

Blueprint for PR24

WATER PEOPLE NATURE

ENVIRONMENTAL OUTCOMES
FOR THE PRICE REVIEW



Image Credit: Carl Sayer
Front Cover: Alex Callister

EXECUTIVE SUMMARY

The resilience of our natural environment and our water sector is fundamentally interconnected. Yet our freshwater and coastal environment is suffering – fragmented, polluted and degraded, to the detriment of our communities, our economy, and our wildlife.

Urgent action is needed to protect and enhance our freshwater and coastal systems.

PR24 offers that opportunity. It could deliver a step-change, allowing water companies to lead the way in driving environmental improvements, improving water quality, reducing abstraction and employing high-quality nature-based solutions where these deliver greater benefits.

This is our Environmental Manifesto for PR24. To deliver this, for people and for nature:

Government must:

- Incorporate environmental resilience into decision-making, setting targets for ecosystem resilience through the Strategic Policy Statement to Ofwat (SPS) and the Water Industry National Environment Programme Review (WINEP).
- Drive an ambitious water efficiency programme, including by removing restrictions on water metering and funding a national campaign to influence consumer water-use behaviour, to reduce per capita consumption to 100 l/p/d or less by 2050.
- Drive action to eliminate harm from Combined Sewer Overflows (CSOs) by establishing ambitious interim targets.
- Enable the agricultural sector to go further in improving water quality in partnership with water companies by reconsidering the regulatory approach to 'fair share' improvement.

Regulators must:

- Support the mainstreaming of nature-based solutions (NBS) through the WINEP and PR24 methodologies, accepting these solutions when they deliver the greatest outcomes.
- Encourage the use of natural capital accounting methods, so that investment during PR24 delivers multiple benefits.
- Promote water industry use of citizen science, embedding this in PR24 and WINEP recommendations, and endorsing the Catchment Monitoring Cooperative.

Water companies must:

- Put environment at the heart of decision making; investing in nature-based solutions, incorporating a natural capital approach to cost benefit assessments, and adopting a target to exceed Biodiversity Net Gain requirements.
- Reduce the amount of water taken from the environment, through adopting a long-term target of 100 l/p/d or less by 2050.
- Ensure that Drainage and Wastewater Management Plans include a 2030 target for zero pollution incidents, and plans to end discharges from the most environmentally harmful CSOs.
- Invest in quality engagement with local communities, developing nature-based solutions in partnership.

DELIVERING A TRANSFORMATIONAL PRICE REVIEW

The resilience of our natural environment and our water sector is fundamentally interconnected.¹

The health, wellbeing and persistence of nature and people depend on a secure, sustainable supply of water. In turn, a flourishing water environment is vital to achieving industry obligations and aspirations, such as compliance with environmental legislation, achieving 'net zero' carbon emissions, and making a wider contribution towards a green recovery. These commitments go to the core of water companies' pledges to 'work in the public interest and place wider good at the heart of everything they do'.²

Yet the current state of our water environment is critical. Not a single waterbody in England is currently considered to be in good health, with none meeting good chemical standards and just 16% meeting good ecological standards.³ Globally, freshwater species are declining more rapidly than any other group – in the UK, 13% of our freshwater species are threatened with extinction.^{4 5}

Urgent action is required if Government hopes to achieve its goal of halting the decline of habitats and species by 2030, delivering 'clean and plentiful water' and seeing at least 75% of waters as close to their natural state as soon as is practicable as pledged through the 25 Year Environment Plan.

A challenging, and yet transformational, Price Review presents an opportunity to ensure that through the next plan period (AMP8) the water sector makes the greatest possible contribution to these goals.

Blueprint for Water has engaged with the Government, regulators and water companies, as well as our members and supporters, to set out environmental priorities for PR24. We are extremely grateful to all the organisations and individuals who took the time to engage with us.

Our Environmental Manifesto sets out **our ambition for PR24, and the action required from Government, regulators, and water companies, to ensure the Price Review meaningfully delivers for people and for nature.**

The following overarching activities and approaches will be key to this, placing environmental and climate considerations at the heart of companies' plans.



