



Bricks and Water

Building the Case for Water
Efficiency and Reuse



July 2026

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The views in this report are those of the author and Policy Connect. Whilst these were informed by the contributors to our inquiry, they do not necessarily reflect the opinions of those individuals and organisations.

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Foreword

Following the hottest summer on record in 2025, England has experienced another record-breaking heatwave in June 2026. Rising temperatures, combined with increased water demand from homes and businesses, have led the Climate Change Committee to warn that our way of life faces a direct threat from heat and drought.

The findings of the Independent Water Commission's review of the water sector and the commitments within the Government's A New Vision for Water are welcome. However, during my time as both a Member of Parliament and a Peer, I have seen too many missed opportunities where recommendations from independent reviews go unimplemented, or where government action arrives too late. The failure to mandate the use of Sustainable Drainage Systems (SuDS) in all new development in England is a good example of this, which was a recommendation from the 2008 Pitt Review.

Given the scale of the challenge, this inquiry explored the barriers preventing better water efficiency and water reuse in homes and businesses in England. What emerged following a written call for evidence, a parliamentary roundtable, and numerous interviews with representatives from industry, academia, and the third sector was revealing. Participants described a fundamental disconnect between the need for change and the reality they encounter in practice. They spoke of land managers who want to utilise nature-based solutions to store water upstream but cannot because of regulatory barriers, of housing developers frustrated by inconsistent targets across regions, and of water companies prevented from installing and maintaining water reuse systems by the wording of existing legislation.

These challenges are not insurmountable, but they require government departments to collaborate — something that does not always come naturally. The Ministry of Housing, Communities and Local Government, the Department for Environment, Food and Rural Affairs, and HM Treasury will all need to work together with the Government's new water regulator to deliver the change that is required. Industry and consumers must also play their part. Water companies will need to plan better, invest earlier, and collaborate across catchment boundaries. Housebuilders will need to demonstrate to their customers how water-efficient homes can benefit both their wellbeing and their household bills. Consumers, too, will need a clearer understanding of the consequences of water scarcity if they are to change their behaviour.

This report's ten recommendations are deliberately practical. They do not call for vast new spending programmes or revolutionary policy shifts. Instead, they ask for something harder: genuine simplification and faster implementation. Throughout my career, I have sat in hundreds of hours of parliamentary debate on water. Too often, the focus has been on grand visions rather than granular delivery. The Government's Water White Paper (2026) sets a credible strategic direction, but direction alone is insufficient. The recommendations in this report are intended to close the gap between stated commitment and practical action.

I commend this report to ministers, officials, and colleagues across both Houses. I thank the inquiry sponsors, Anglian Water, Enabling Water Smart Communities, Stormsaver, and Queen Mary University of London, for their generous support.



Baroness Anne McIntosh of Pickering

Inquiry Chair

A handwritten signature in black ink, which appears to read "Anne McIntosh".

Inquiry Vice-chairs



Lee Pitcher MP

Inquiry Vice-chair

Lee Pitcher



Dr Julia Buckley MP

Inquiry Vice-chair

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Executive Summary

Water is the foundation upon which a healthy society and economy are built — not just for drinking, but for growing food, manufacturing, and generating power. However, England faces a five billion litre per day shortfall in public water supply by 2055 — a deficit that, without urgent action, will constrain housebuilding, threaten food security, and undermine our economic resilience.

This is a challenge that policymakers are beginning to address. The Government commissioned an independent review of the water sector by Sir Jon Cunliffe in 2024 and published its Water White Paper, *A New Vision for Water*, in January 2026. **Chapter 1** of this report reviews the resulting policy landscape, including recommendations made within previous Bricks and Water inquiries.

The pressure on England's water resources is being compounded by climate change. Droughts that were once exceptional are becoming routine, and the infrastructure inherited from previous generations was not designed for the demands now placed upon it. Emerging technologies, such as artificial intelligence (AI) data centres, have far higher water demands than could have been anticipated even a few years ago. **Chapter 2** explores these challenges in detail, along with other supply and demand-side pressures.

Domestic water use in England has risen steadily in recent years and is now among the highest in Europe. Both household and non-household demand must be reduced if future water shortages are to be avoided. **Chapter 3** considers how this can be achieved in practice, including accelerating the rollout of smart water meters, implementing behaviour-change programmes, and mandating the labelling of fixtures, fittings, and water-using products to inform consumers of their water efficiency.

However, water efficiency measures alone are unlikely to achieve demand reduction at the scale required. Water reuse systems, including rainwater harvesting and greywater recycling, can help reduce consumption further in both homes and businesses. **Chapter 4** explores the practical and legislative barriers preventing widespread adoption of water reuse, and how these can be overcome.

The recommendations set out below are intended to complement the actions proposed in the Cunliffe Review and the Water White Paper, and to prevent predicted shortfalls in public water supply from becoming a reality.

Recommendations

Water Security

1. In line with the Independent Water Commission's recommendations, the Department for Environment, Food and Rural Affairs should develop a long-term, cross-sectoral, systems-focussed National Water Strategy for England. The Strategy should be subject to public consultation immediately and be made a priority across relevant government departments.
2. To accelerate the development of small-scale water storage schemes, the Department for Environment, Food and Rural Affairs should:
 - a. Conduct a review of the 1975 Reservoirs Act and implement changes that would enable land managers to store water on their land in a wider variety of contexts. Any such changes to the Act should be introduced through the forthcoming Clean Water Bill.
 - b. Determine the most effective way of incentivising land managers to invest in on-farm reservoirs and small-scale water storage, such as via grant support or tax incentives.

Water Security

3. The mandatory water efficiency standard and optional technical water efficiency standard currently set out in Building Regulations should be repealed and replaced with:
 - a. A single national standard applied uniformly across the whole of England.
 - b. The standard should adopt a fittings-based approach, aligned to minimum product standards established under the forthcoming Mandatory Water Efficiency Labelling Scheme (MWELS).
 - c. Minimum standards for all fixtures, fittings, and water using products should be equivalent to 95 litres per person, per day (lpppd) or less, under real-world conditions.
 - d. The water calculator should be removed from Building Regulations.

4. Where consumers fail to fit water meters voluntarily, water companies should have greater powers to request meter installation, and in a wider range of circumstances – extending beyond existing geographical areas of water stress. Where possible, all newly installed meters should be smart meters.
5. To incentivise non-household water efficiency:
 - a. The Water Services Regulation Authority (Ofwat) and its successor should oversee the phased removal of falling block tariffs by the end of this price control period (2030).
 - b. Water companies operating in the business retail market should be granted greater discretion to trial and deploy innovative tariff structures that incentivise water efficiency and manage peaks in demand. Revenue generated from these schemes should be returned to the customer base as grants supporting investment in water efficiency and reuse infrastructure.

Water Reuse

6. Water reuse systems should be mandatory for new residential developments exceeding 100 properties and new commercial developments exceeding 500m². To facilitate this, the Government should:
 - a. Update the National Planning Policy Framework and Planning Practice Guidance to reflect this requirement.
 - b. Amend Approved Document G of Building Regulations 2010 to include a specific legal requirement for inclusion of water reuse systems where required under planning policy.
 - c. Amend the Water Industry Act 1991 to redefine the term ‘domestic purpose’ so as to distinguish between uses requiring drinking water and those suitable for non-drinking water, thereby enabling water companies to adopt water reuse systems.
 - d. Establish a statutory basis for the provision of water reuse systems through new secondary legislation, consolidating requirements currently dispersed across Water Supply (Water Quality) Regulations (2016/18), Water Supply (Water Fittings) Regulations (1999) and Private Water Supplies Regulations (2016/17).