Image Credit: Mark Hamblin/2020VISION

1 https://www.wcl.org.uk/docs/Naturally%20Resilient_Final_Report.pdf

2 <https://www.water.org.uk/news-item/water-industry-reaffirms-pledge-to-work-in-the-public-interest/>

3 <https://environment.data.gov.uk/catchment-planning/>

4 https://f.hubspotusercontent20.net/hubfs/4783129/LPR/PDFs/Living_Planet_Report_Freshwater_Deepdive.pdf

5 <https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf>

Blueprint recommendations for the Price Review:

Headline actions	Blueprint Asks	Who should take action?
Incorporate environmental resilience into Government and water company decision-making	<p>Government should set a target for ecosystem resilience within the water industry through Defra's Strategic Policy Statement to Ofwat (SPS) & the Environment Agency's (EA) review of the Water Industry National Environment Programme (WINEP) and this should be added to the WINEP recommendations.</p> <p>Recognising environmental resilience as a legitimate outcome of the WINEP drivers will encourage companies to develop and deliver schemes that protect and enhance the environment upon which their businesses depend.</p>	Defra (SPS), EA (WISER, WINEP), Ofwat (PR24 methodology).
Incorporate a natural capital approach to cost benefit assessments	<p>Cost benefit assessments for all investment should be based on Natural Capital rather than financial costs alone.</p> <p>The SPS should establish the approach as central to determining expenditure within the WINEP as well as wider Business Plans.</p> <p>Companies must build on the preparations of AMP6 and trials taking place in AMP7, and adopt an industry-wide approach to Natural Capital Accounting, so that variations in approaches do not result in poorer outcomes for the environment in different parts of the country.</p>	Water Companies/ Ofwat
Invest in nature-based solutions	<p>An increased proportion of the industry's £1bn WINEP annual investment should be used to deliver high-quality Catchment and Nature-based Solutions (C&NBS), delivering more for society and the environment than traditional approaches.</p> <p>The SPS and WINEP methodology should include specific ambitious targets for the increased use of C&NBS, supporting their 'mainstreaming' and securing their contributions to nature and climate goals.</p> <p>Water companies should adopt these as a matter of course, and be able to provide good evidence where such solutions cannot be incorporated.</p> <p>Clear appraisal guidance is needed to ensure that where C&NBS are the preferred options by water companies and stakeholders, proposals will be accepted by the regulators.</p>	Water Companies/ Ofwat
Align funding mechanisms	<p>The Options Appraisal processes for Regional Groups' Water Resources Plans, and companies' Water Resources Management Plans and Drainage & Sewerage Management Plans should give increased weighting to schemes that contribute to the recovery of nature, such as through Local Nature Recovery Strategies and catchment management plans.</p> <p>Business Plans must reflect these priorities to ensure that schemes that invest in nature are prioritised.</p>	Water Companies/ Ofwat/EA

Headline actions	Blueprint Asks	Who should take action?
5 Increase biodiversity net gain targets	<p>All water companies should adopt a target of 20% Biodiversity Net Gain for the Price Review, in line with the Industry's commitment to "champion measures through which water companies can enshrine what it means to operate in the public interest."</p> <p>Showing leadership by adopting a target greater than the minimum 10% (that will be established through the Environment Bill) is entirely fitting for a sector that benefits from a healthy water environment.</p>	Water Companies
6 Adopt nature-based solutions to achieve net zero carbon emissions	<p>To meet the industry's commitment of achieving net zero carbon emissions by 2030 in a sustainable way, companies should prioritise actions that have NBS at their core, in order to reduce operational emissions.</p> <p>This should extend the scope of NBS beyond simply just tree planting, and significantly increase investment into the protection and enhancement of green and blue carbon stocks including peatlands, grasslands, wetlands, reedbeds, seagrass meadows and kelp beds.</p> <p>Companies' carbon accounting should factor in 'scope 3' carbon impacts (indirect emissions e.g. staff travel, purchased goods) which can be a large share of a businesses' Carbon footprint.</p>	Water Companies
7 Publish Water Company Performance Reporting and EPA Review	<p>Environmental headlines from companies' Annual Performance Reporting, and EA's Environmental Performance Assessments, should be published annually on the Discover Water website, so that information is easily accessible to customers and stakeholders, and comparable across companies.</p> <p>Information from company reporting should include progress with environmental Key Performance Indicators / Performance Commitments, and information about environmental fines or penalties.</p>	Water UK
8 Embed a safe and sustainable circular economy into water industry practice	<p>A safe and sustainable circular economy should be embedded into water industry practice. For example, companies should:</p> <ul style="list-style-type: none"> • Ensure their own operations are not contributing to an increase in contaminants (e.g., persistent organic pollutants and microplastics) in the environment; • Review current sludge and bio-solids treatment practice. Thresholds for treated sewage sludge should be introduced that reflect modern composition of wastewater, including for microplastics and PFAS (a group of persistent pollutants) as a minimum, and publish a road map which includes annual reduction targets, and addresses concerns around anti-microbial resistant bacteria; • Take a proactive approach to reducing contaminants coming into the system by working together to fund projects which identify and implement interventions to stop pollutants at source. 	Water UK / Water Companies



Image Credit: Steve Nicholls/WWT

WATER USE

The health, wellbeing and persistence of nature and people depends on a secure, sustainable supply of water.

Every day, 14,000 million litres of water are provided by water companies for public water supply, and 1000 million litres of water is used by other sectors, such as industry, power generation, and farming.⁶ The fundamental properties of our freshwater systems, including water quality and the distribution of habitats and wildlife, are dependent on the volume and flow of water.

But our current relationship with water is not sustainable. Over-abstraction is a significant threat to our freshwater environments. Nearly a fifth of surface waters, and over a quarter of groundwaters, do not have enough water to protect the environment and to meet the needs of fish and other aquatic life.⁷ Parts of England are projected to run out of water in the next 20 years, with the UK's total water supply forecast to drop 7% by 2045 due to climate change and sustainable abstraction limits.⁸

The next Price Review needs to move us further towards sustainable water use by taking actions that collectively reduce the amount of water we take from our environment.

Blueprint recommendations for the Price Review:

Headline actions	Blueprint Asks	Who should take action?
Take ambitious action that reduces abstraction needs	<p>Companies should take action to reduce the amount of water they take from the environment and put into supply (Distribution Input, DI) measured in absolute volumetric terms and as DI per head.</p> <p>Milestones (2030, 2040, 2050) should be set, linked to an aim to reduce absolute DI by at least 15% by 2040, and to achieving Environment Bill targets as a minimum. This should be met through a combination of reducing leakage (MI/d), domestic Per Capita Consumption (PCC, l/p/d) and non-household demand, with AMP8 targets that set companies firmly on the path to helping government achieve these longer-term goals.</p> <p>Within this, the industry should adopt a long-term target of reducing PCC to 100 l/p/d or less by 2050, (a level of consumption already achieved across several European countries). The current 110 l/p/d planning assumption for that date was agreed to be appropriate in the absence of new positive government policy; the Government is now taking forward mandatory water labelling and will publish a roadmap to improve water efficiency in homes, making faster reductions viable.</p>	Water Companies/ Ofwat

6 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873100/National_Framework_for_water_resources_summary.pdf

7 <https://www.gov.uk/government/publications/water-abstraction-plan-2017/water-abstraction-plan>

8 <https://www.nao.org.uk/press-release/water-supply-and-demand-management/>



Image Credit: Ross Hoddinott/2020VISION

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Headline actions	Blueprint Asks	Who should take action?
Remove restrictions on metering	<p>Government should remove remaining restrictions limiting the pace of (smart) meter roll out. Smart meters are known to help customers understand and reduce their water use.</p> <p>All water companies should provide straightforward, readily accessible information to customers on their water usage and benchmarks. Without this information it is harder to motivate customers to save water.</p> <p>Every newly metered customer should have the option of a home water saving audit in AMP8.</p> <p>Wholesalers should work with water retailers to ensure the top 200,000 businesses that use over 80% of water supplied to businesses have smart meters by the end of AMP8 with data available to the businesses, retailer and wholesaler.</p>	Government, Water Companies, Water Retailers
Put sufficient legislative and other measures in place to reduce PCC to 100 l/p/d or less	<p>Government should bring forward a programme of water efficiency work including directing water industry targets, introducing water labelling requirements, and requiring stricter efficiency standards for water efficient development in the Future Homes Standard & National Planning Policy Framework.</p> <p>This needs to be achieved by 2023.</p>	Government
Deliver ambitious wholesale abstraction reform	<p>EA to develop a new forward looking Sustainable Abstraction programme to address predicted future deficits and environmental needs identified in the National Framework.</p> <p>Regional Groups and Water companies to include water resources investment in their plans to address future environmental needs, as well as addressing existing impacts.</p> <p>Water companies to commit to relocating groundwater abstractions impacting on the ecological health of our rare chalk streams and rivers.</p> <p>Government should direct the water industry to investigate the benefits and costs of significantly reducing abstraction from chalk streams (including to zero) and to test these with customers.</p>	EA Water Companies Water Companies Water Companies/Govt

WASTEWATER

We are facing a water quality crisis.

None of England's surface waters – rivers, lakes, estuaries and coastal waters – meet water quality standards. At the start of the last Price Review period, wastewater from the water industry was cited as a factor in waterbodies failing to meet 'Good Status' under Water Framework Directive targets in over 3000 instances⁹.