7. To avoid costly retrofit, all new homes should be constructed with internal dual pipework and connection-ready drainage, ready to be integrated into a water reuse system once appropriate legislation comes into force. The Government should commission a review of historic guidance to determine appropriate standards, colour, and material for all new non-drinking water pipework.
8. The Government should commission a Publicly Available Specification (PAS) to establish consistency across industry for non-drinking water quality requirements, treatment verification, equipment performance, and competence requirements for practitioners involved in the design, installation and maintenance of water reuse systems. Until such a Specification is in place, alongside a mandatory installer accreditation scheme, all water reuse systems should be accompanied by a Water Safety Plan identifying risks and ensuring that adequate control measures are in place.
9. The Government should implement the recommendations set out within the Drinking Water Inspectorate's report: Governance framework for non-drinking water from rainwater harvesting and greywater reuse systems (March 2026).
10. Information to address misconceptions around water reuse should be incorporated into the Let's Save Water campaign. The campaign should also be integrated into the National Curriculum to foster an appreciation of water scarcity from an early age.

Chapter 1: Introduction

“Recent reviews by Sir Michael Pitt, Professor Martin Cave, Anna Walker CB, and Sir Jon Cunliffe all include effective recommendations for better water management, water efficiency, and water reuse. However, very few of these have been taken up by successive governments. The forthcoming Clean Water Bill offers an opportunity to legislate for changes that will help to secure a sustainable supply of water for all.”

Chair, Baroness McIntosh of Pickering, inquiry scoping session, September 2025

The Westminster Sustainable Business Forum (WSBF) has completed four ‘Bricks and Water’ inquiries to date, which have explored environmental governance, water resources, water quality, land drainage, and flooding – all in the context of supporting housebuilding in England. Following the UK’s hottest summer on record in 2025, the country is facing significant challenges associated with water stress, projected to cost the economy £25 billion in undelivered housing over the next five years.¹ This inquiry examines recent government commitments on water resources, water efficiency, and water reuse, and sets out recommendations for further policy intervention ahead of a forthcoming Clean Water Bill, due later this year. These recommendations are critical to enable and unblock housebuilding at the scale required by the Government.

1.1 Cunliffe Review

In 2024, the Government appointed former Bank of England Governor, Sir Jon Cunliffe, to undertake “the most comprehensive review of the water sector since privatisation”.² The Independent Water Commission published its final report in 2025, setting out 88 recommendations to the UK and Welsh Governments and their associated regulators.

The Commission examined water resources directly and outlined the current policy landscape, which is underpinned by the water industry’s Water Resource Management Plans (WRMPs). WRMPs set out how water companies intend to deliver a secure supply of water throughout their areas over the next 25 years. The Commission found that the pressures on water supply are intensifying because of warmer, drier weather and the demands of new development.

1. The case for water smart housing, Public First (as part of the Enabling Water Smart Communities project), February 2025

2. Summary report, Independent Water Commission, June 2025

On the supply side, the Commission raised concerns about a growing gap between planned development and the delivery of new infrastructure. On the demand side, it concluded that action is needed to incentivise the efficient use of water in homes and businesses alike. To help address these issues, the Commission made recommendations to government, including on strategic planning, abstraction, leakage, metering, tariffs, all of which are discussed in the following sections of this report.

1.2 Previous Recommendations

The WSBF's second Bricks and Water inquiry (2020) drew attention to the mounting pressure on water resources in England.³ That work included the following recommendations for demand reduction:

- The Government should set a national per-capita water consumption target, to be tightened progressively over time.
- Government should introduce a mandatory water label, for all fixtures, fittings, and water using products, visible at the point of sale.
- Building Regulations should be updated to adopt a 'fittings-based' approach only, underpinned by a mandatory water efficiency label. Minimum product standards should be set to achieve 100lpppd initially, tightening over time to achieve 85lpppd by 2050.
- Beyond metering allocated within Water Resource Management Plans, meter installation and retrofit should be accelerated for delivery before 2030, incorporating smart meters from the outset.

Sadly, progress against these recommendations has been slow. Ultimately, this is to the detriment of water users, as evidenced by the need for increased temporary use bans. The 2021 Environment Act set a legally binding target to reduce the use of public water in England by 20% per head of population by 2038. To achieve this, the previous government's Plan for Water pledged to reduce household water use to 122lpppd by March 2038 and 110lpppd by 2050 – targets considerably less ambitious than those recommended above.⁴ The previous government consulted on a mandatory water efficiency labelling scheme in 2022 and committed to

3. Bricks and water: building resilience for England's homes, Policy Connect, October 2020

4. Plan for water, Department for Environment, Food and Rural Affairs, April 2023

introducing one by 2025 – a commitment that was not delivered.⁵ The current Government reaffirmed its intention to introduce a mandatory water efficiency label in 2026.⁶

In 2025, the Department for Environment, Food and Rural Affairs (Defra) consulted on revisions to water efficiency standards in Building Regulations, proposing to reduce the standard for new homes from 125lpppd to 105lpppd and the optional technical standard from 110lpppd to 100lpppd.⁷ Defra is yet to respond to this consultation.

1.3 Inquiry Aims

A scoping session held in September 2025 shaped the scope and aims of this inquiry. Participants agreed the inquiry should focus on three themes: water resources and security of supply, water efficiency, and water reuse – each explored in the chapters that follow. Within each chapter, the report identifies the key challenges, reviews existing government intervention, and sets out recommendations for policy change.

5. Consultation on mandatory water efficiency labelling scheme, Department for Environment, Food and Rural Affairs, September 2022

6. A new vision for water: white paper, Department for Environment, Food and Rural Affairs, January 2026

7. Reviewing the water efficiency standard in Building Regulations 2010, Department for Environment, Food and Rural Affairs, September 2025

Chapter 2: Water Security

“The UK experienced record-breaking dry conditions in 2025 and the declining availability of water in England is set to continue, with the Environment Agency predicting a 5 billion litre per day shortfall in public water supply by 2055. Whether we are trying to tackle drought, floods, or pollution it is vital that stakeholders work together to manage water holistically across the whole system. To achieve this, we must have the right legislation in place.”

Vice-chair, Lee Pitcher MP, inquiry evidence session, March 2026

Top Lines

- Climate change, population growth, and water-intensive new technology have resulted in increasing water scarcity. Without action, England could face a public water shortfall of 5 billion litres every day by 2055. This will have a direct impact on the viability of new development and is likely to be associated with future use restrictions and outages.
- Security of supply is threatened by increased abstraction from the environment, inadequate reservoir storage, and leakage from supply pipes. At the same time, demand from households and businesses is increasing.
- A new, National Water Strategy, as recommended by the Independent Water Commission is urgently needed to set a long-term, cross-sectoral, and systems-focussed plan for the sector.
- Reform of the existing abstraction licensing regime, along with intervention to facilitate the development of more farm and estate water storage will help to ease supply-side pressure in the interim, before larger reservoir projects are completed.

2.1 Challenges

Last year, the Environment Agency warned that, without action, England could face a public water supply shortfall of 5 billion litres per day by 2055, with a further 1 billion litre per day shortfall for the wider economy.⁸

8. National framework for water resources 2025: water for growth, nature and a resilient future, Environment Agency, June 2025

The Committee on Climate Change recently concluded that the country's water and wastewater systems are not sufficient to meet the demands of the current, let alone future, climate.⁹ There are several reasons for this, including accelerating climate change (10 of the hottest years on record have occurred since 2002), population growth, and the water-intensity of new technologies.¹⁰ Where these pressures are most acute, the Environment Agency designates areas of 'water stress', where local authorities can tighten water efficiency requirements and water companies can introduce compulsory metering. However, inquiry participants warned that this approach is becoming outdated given the interconnectedness of England's water system and the increasing pressure across all regions from a drier climate. Evidence submitted from the housebuilding community was critical of variable standards that differ between Local Plans and called for a unified national approach.

The availability of water is shaped by both supply-side and demand-side pressures, each examined in turn below.

2.1.1 Supply-Side

Strategic Planning. Planning to meet the demands of households and industry, while avoiding damage to the natural environment, is a complex undertaking. The Independent Water Commission concluded that the existing framework for strategic planning, encompassing the Plan for Water, Environmental Improvement Plan, Storm Overflows Discharge Reduction Plan and related strategies has fallen short in enabling an integrated approach to managing the water system. To address this, the Commission recommended replacing the existing patchwork of policy documents with a new, long-term, cross-sectoral, systems-focussed National Water Strategy for England and Wales.¹¹ However, the Government's recent Water White Paper made no mention of any intention to develop such a strategy.

Abstraction. Inquiry participants acknowledged that current levels of abstraction are unsustainable. The Environment Agency's National Framework for Water Resources identifies where, and by how much, water abstraction must change to achieve and maintain a healthy water environment.¹² Any changes to abstraction licensing must, however, be carefully considered.

9. A well-adapted UK: the fourth independent assessment of UK climate risk, Climate Change Committee, May 2026

10. Climate change continues to be evident across the UK, Met Office, July 2021 (online: <https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2021/climate-change-continues-to-be-evident-across-uk>)

11. Final report, Independent Water Commission, July 2025

12. National framework for water resources 2025: water for growth, nature and a resilient future, Environment Agency, June 2025

Research by Risk and Policy Analysts examined the financial impact of reduced water availability through abstraction license reductions in Norfolk and Suffolk, reporting potential losses of up to £2.3 billion over 20 years.¹³ Participants also raised concerns about the fairness of the current abstraction licensing regime, suggesting that it is disproportionately burdensome for smaller abstractors, such as those in the horticulture sector, while failing to address over abstraction by large-scale industry. Evidence submitted to this inquiry indicated that moving to a 'dynamic' licensing system would support better management of water for agriculture. Dynamic licensing could use real-time information on the hydro-ecological condition of water bodies to inform decisions on availability and facilitate the swift movement of water between users. Participants also highlighted a lack of regulation and transparency around water-intensive industrial users, such as datacentres.¹⁴ The Independent Water Commission echoed these concerns in its final report, recommending that the Government strengthen regulatory oversight of water industry abstraction by bringing it within the Environmental Permitting Regime.

Storage. No new reservoirs have been completed in England since 1992, despite a 21% increase in population.¹⁵ The Independent Water Commission's final report was critical of the absence of any specific statutory requirement compelling water companies to deliver plans set out in their Water Resource Management Plans – a gap that could cause delay or reduction in the scale of new water infrastructure projects.¹⁶

Land managers, particularly farmers, can play an important role in water security. By storing water during wetter periods, on-farm reservoirs and small-scale water storage can reduce reliance on summer abstraction and help protect environmentally sensitive river flows.¹⁷ Evidence submitted to this inquiry indicates that the costs of operating on-farm reservoirs are outweighed by the potential losses farmers face when they are unable to obtain water through existing agricultural abstraction licences. Yet, evidence also suggests that high capital costs, alongside legislative and regulatory barriers, are preventing land managers from developing this vital form of water storage. For example, the de minimus rule within the 1975 Reservoirs Act stipulates that all reservoirs capable of holding more than 25,000m³ of water above the surrounding land are subject to the Act's statutory safety requirements.

13. The value of water for food production to the local and national economy, Risk and Policy Analysts, September 2025

14. Not a drop to drink: how Britain's data centre surge threatens water security, Global Action Plan, April 2026

15. Government steps in to build first major reservoirs in 30 years, Department for Environment, Food and Rural Affairs, May 2025 (press release: <https://www.gov.uk/government/news/government-steps-in-to-build-first-major-reservoirs-in-30-years>); A Reset for Water, Water UK, April 2025

16. Final report, Independent Commission for Water, July 2025

17. Planning farm reservoirs with case studies in eastern England, Water Resources East et. AL, May 2026

Grant support of up to £10 million was previously available to land managers for on-farm reservoir construction through the Water Management Grant; however, this support is no longer available.¹⁸ At the 2025 National Farmers' Union Water Summit, Environment Agency Chair, Alan Lovell suggested that existing capital allowances are not sufficiently tailored to the needs of land managers and that changes to this scheme could provide more of an incentive to invest in storage.¹⁹

Aging infrastructure and leakage. Although leakage of treated water is at its lowest ever level, around 3 billion litres are still lost daily – roughly 20% of total supply.²⁰ In its 2025 progress report to Parliament, the Climate Change Committee (CCC) acknowledged that, although leakage has declined, water companies remain off track to deliver the leakage reduction needed to prepare for a drier future. The CCC was also critical of Ofwat, finding that the 2024 Price Review fails to bring forward sufficient credible options for delivering on leakage reduction targets.²¹

2.1.2 Demand-Side

Population growth and planning policy. The UK population is projected to grow by around 12 million by 2055, placing considerable pressure on water resources.²² Restrictions on new development arising from water scarcity represent an active and growing problem for individuals, businesses and the economy. In 2024, 9,000 new homes in Cambridgeshire were unable to proceed through the planning process due to objection from the Environment Agency, on the grounds that the development would lead to unacceptable deterioration of water bodies.²³ Similar barriers affect the non-household market. A moratorium on new non-domestic supplies in the Hartismere Water Resource Zone has been in place since 2023 and expected to remain so until 2033.²⁴ Demand from non-household use is set to increase, with 38% of businesses nationally planning to increase water use over the next five years, rising to 46% in the south of England.²⁵

18. Water reservoirs: advice and support, National Farmers' Union, November 2025 (online: <https://www.nfuonline.com/news/water-reservoirs-advice-and-support>)

19. Ibid.

20. Water company performance report 2024-25, Ofwat, October 2025; 3 billion litres of water wasted every year by leaky pipes, Liberal Democrats, April 2025 (online: <https://www.libdems.org.uk/news/article/3-billion-litres-of-water-wasted-every-day-by-leaky-pipes-costing-customers-almost-pound400-million-per-year>)

21. Progress in adapting to climate change: 2025 report to Parliament, Climate Change Committee, April 2025

22. National population projections: 2024-based, Office for National Statistics, April 2026

23. Addressing water scarcity in Greater Cambridge: update on Government measures, Department for Environment, Food and Rural Affairs; Ministry of Housing, Communities and Local Government, March 2024

24. All you need to know about the moratorium on new supplies for non-domestic mains water use, Essex and Suffolk Water

25. Risking growth: the impact of water deficits on business, Public First, March 2026

Proposed solutions to unblock residential and commercial development include new supply infrastructure, such as the Fens Reservoir, and reducing demand through water efficiency, water reuse, and water offsetting. Inquiry participants stressed that increased demand from new homes and businesses poses challenges for both the Ministry of Housing, Communities, and Local Government and the Department for Environment, Food and Rural Affairs and encouraged these departments to work together to overcome these barriers to growth.

Water intensive industries and emerging technologies. Growing demand from emerging technologies, such as Artificial Intelligence (AI) datacentres, means that securing sufficient supply to meet future needs will be challenging. Research by Global Action Plan found that a mid-sized 15 megawatt (MW) data centre may use around 300-500 million litres of water each year – roughly equivalent to the annual domestic water use of 2,000-3,500 UK households.²⁶ Research by Public First suggests that rapidly increasing AI growth expectations have not been fully accounted for in Water Resource Management Plans, and the economic impact of reduced water availability linked to AI and datacentre expansion could be £1.3 billion by 2030.²⁷ Water demand is also likely to increase as a result of the Government's commitment to reduce carbon emissions, which will require additional water for carbon capture and storage and hydrogen production.²⁸ Inquiry participants suggested that water intensive sectors of the economy may need to collectively agree their future water demands for a pre-defined period, in the same way that water companies do through Water Resource Management Plans.

2.2 Intervention

The 2024 round of Water Resource Management Plans set out several interventions by the water industry to improve security of supply. These include:

- **£8 billion of investment** for ten new reservoirs, one reservoir enlargement, nine water transfer schemes, two desalination schemes, and one mine water treatment scheme.
- A commitment to **reduce leakage by 50% by 2050** compared to a 2017/18 baseline, including £700 million of investment for leakage reduction over the next five years, delivering an initial reduction target of 30% by 2032.

26. Not a drop to drink: how Britain's data centre surge threatens water security, Global Action Plan, April 2026

27. The cost of water scarcity: research report, Public First, June 2025

28. National framework for water resources 2025: water for growth, nature and a resilient future, Environment Agency, June 2025

The Government's Water White Paper also makes several commitments to address challenges with water security outlined above. These include:

- A review of Permitted Development Rights for water companies in England and consideration of additional planning flexibilities for small scale projects to accelerate delivery, including at the nationally significant infrastructure level.
- Updates to National Policy Statements for water resources and wastewater to ensure planning processes for major new water infrastructure projects are up to date and clearly understood by developers.
- A commitment to bring abstraction into the Environmental Permitting Regulations regime.

2.3 Recommendations

This inquiry acknowledges that urgent action is required to avoid a public water shortfall of up to 5 billion litres per day by 2055. The inquiry welcomes the Independent Water Commission's recommendations to address both supply-side and demand-side pressures in its final report. However, the Forum is concerned that many of these recommendations are neither actioned nor acknowledged in the Water White Paper, most notably, the call for a National Water Strategy.

Recommendation 1. In line with the Independent Water Commission's recommendations, the Department for Environment, Food and Rural Affairs should develop a long-term, cross-sectoral, systems-focussed National Water Strategy for England. The Strategy should be subject to public consultation immediately and be made a priority across relevant government departments.

The inquiry welcomes the Government's recent announcements on delivery of new reservoirs, desalination facilities, and water transfer schemes. However, these are all long-term projects. The Forum shares the Independent Water Commission's concern that the absence of a statutory requirement compelling water companies to deliver on these plans risks significant delay. In the meantime, greater use of on-farm reservoirs and smaller water storage schemes should be prioritised.

Recommendation 2. To accelerate the development of small-scale water storage schemes, the Department for Environment, Food and Rural Affairs should:

- a. Conduct a review of the 1975 Reservoirs Act and implement changes that would enable land managers to store water on their land in a wider variety of contexts. Any such changes to the Act should be introduced through the forthcoming Clean Water Bill.
- b. Determine the most effective way of incentivising land managers to invest in on-farm reservoirs and small-scale water storage, such as via grant support or tax incentives.

Chapter 3: Water Use

“Throughout south and east England there are tens of thousands of homes that could be delayed because of a lack of water. Analysis suggests this could have an impact on the economy of up to £25 billion. We must therefore develop a strategy that includes water efficiency and water reuse to help unlock development in these areas.”

Catherine Moncrieff, CIWEM, inquiry evidence session, March 2026

Top Lines

- Per capita consumption of water in the UK has risen steadily in recent years and is amongst the highest in Europe. Both household and non-household demand must be reduced if future water shortages and outages are to be avoided.
- Metering, reducing leakage, and installing water efficient fixtures and fittings can all help improve water efficiency. The Government has committed to accelerating the rollout of smart meters, implementing a Mandatory Water Efficiency Labelling scheme, and tightening water efficiency standards in Building Regulations to between 100 and 105 lpppd, depending on location.
- However, this inquiry recommends that the Government should go further by setting a single national water efficiency standard across all of England, adopting a fittings-based approach to achieve a per capita consumption equivalent to 95lpppd or less, under real-world conditions.
- Ofwat should also reform existing tariffs for non-household users to incentivise businesses to improve water efficiency and reduce costs.

3.1 Challenges

Even without the construction of the planned 1.5 million new homes during this Parliament, the country's current water use is unsustainable. On average, the British each use around 150l of water per day – far higher than many European neighbours, such as the Germans, who use

approximately 121lpppd.²⁹ Reducing demand is therefore essential to avoid the predicted shortfall in public supply over the next 30 years. This is not merely an aspiration, it is a statutory target within the 2021 Environment Act – to reduce the use of public water in England by 20% per head of population by 2038, measured against a 2019 to 2020 baseline.³⁰ Inquiry participants identified several barriers that must be overcome to achieve this.

3.1.1 Domestic

Leakage. Although the majority of leakage arises from water company pipework, around 25% originates from domestic supply pipes (i.e. pipework within the home or the pipes that carry water from water company pipework at the property boundary into the home).³¹ Homeowners are responsible for the maintenance of these pipes, and the Chartered Institute of Water and Environmental Management estimates leakage at 45 litres per household per day for unmetered or internally metered properties.³² Leakage from fittings within the home can be significant, particularly from toilets. So-called ‘leaky loos’ can waste up to 400 litres of water per day, totalling 400 million litres nationally – enough water to supply the combined population of Edinburgh, Cardiff, Belfast, Manchester, Sheffield, Liverpool and Bristol.³³ In 2024, the previous government published guidance, committing to a review of fixtures and fittings regulations and dual flush buttons as part of a taskforce established to identify solutions to reduce toilet water wastage.³⁴ It is understood that this review is yet to be completed.

Metering. Homes with water meters use between 15% and 18% less water than those paying for water by rateable value.³⁵ Within its second Bricks and Water inquiry, the WSBF previously advocated for the wider retrofit of household water meters to reach as close to 100% coverage as possible.³⁶ Smart meters have been shown to reduce consumption further and can provide real-time information to help identify and prevent domestic leakage from supply pipes, taps, and toilets. English water companies aim to achieve 77% household smart meter coverage by

29. Customer water use, Ofwat, 2026 (online <https://www.ofwat.gov.uk/about-us/ofwat-and-the-environment/customer-water-use/>) ; Vast majority of brits have no idea how much water they use, Water UK, August 2020 (online <https://www.water.org.uk/news-views-publications/news/vast-majority-brits-have-no-idea-how-much-water-they-use-each-day>)

30. Water demand Environment Act target delivery plan, Department for Environment, Food and Rural Affairs, December 2025

31. Consultation on measures to reduce personal water use, Department for Environment, Food and Rural Affairs, July 2019

32. Policy position statement: water supply pipes, Chartered Institution of Water and Environmental Management, August 2013

33. Leaky loos – a water wasting scandal, Wildlife and Countryside Link, November 2020 (online: <https://www.wcl.org.uk/leaky-loos-a-water-wasting-scandal.asp>)

34. Addressing water scarcity in greater Cambridge: update on Government measures, Ministry for Housing, Communities and Local Government, Department for Environment, Food and Rural Affairs, March 2024

35. Preparing for a drier future, National Infrastructure Commission, April 2018

36. Bricks and water: building resilience for England's homes, Policy Connect, October 2020

2050, however, have called for this timescale to be accelerated.³⁷ The Independent Water Commission criticised the restriction of compulsory metering to certain circumstances (such as in areas of water stress) and called for expanded criteria for compulsory meter installation by water companies.³⁸

Universal smart metering would also open possibilities associated with tiered pricing for water. For example, all customers could be offered a lower basic unit rate, per capita, to meet their essential needs. Users which exceed this threshold for optional activities, such as for filling hot-tubs or swimming pools, could be charged incrementally higher rates. Such a system would also help to address concerns around the price of water and cost of living. Some inquiry participants suggested that, in future decades, it may be necessary to go beyond simply monitoring consumption and move towards actively rationing water based on the number of people in a household. This is already a reality in several cities around the world, including Cape Town, Mexico City, and Bogotá. Comprehensive meter coverage would need to be in place to facilitate this.

Measurement. Domestic water use is currently measured in litres per person per day (lpppd). Minimum water efficiency standards are set by Building Regulations and currently stand at 125lpppd, with an optional standard of 110lpppd in areas of clear local need, such as water stress.³⁹ To deliver on statutory targets for demand reduction, the previous government committed to reduce household water use to 122lpppd by 31 March 2038 and 110lpppd by 2050.⁴⁰ The current Government has consulted on tightening water efficiency standards in Building Regulations to 105lpppd, with an optional standard of 100lpppd in areas of water stress.⁴¹ However, inquiry participants have been critical of using lpppd as a reliable measure of actual personal water consumption. Research by Thames Water drew on smart meter data to demonstrate that homes designed to use 110lpppd actually averaged 145lpppd.⁴² Participants argued that a more effective means of reducing domestic demand would be to adopt a ‘fittings-based’ approach exclusively, which sets maximum flow rates for fittings and fixtures without making assumptions about per capita consumption.

37. Smart metering in revised draft water resources management plans, Environment Agency, December 2024

38. Final report, Independent Water Commission, July 2025

39. Approved document G: sanitation, hot water safety and water efficiency, Ministry of Housing, Communities, and Local Government, October 2024

40. Environmental improvement plan 2023, HM Government, February 2023

41. Reviewing the water efficiency standard in the building regulations 2010, Department for Environment, Food and Rural Affairs, September 2025

42. Water efficiency and reusing in housing: design guide for a changing climate, Good Homes Alliance, July 2025

Such an approach would be consistent with the forthcoming Mandatory Water Efficiency Label (MWEL), due for introduction in 2026, which will use a colour-coded system to demonstrate the water efficiency of fixtures, fittings, and water using products to consumers. A fittings-based approach would also remove the need for regular updates to Building Regulations. Household water efficiency would improve automatically as MWEL ratings are updated — for example, through a requirement for new homes to incorporate only A-rated fixtures, fittings, and water-using products.

Consumer behaviour. Even when new homes are designed to the highest water efficiency standards, evidence submitted to this inquiry indicates that, under the current system, homeowners frequently remove water efficient fixtures and fittings and replace them with less efficient alternatives. Moving to a Mandatory Water Efficiency Label would help address this by restricting market access to inefficient fixtures and fittings. The Government could also offer incentives, such as VAT discounts or exemptions, to encourage the purchase of the most efficient products.

Enforcement. Setting water efficiency standards through the existing water calculator in Building regulations requires verification by building control. Evidence submitted to this inquiry indicates that these checks are routinely not completed and, even when they are, household consumption often exceeds design standards. Linking Building Regulations to product ratings under the MWEL would enable flow rates to be more readily verified and improve compliance.

3.1.2 Commercial

Awareness. Water efficiency presents challenges beyond the residential sector, extending to commercial buildings and the public estate. Research by the Consumer Council for Water found that only around 43% of business customers are taking action to save water, while over a third expressed interest in receiving advice and support on how to reduce their consumption.⁴³

Metering. Although metering prevalence in commercial buildings is much higher than in domestic properties, only an estimated 4% of non-household users have smart meters.⁴⁴ The Independent Water Commission raised concerns that the business wholesale market's ability to improve water efficiency is being hindered by incompatibility between different types of smart meters and the inability to identify the highest consumers for targeted intervention.⁴⁵

43. Less than half of business customers are taking action to save water, Consumer Council for Water, November 2024 (online: <https://www.ccw.org.uk/news/less-than-half-of-business-customers-are-taking-action-to-save-water>)

44. Smart metering in revised draft water resources management plans, Environment Agency, December 2024

45. Final report, Independent Water Commission, July 2025

Tariffs. Most non-household consumers pay for the water that they use via pre-agreed tariffs. Some wholesalers offer Falling Block Tariffs (FBTs), which means that the marginal price of water falls as consumption increases. Ofwat consulted on the use of FBTs in 2025 and concluded in 2026 that they are no longer appropriate.⁴⁶ However, Ofwat stopped short of prohibiting them in its charging rules. Several inquiry participants called for a mandatory and immediate end to FBTs. Others added that future tariff structures should instead adopt a rising block model, which would incentivise water efficiency and allow for price increases during periods of water scarcity.

Incentives. Businesses that invest in energy efficient plant and equipment can claim 100% tax relief through the Full Expensing regime and Annual Investment Allowance. However, no such incentives are available for capital investment to improve water efficiency. A Private Members' Bill, in development by Dr Julia Buckley MP seeks to address this by seeking changes to the tax regime so that investment in water efficiency and reuse systems receive the same favourable treatment as investment in low-carbon solutions.

Compliance. Inquiry participants suggested that deterrents such as rising tariffs and incentives through the tax system described above may still not be sufficient to improve non-household water efficiency to the required level. In some situations, it may be necessary for businesses to demonstrate that they will be using water as efficiently as possible before they secure planning permission or gain approval for a new connection.

46. Conclusions on promoting water efficiency in wholesale charges for business customers, Ofwat, May 2026

3.2 Intervention

The Government's Water White Paper sets out several commitments to help improve water efficiency in both domestic and commercial settings.⁴⁷ These include:

- **Removing barriers to accelerate the roll out of smart metering**, including the establishment of a Smart Meter Delivery Board to ensure that consumers receive the maximum benefit.
- **A Commitment to introduce Mandatory Water Efficiency Label**, projected save customers around £57 million on water bills and £71 million on energy bills over the next decade.
- A consultation by Ofwat on promoting water efficiency in wholesale charges and the **removal of falling block tariffs**, planned by 2030.
- A consultation by Defra on water efficiency standards in Building Regulations, with proposals to **revise the minimum water efficiency standard for new homes from 125 lpppd to 105 lpppd**, and the optional technical standard from 110lpppd to 100lpppd.⁴⁸

3.3 Recommendations

This inquiry welcomes the Government's commitments in the Water White Paper to increase water efficiency in homes and businesses through accelerated smart meter roll out, revised minimum water efficiency standards for new homes, introduction of a Mandatory Water Efficiency Label, and removal of falling block tariffs. However, concerns remain that these measures do not go far enough to deliver on the demand reduction target of 20% per head of population by 2038. The Forum therefore makes the following recommendations:

47. A new vision for water: white paper, Department for Environment, Food and Rural Affairs, January 2026

48. Review of water efficiency standards in the building regulations 2010, Department for Environment, Food and Rural Affairs, September 2025

Recommendation 3. The mandatory water efficiency standard and optional technical water efficiency standard currently set out in Building Regulations should be repealed and replaced with:

- a. A single national standard applied uniformly across the whole of England.
- b. The standard should adopt a fittings-based approach, aligned to minimum product standards established under the forthcoming Mandatory Water Efficiency Labelling Scheme (MWELS).
- c. Minimum standards for all fixtures, fittings, and water using products should be equivalent to 95lpppd or less, under real-world conditions.
- d. The water calculator should be removed from Building Regulations.

This recommendation does not take England into new and radical territory. Several local planning authorities in areas of water stress are already setting more stringent water efficiency standards. For example, Uttlesford District Council has recently adopted its Local Plan, setting water efficiency standards at or below 90lpppd, a position upheld as legally compliant by planning inspectors.⁴⁹ However, the recommended changes to Building Regulations would primarily affect new properties and may alone be insufficient to reduce per capita consumption to a sustainable level. Water meter retrofit (smart meters in particular) will therefore be essential in helping consumers better understand and manage their consumption in existing homes.

Recommendation 4. Where consumers fail to fit water meters voluntarily, water companies should have greater powers to mandate meter installation, and in a wider range of circumstances – extending beyond existing geographical areas of water stress. Where possible, all newly installed meters should be smart meters.

49. Uttlesford District Council adopts new plan, Uttlesford District Council, March 2026 (online: Uttlesford District Council adopts new local plan - Uttlesford District Council)

Businesses also have a vital role to play in reducing demand. This inquiry welcomes the planned phase-out of falling block tariffs set out in the Water White Paper. Ofwat, and its successor will have an important role to play in overseeing this and ensuring that future pricing structures incentivise water efficiency.

Recommendation 5. To incentivise non-household water efficiency:

- a. The Water Services Regulation Authority (Ofwat) and its successor should oversee the phased removal of falling block tariffs by the end of this price control period (2030).
- b. Water companies operating in the business retail market should be granted greater discretion to trial and deploy innovative tariff structures that incentivise water efficiency and manage peaks in demand. Revenue generated from these schemes should be returned to the customer base as grants supporting investment in water efficiency and reuse infrastructure.

Chapter 4: Water Reuse

“Demand reduction to meet the Government’s ambitious targets will only be possible if we re-use water. However, current legislation prevents developers from putting large-scale water reuse systems in new homes and water companies from adopting and maintaining them. It seems ridiculous that, at a time of such water scarcity, we are still flushing our toilets with precious mains water.”

Lisa Craven, Stormsaver, inquiry evidence session, March 2026

Top Lines

- Water efficiency measures alone are unlikely to achieve demand reduction at the scale required to avoid future water shortages and temporary use bans. Water reuse, encompassing rainwater harvesting and greywater recycling, will be increasingly necessary in new residential and commercial developments.
- Significant regulatory and legislative barriers are preventing the adoption and maintenance of water reuse systems (e.g. using treated rainwater or greywater for toilet flushing) in new homes.
- The Government should use the forthcoming Clean Water Bill as a vehicle to consolidate and clarify regulations – enabling water companies to adopt and maintain water reuse systems.
- This would pave the way for water reuse systems to become mandatory in all new residential developments of more than 100 homes and all commercial developments exceeding 500m².

4.1 Challenges

Per Capita Consumption (PCC) must be significantly reduced if the Government is to meet its demand reduction target of 20% by 2038. This is likely to require PCC below 100lpppd, a level which is difficult to achieve using water efficiency measures alone. Water reuse, which can

reduce PCC by 40lpppd or more, will therefore form an essential part of the solution.⁵⁰ Instructive case studies are available from continental Europe. For example, in Belgium, residential rainwater harvesting has been mandatory since 2023 and has contributed to savings of 30 billion litres of water, reducing PCC to around 80lpppd.⁵¹ However, the longer it takes for water reuse to become commonplace in the UK, the harder it will be to achieve the required demand reduction. Evidence submitted by Stormsaver, on behalf of the UK Water Reuse Association estimated that if water reuse systems were installed in all new buildings from 2030 onwards then the national water deficit could be reduced by 21% by 2055 – consistent with the Government’s target. By contrast, if installation were delayed until 2045, only a 9% deficit reduction could be achieved by 2055, requiring the Government to identify other means of reducing demand.⁵²

Water reuse encompasses both rainwater harvesting (RWH) and greywater recycling (GWR). RWH can provide a cost-effective solution for multiple occupancy housing as well as at a communal scale on housing estates. However, they require an adequate collection area and sufficient rainfall. GWR systems are not subject to the same constraints around water availability (as wastewater is generated from use within the property), making them a tangible technology for areas with dense urban populations. However, both RWH and GWR face additional barriers to adoption, which are discussed below.

4.1.1 The Need for Clearer Definitions

A variety of terms differentiate between drinking water and non-drinking water in legislation, regulation, and guidance, including ‘wholesome/non-wholesome’, ‘potable/non-potable’, ‘reclaimed’, and ‘alternative’. A further subset of terms defines the types of non-drinking water such as ‘greywater’ (from sinks, showers, and laundry that does not contain toilet waste) and ‘blackwater’ (which derives from toilet waste). There is also inconsistency in the definition of the term ‘domestic use’ between Building Regulations and drinking water regulations – specifically whether toilet flushing requires water of drinking water quality. In its recent report on water reuse, the Drinking Water Inspectorate (DWI) called for clarification and alignment of this terminology and a review of the domestic uses that would be suitable for supply by non-drinking water.⁵³

50. Consultation on water efficiency in building regulations, WRE response, Water Resources East, December 2025

51. Water compendium: who’s doing what in housing worldwide, National House Building Council Foundation, September 2025

52. Inquiry call for evidence response, Stormsaver, May 2026

53. Governance framework for non-drinking water from rainwater harvesting and greywater reuse systems: expert group recommendations, Drinking Water Inspectorate, March 2026

4.1.2 Consistency in Legislation

Research by Enabling Water Smart Communities concluded that the rollout of water reuse schemes is being delayed by inconsistent interpretation of England's water legislation.⁵⁴ Section 4 of the Water Supply (Water Quality) Regulations 2016 requires water supplied by statutory Water Companies to be 'wholesome' if supplied for 'domestic purposes'. The Water Industry Act 1991 – the Primary Legislation for this area - includes toilet flushing within the definition of a domestic purpose. Water companies have therefore concluded that they cannot legally deliver water reuse schemes, which typically employ non-wholesome water. However, these regulations are subject to interpretation, and some New Appointment and Variation (NAV) companies interviewed as part of this inquiry had concluded that they were able to handle non-wholesome water. Furthermore, the Private Water Supplies Regulations 2016, do not explicitly require supplied water to be wholesome and permit alternate standards of wholesomeness for different uses. These regulations, enforced by local authorities, cover supplies outside the public mains network (e.g., from boreholes, springs, lakes etc.) but could still serve domestic properties such as farms, rural estates, and holiday lets.

In its recent report the DWI drew attention to the absence of any legal definition of, or provision for the supply of non-drinking water in primary legislation. It also called for the definition of the term 'domestic purpose' to be redefined across the primary and secondary legislation to provide consistency and clarity.⁵⁵ This position was supported by most participants in this inquiry.

4.1.3 Public Health

Inquiry participants raised concerns about the risk of cross contamination between drinking water and non-drinking water. In its recent report on water reuse, the DWI identified uses unsuitable for reused water on the grounds of risk to human health, including ingestion, personal hygiene (washing, bathing, teeth brushing etc.), dish washing, and outdoor bathing (hot tubs, paddling pools etc.). The DWI also identified potentially suitable uses based on their relatively low risk to users, these included toilet flushing, garden irrigation, laundry for non-vulnerable persons, and the washing of cars and other external surfaces.⁵⁶ Evidence submitted

54. Enabling water reuse in the UK: single source of truth, Enabling Water Smart Communities, March 2025

55. Governance framework for non-drinking water from rainwater harvesting and greywater reuse systems: expert group recommendations, Drinking Water Inspectorate, March 2026

56. Ibid.

to this inquiry supported this approach, subject to appropriate safeguards for governing non-drinking water quality and the protection of human health. The DWI emphasises the importance of a ‘Water Safety Plan’ – a process involving assessment of each aspect of a water supply system, identification of risks, implementation of control measures to mitigate them, and verification of their effectiveness. Enabling Water Smart Communities has similarly called for wider use of Water Safety Plans as an interim mechanism to advance water reuse schemes while legislation, regulations, and guidance are being clarified.⁵⁷

There are already well-defined standards in place for drinking water quality, which are protective of human health and approved by the World Health Organisation (WHO). However, the WHO publishes no guideline values for non-drinking water and currently imposes no requirement for water quality testing in water reuse systems. British Standards for non-drinking water span several standards and codes of practice, each intended to serve different purposes. The DWI recommends that the strictest existing standards – those developed by the American National Sanitation Foundation – should be used in the interim.⁵⁸

4.1.4 Consumer Attitudes

A common preconceived misconception of water reuse is that they are unpopular with consumers and carry a significant ‘yuck’ factor. Recent research by Public First examined this in detail, initially finding that very few respondents were unwilling to use recycled water at all (9% for treated greywater, 6% for recycled stormwater, and 5% for recycled rainwater from roofs).⁵⁹ These findings are corroborated by academic research from the USA, which found that uncertainty around water reuse stemmed more from rational concerns, such as cost, necessity, and trust.⁶⁰ However, Public First found considerably more divergent views when the public was asked about drinking recycled water, particularly from toilet flushing, with fewer than 10% of respondents willing to drink water recycled from dishwashing, bathing, laundry, or toilet flushing. The research found that recycled rainwater was the most popular option by a considerable margin across all types of reuse.⁶¹

57. Enabling water reuse in the UK: single source of truth, Enabling Water Smart Communities, March 2025

58. Standard 350: certification for water reuse treatment systems, National Sanitation Foundation/American National Standards Institute, October 2025

59. The case for water smart housing, Public First (as part of the Enabling Water Smart Communities project), February 2025

60. Is it still the yuck factor? Public support and willingness to pay for municipal wastewater reuse in Oklahoma, Diodosio, K, et al., Science of the Total Environment, July 2025

61. The case for water smart housing, Public First (as part of the Enabling Water Smart Communities project), February 2025

4.1.5 Cost and Incentives

Public First also examined the types of messaging likely to garner support for water reuse systems. Messaging around cost-saving and bill reduction performed better than messaging relating to sustainability, quality assurance, and common sense.⁶² Evidence submitted to this inquiry indicates that the installation of community-scale reuse systems are currently the most cost effective, averaging an additional £2,000 per plot over and above conventional potable supply and drainage.⁶³ Costs are higher for individual reuse systems, which typically do not use water from Sustainable Drainage Systems (SuDS) and average around £4,000 per plot.⁶⁴ Water companies, which have a legal duty to supply water to new homes that have been granted planning permission, often offer incentives for installation of reuse systems that exceed £2,000, which removes this financial barrier for developers. A Private Members' Bill, in development by Dr Julia Buckley MP proposes that developers could be further incentivised to install rainwater harvesting and greywater recycling systems by prioritising their water utility connection consent applications within 6 months.

Installing reuse systems at the design stage is about 50% cheaper than retrofit.⁶⁵ Furthermore, evidence submitted to this inquiry indicates that designing homes with internal dual pipework and connection-ready drainage, which could be connected to a reuse system later, could cost as little as £350 per property. Participants also highlighted the significant cost savings associated with installation of buried tanks and pipework at the initial build phase, compared to the costs of ripping up hardstanding later.

4.1.6 Installation and Maintenance

Risks can arise if water reuse systems are not correctly installed or maintained. These are particularly acute for cross-connections where non-drinking water is plumbed into pipework containing drinking water. It is therefore essential that these systems are designed and installed by competent professionals, operated correctly, and maintained throughout their lifetime.

62. Ibid.

63. Water reuse in new housing: understanding the business case, Enabling Water Smart Communities, December 2024

64 Ibid.

65. UKWRA: a roadmap towards mandatory water reuse, Stormsaver, August 2025, (online: <https://www.stormsaver.com/ukwra-a-roadmap-towards-mandatory-water-reuse>)

In its recent report, the DWI makes several recommendations to help achieve this, which include:⁶⁶

- Establishing a risk-based framework for all water reuse systems, with accompanying standards for design, installation, and operation.
- Setting standards for the maintenance of reuse systems, that safeguard performance over their operational lifetime, including through performance verification and testing frequencies.
- Strengthening competency within the industry through training and mandatory accreditation of designers, installers, and operators.
- Consolidating industry guidance to the industry into a single Approved Code of Practice, hosted on an official government website.
- Introducing mandatory registration of all installed systems – using the existing Gas Safe Register as a model.

Evidence submitted to this inquiry also indicated that the current system of colour-coding for reuse pipework is confusing and could lead to errors in future. Historically, black pipework was used for non-drinking water. More recently, a black, green, and grey combination has been required, although guidance on this has recently been withdrawn by the Water Regulations Approval Scheme Participants also noted that this combination of colours cannot be readily manufactured, leaving suppliers to add coloured stickers that can fall off or be removed. Several other countries use purple pipework for reused water, which would be both easier to manufacture and easier to identify.

4.1.7 Water Reuse and SuDS

SuDS help to manage rainwater where it falls, improving water quality and reducing flood risk. Alongside the many benefits of SuDS, they provide a reliable source of stormwater, which can be incorporated into community-scale reuse systems. Several inquiry participants were critical of successive governments' lack of progress on SuDS, in particular, the decision not to implement Schedule 3 of the 2010 Flood and Water Management Act in England, which would have made the use of SuDS mandatory for all new developments and help pave the way for their widespread integration into reuse systems.

66. Governance framework for non-drinking water from rainwater harvesting and greywater reuse systems: expert group recommendations, Drinking Water Inspectorate, March 2026

4.2 Intervention

Within the Water White Paper, the Government commits to exploring ways of helping increase water reuse and rainwater management uptake for non-household developments and large water users. However, the Paper provides little further detail on how this will be achieved.

4.3 Recommendations

Even if the recommendations in Section 3 of this report on water efficiency were to be implemented with immediate effect, it would remain unlikely that per capita consumption could be reduced sufficiently to meet the Government's demand reduction target. Water reuse must therefore form an integral part of the solution, and as set out at the start of this chapter, the longer the introduction of mandatory water reuse is delayed, the greater the risk of a significant water deficit by mid-century.

Recommendation 6. Water reuse systems should be mandatory for new residential developments exceeding 100 properties and new commercial developments exceeding 500m². To facilitate this, the Government should:

- a. Update the National Planning Policy Framework and Planning Practice Guidance to reflect this requirement.
- b. Amend Approved Document G of Building Regulations 2010 to include a specific legal requirement for inclusion of water reuse systems where required under planning policy.
- c. Amend the Water Industry Act 1991 to redefine the term 'domestic purpose' so as to distinguish between uses requiring drinking water and those suitable for non-drinking water, thereby enabling the adoption of water reuse systems by water companies.
- d. Establish a statutory basis for the provision of water reuse systems through new secondary legislation, consolidating requirements currently dispersed across Water Supply (Water Quality) Regulations (2016/18), Water Supply (Water Fittings) Regulations (1999) and Private Water Supplies Regulations (2016/17).

Mandating water reuse on the community/commercial scale described above has been demonstrated to be cost-effective, while also avoiding risks associated with cross-connections during individual property retrofit.⁶⁷ However, this inquiry acknowledges that Defra will need to consult on these changes and that the resulting legislative and regulatory reforms will take time to enact. In the meantime, significant numbers of new homes will be constructed without water reuse systems, potentially requiring costly retrofitting within just a few years.

Recommendation 7. To avoid costly retrofit, all new homes should be constructed with internal dual pipework and connection-ready drainage, ready to be integrated into a water reuse system once appropriate legislation comes into force. The Government should commission a review of historic guidance to determine appropriate standards, colour, and material for all new non-drinking water pipework.

This inquiry further acknowledges that the widespread adoption of water reuse systems should proceed only once appropriate safety measures are in place to safeguard public health. Consequently, in parallel:

Recommendation 8. The Government should commission a Publicly Available Specification (PAS) to establish consistency across industry for non-drinking water quality requirements, treatment verification, equipment performance, and competence requirements for practitioners involved in the design, installation and maintenance of water reuse systems. Until such a Specification is in place, alongside a mandatory installer accreditation scheme, all water reuse systems should be accompanied by a Water Safety Plan identifying risks and ensuring that adequate control measures are in place.

Over the longer term, an appropriate framework governing the installation and maintenance of water reuse systems by suitably qualified professionals should be established. Section 4.1.6 of the DWI's recent report on water reuse sets out such a framework in detail.

67. Water reuse in new housing: understanding the business case, Enabling Water Smart Communities, December 2024

Recommendation 9. The Government should implement all the recommendations set out within the Drinking Water Inspectorate's report: Governance framework for non-drinking water from rainwater harvesting and greywater reuse systems (March 2026).

Finally, concerns remain that both household and non-household users lack a clear understanding of their water consumption, do not place an appropriate value on this vital resource, and have misconceptions about water reuse. Addressing these issues will be essential if demand management targets are to be met. This inquiry welcomes the new 'Let's Save Water' campaign but is concerned that it does not adequately highlight the value of water reuse.

Recommendation 10. Information to address misconceptions around water reuse should be incorporated into the Let's Save Water campaign. The campaign should also be integrated into the National Curriculum to foster an appreciation of water scarcity from an early age.

Conclusion

The Government describes economic growth as its “number one mission”. This priority is unlikely to change with either a new Prime Minister or a new Party of Government. It may seem obvious, but growth will be impossible without the water needed for industry, agriculture, and domestic use.

Without action, England could face a public water supply shortfall of 5 billion litres per day by 2055.⁶⁸ However, as this inquiry has heard, water scarcity is not just a challenge for the future, it is something that is actively preventing the development of new homes and businesses right now. This stifles the growth needed to fund public services, maintain investment in infrastructure, and raise living standards for everyone.

In the Cunliffe Review and Water White Paper, the Government has a roadmap to address these challenges. However, unless change comes urgently, it will be much harder to avoid the permanent damage to the economy and our lifestyles that comes with too little water.

The recommendations in this report are intended to close the gap between stated commitment and practical action. This inquiry has set out a timeframe for the implementation of these recommendations below:

Timescale for implementation of recommendations

NOW	2026/27	2028
• Recommendation 2 - Reservoir Act Review and incentives for on-farm storage • Recommendation 3 - A national water efficiency standard and Mandatory Water Efficiency Labelling Scheme • Recommendation 4 - Mandatory smart meter installation • Recommendation 5 - Phased removal of Falling Block Tariffs	• Recommendation 1 - Development of a National Water Strategy • Recommendation 7 - Future-proofing homes with dual pipework • Recommendation 8 - Commissioning a Publicly Available Specification for water reuse • Recommendation 10 - Incorporation of water reuse into the Let's Save Water campaign	• Recommendation 6 - Mandatory water re use for new residential and commercial developments • Recommendation 9 - Implementation of DWI recommendations on water reuse

68. National framework for water resources 2025: water for growth, nature and a resilient future, Environment Agency, June 2025

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Methodology and Contributors

Work on this inquiry began in February 2026, following an online scoping session in September 2025, which was kindly chaired by Baroness McIntosh of Pickering and Lee Pitcher MP.

This project draws on third-party research from a range of organisations, as well as primary data collected following a call for evidence and through one-to-one interviews with experts across industry, academia, the civil service, and NGOs. In addition, an evidence session was held in Parliament on 17th March 2026, hosted by Baroness McIntosh of Pickering.

Policy Connect would like to thank all the individuals and organisations that participated in this inquiry. Our particular thanks to our Chair, Baroness McIntosh of Pickering and Vice-chairs, Lee Pitcher MP (other Vice-chairs here) for their leadership and dedication to the project. A full list of contributors is outlined below. The views in this report are those of Policy Connect and the author. Although these were informed by the listed contributors, they do not necessarily reflect the opinions of these organisations.

Roundtable attendance, oral, and written evidence:

- Affinity Water
- Anglian Water
- Aquality
- ARUP
- Barratt Redrow
- British Association of Landscape Industries
- British Standards Institution
- Chartered Institution of Water and Environmental Management
- Countryside Properties
- Department for Environment, Food and Rural Affairs
- Environment Agency
- Illman Young
- Imperial College London
- Policy Connect
- Queen Mary University of London
- Risk & Policy Analysts
- River Action
- Stormsaver
- Stormwater Shepherds
- Town and Country Planning Association
- UK Water Reuse Association
- Water Resources East
- Waterlevel
- Waterman Aspen
- Wates
- Yorkshire Water

About This Report

The Westminster Sustainable Business Forum

The Westminster Sustainable Business Forum (WSBF) is Policy Connect's coalition of high-level stakeholders informing better policy-making on sustainability issues for the built environment.

The WSBF's members include key UK businesses, parliamentarians, Civil Servants, academics and third sector organisations. Providing a politically neutral environment for knowledge sharing and discussion on sustainability policy, the WSBF helps to impact the agenda in government and is a trusted source of independent information and advice for policymakers. The WSBF works in the policy areas of construction, infrastructure, water, sustainable planning, green finance and natural capital.

The Sustainability Team

The All-Party Parliamentary Sustainable Resource Group (APSRG), the Sustainable Resource Forum, and the Westminster Sustainable Business Forum (WSBF) make up the Sustainability team at Policy Connect.

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Our work focusses on five key policy areas which are: Education & Skills; Industry, Technology & Innovation; Sustainability; Health; and Assistive & Accessible Technology.

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