Progress on tackling this is poor – the percentage of waterways meeting Good Ecological Status is unchanged since 2016. In 2019, the total number of pollution incidents across Water and Sewage Companies was at the worst level in 5 years, and in 2020 raw sewage was discharged into rivers and coastal waters across England over 400,000 times, for over 3 million hours.^{10 11}

This poor water quality in our rivers and waterways is detrimental to both people and nature, threatening the well-being and economic vitality of our communities, and the health and persistence of habitats and wildlife. Our freshwater biodiversity underpins productive, efficient and stable ecosystems, yet these species and habitats are in steep decline; 90% of our wetland habitats have been lost in the last 100 years.¹² Our water treatment systems are struggling to cope with increasing pressure from extreme weather events and increased demand. Water users, inland and at sea, are put at risk of contracting illnesses such as E. coli and gastroenteritis. Research by the European Centre for Environment and Human Health (ECEHH) in 2020 found that bathers in the UK remain just as likely to become ill from seawater as they were in the 1990s.¹³

Blueprint recommendations for the Price Review:

Headline actions	Blueprint Asks	Who should take action?
Publish real-time data to inform stakeholders and underpin investment decisions	The Industry should deliver against aspirations to improve the monitoring methodology for Storm Overflow. In the long term this should include load information, as well as volume, and should see real-time data published (beyond just for bathing waters) UKWIR should make data and outputs from the Chemical Investigation Programme publicly available.	EA, Defra, UKWIR



9 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/514944/National_evidence_and_data_report.pdf (See Table 33).

10 <https://www.gov.uk/government/publications/water-and-sewerage-companies-in-england-environmental-performance-report-2019/water-and-sewerage-companies-in-england-environmental-performance-report-for-2019>

11 <https://www.therivertrust.org/about-us/news/sewage-update-2020-spill-data-added-to-our-map>

12 https://f.hubspotusercontent20.net/hubfs/4783129/LPR/PDFs/Living_Planet_Report_Freshwater_Deepdive.pdf

13 Leonard, A.F.C., Garside, R., Ukoumunne, O.C., and Gaze, W.H. (2020) A cross-sectional study on the prevalence of illness in coastal bathers compared to non-bathers in England and Wales: Findings from the Beach User Health Survey, Water Research, Vol.176, p.115700

Headline actions	Blueprint Asks	Who should take action?
Improve classification and Investment in Sewage Discharge Infrastructure	<p>Water companies must classify the condition of all Combined Sewer Overflows (CSOs) and make assessment information open and transparent as soon as data allows.</p> <p>Investment must be put in place to bring all CSOs to 'satisfactory' asset standards by 2030, prioritising through the WINEP improvements that deliver wider benefits to health, wellbeing and environment.</p> <p>A programme of continuous investigation and improvement must be put in place with investment allocated through 'contingent items', to enable investigation and improvement works to be undertaken within the AMP8 cycle.</p> <p>To maintain or enhance high-status waters and Protected Areas, Government should direct the Water Industry to deliver catchment solutions and NBS through the WINEP, building on the investment already delivered to protect such sites.</p> <p>On other rivers, where tertiary treatment is cost- and carbon-prohibitive, nature-based solutions should be employed.</p>	Water Companies, EA, Ofwat
Develop plans for decommissioning particular CSOs so that they no longer discharge at all	<p>Integrate interim targets to 'reduce harm' from CSOs by developing plans to decommission all CSOs in recreational hotspots, and those causing environmental harm, through prevention rather than just diverting spills</p> <p>Target the most environmentally harmful CSOs to be dealt with, not just monitored, in the next business plan (AMP8). Harm should be defined by environmental impact on receiving water bodies.</p> <p>Replicate in Business Plans the Bathing Water designation target from the Sewage (Inland Waters) Bill for recreational hotspots (i.e., at least two inland bathing water designations per water company per year).</p> <p>Include Drainage and Wastewater Management Plan (DWMP) priorities (covering all wastewater, not just CSOs) in PR24 - Business Plans must reflect wastewater priorities coming out of the DWMP & WINEP.</p> <p>Mainstream the use of C&NBS such as sustainable drainage schemes for reducing reliance upon CSOs, employing them wherever effective.</p>	Water Companies and Defra
Set targets for zero pollution incidents by 2030	A target for zero pollution incidents (categories 1, 2 and 3) by 2030 must be set by all water companies.	Water Companies, Ofwat, Defra
Set out plans to achieve Environment Bill wastewater targets on nitrate and phosphorus as a minimum	<p>Companies should set out plans to achieve Environment Bill wastewater targets as a minimum, as part of an overall approach to the more sustainable management of wastewater. Blueprint believes that clean water targets established under the Bill should go beyond existing Water Framework Directive requirements.</p> <p>Contributing metrics could include the proportion of wastewater treated to tertiary standards, the proportion of wastewater managed via nature-based solutions, and the area of habitat protected via first-time sewerage schemes or 're-routing' of water industry infrastructure.</p>	Water Companies

ENGAGING COMMUNITIES

Healthy, flourishing blue spaces are vital not only for nature, but for us.

The health and wellbeing of our freshwater environment is intrinsically connected to the health, wellbeing and economic vitality of our communities. The value of freshwaters for the whole of the UK is estimated to be £39.5 billion.¹⁴ Restoring just 3/4s of rivers, lakes and wetlands in England to good ecological status by 2027 would boost the economy by a total of £5 billion through increased tourism, improved flood resilience, and enhanced quality of life.¹⁵ Research suggests that access and exposure to blue spaces is beneficial to both physical and mental health and well-being, and could be key to mitigating socio-economic health inequalities.^{16 17}

But our freshwater environment is fragmented, polluted and degraded, and despite growing public awareness and appreciation of blue spaces, barriers to access and understanding remain. 200,000ha of priority wetland habitat is currently in poor condition.¹⁸ The UK compares poorly to other European countries in terms of the number and type of designated bathing waters. Data from 2017 shows that 50% of consumers were not aware that raw sewage could be released into rivers, and 35% had flushed or put something down the drain that they shouldn't within the past month.¹⁹ Surveys commissioned by Waterwise and Water UK in summer 2020 showed that 46% of people think their entire household uses less than 20 litres of water a day – the real figure is around 143 litres per person.²⁰

Blueprint recommendations for the Price Review:

Headline actions	Blueprint Asks	Who should take action?
1 Fund a national campaign to influence consumer behaviour	Government should fund a national campaign, developed and delivered in partnership with others, to change consumer behaviour with regard to water use and the way people dispose of items and chemicals down drains and toilets.	Government
2 Develop nature-based solutions in partnership with local communities	Companies should invest in quality engagement with local communities wherever nature-based solutions are being considered. Schemes with community support are more resilient and the community often play a key role in ensuring their operational effectiveness.	Water Companies
3 Work with the agricultural sector to improve the water environment	Reconsider the regulatory approach to 'fair share' improvement of water quality. The water sector can play a key role in supporting farmers who are compliant with regulation but where pollution reduction requires them to go beyond regulatory baselines. The current approach can see farmers unable to invest, and the sector unable to support them.	EA
4 Promote Water Industry use of Citizen Science by embedding in PR24 and WINEP recommendations	In order to improve on appropriate monitoring of the environment, the Government should endorse the Catchment Monitoring Cooperative, which proposes to create the first national scale framework for standardised citizen science approaches, which integrate local monitoring with other low-cost, high-density data into national decision support tools.	Ofwat, EA, Defra

14 <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapital/landandhabitatemecosystemaccounts#ecosystem-accounts-for-freshwater>

15 <https://www.wwf.org.uk/uploads/saving-earth-sustainable-future-soils-and-water>

16 <https://www.sciencedirect.com/science/article/pii/S1438463917302699>

17 <https://www.sciencedirect.com/science/article/pii/S0013935120310665?via%3Dihub#bib2>

18 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933803/ncc-final-response-25yr-env-plan.pdf

19 https://www.wwf.org.uk/sites/default/files/2017-12/Flushed%20Away__Nov2017.pdf

20 https://waterwise.org.uk/wp-content/uploads/2019/09/The-Effect-of-Metering-on-Water-Consumption_June2017.pdf



Our Manifesto for the Price Review sets out the role that the water sector can play in helping to restore our freshwater environment. These are part of a broader suite of actions to **recover biodiversity, drive down pollution, and re-think our relationship with water** that are urgently needed to bring our waters, wetlands and wildlife back to health. Read more in "[Blueprint for Water: Actions to recover England's Waters and wildlife](#)".

Blueprint for Water, part of Wildlife and Countryside Link, is a unique coalition of environmental, water efficiency, fisheries and recreational organisations that come together to form a powerful joint voice across a range of water-based issues.

Wildlife and Countryside Link is a coalition of 62 organisations working for the protection of nature. Together we have the support of over eight million people in the UK and directly protect over 750,000 hectares of land and 800 miles of coastline.

Thank you to the following organisations and partners for their support:

