

**WORSHIPFUL COMPANY OF WATER CONSERVATORS  
SUBMISSION TO THE OFWAT FUTURE IDEAS LAB**

**PR24 AND BEYOND: CREATING TOMORROW, TOGETHER**

**Summary**

- S1. The Worshipful Company of Water Conservators welcomes Ofwat’s ideas and ambitions for the 2024 price review “PR24 and beyond: Creating tomorrow, together”. The Company is encouraged by the four ambitions for what PR24 can achieve for customers and the environment. It is clear that the water sector faces profound challenges in the coming years and decades, from climate change to growing customer expectations, and concerns about affordability. The Company is concerned that these challenges should be met “Together” and not tackled piecemeal or in isolation.
- S2. The Company has developed views on what ‘Together ‘ could mean and these have been expressed in several responses to Defra consultations and also submitted to the House of Lords in relation to its Inquiry into Ofwat’s powers with particular reference to storm overflows. These are located on the Company website <https://www.waterconservators.org/>.
- S3. The Company recognises that several of its suggestions may be too late for PR24, but it is hoped that they might help AMP8 and that they will inform PR29 and AMP 9.
- S4. The Company submits that the work of Ofwat cannot be effected best in isolation. It must, at the very least, interact with economic and environmental regulation, and with Government policy. The key challenge facing Ofwat, and the sector, is how to deliver improvements in environmental quality and resilience to drought and flood without creating an unaffordable bill burden. Current approaches will not achieve this.
- S5. Part of this, should be a shift towards outcome-based environmental regulation. Rather than specifying outputs that water companies must deliver, it should instead specify the outcomes that are needed. This would unlock the ability to look at problems in the round, drawing in all sectors that contribute to the root cause of problems that need resolution (agriculture, industry, developers) to work with the water sector to find best value solutions, stimulate innovation and increase the number of nature-based solutions.
- S6. This submission is supported by some specific suggestions to help Ofwat, the Environment Agency (EA) and water companies, particularly in the examples in the Appendix which have already been submitted to Defra in response to consultations earlier this year. Some relatively straightforward policy changes could be implemented, including:
- Removing the automatic right to connect to the public sewer network
  - Making water companies a statutory consultee in planning processes
  - Tighter product regulation to reduce sewer blockages and reduce water consumption
  - New developments should have a legal requirement to deliver SUDS (with exemptions in prescribed conditions)
  - Improve the processes for dealing with disruption to roads and access when water infrastructure is being put in place or repaired

- S7. Given the above, the Company suggests that the Government should review its proposed Environment Act targets, which would work against the outcome-based approach. For example, the proposed target for phosphorus reduction is focused only on phosphorus reductions “from treated wastewater” will drive expenditure and focus from water companies only on the “end of pipe” issue, rather than the root cause, at great cost and with limited benefit to river health. This is elaborated in Para S 11. Instead, wording that targeted “Good Ecological Status” in rivers, would drive actions from all sectors to deliver the outcome that is desired.
- S8. The Company submitted to Defra that Government should also bring forward a National Strategy for Water, and that would include a National Rivers Strategy. This would embrace a more coherent approach to inland bathing waters to draw this together and build national consensus.
- S9. This submission highlights the insight that achieving our environmental targets will require a much broader national effort that just the triangulated nexus of Ofwat, the environmental regulators and water companies. It includes recognition of roles of other organisations and in particular what roles we must all play as individuals. This is also relevant to understanding the way forward on storm overflows.
- S10. Whatever way forward is adopted, the Company submits that, at the moment, national water policy seems to be a series of individual initiatives, more like ‘a jigsaw’ What is needed is a clearer road map and that will be aided by a National Strategy for Water linked to the 25 Year Environment Plan. Sometimes, it difficult for all but the most intimately involved to understand what the drivers are. The focus must be on a national framework from which local targets can be derived, rather than the current focus on broad national targets applied locally.
- S11. As an illustration, the Consultation on Environmental Targets proposed that phosphorus loadings from treated wastewater were reduced by 80% by 2037 (against a 2020 baseline). Defra wanted to ensure water companies explore innovative, nature-based, and catchment based approaches to reduce phosphorus pollution from wastewater in the water environment and it stated that it was not focussed solely on phosphorus treatment at sewage treatment works and that this will deliver the best outcomes for our water bodies and the natural environment as a whole. Defra stated that it had made this clear in its draft Strategic Policy Statement to Ofwat which encourages water companies to use nature-based solutions. This national target must be understood in the context of phosphate removal programmes as part of Water Industry Environment Programme with targets set in AMP 7 (20-25). But, however this is packaged, they are all end of pipe solutions. The Company offered an innovative thought that one contribution to phosphate targets might be to reduce phosphate in diets. Half is added artificially for a variety of reasons and the NHS already issues advice on its reduction for patients with renal problems.
- S12. As a further illustration there are no plans to deal with the disposal of all used care products beyond the proposed ban on wet wipes containing single use plastics. The presence of these materials in toilet flushes causes sewer blockages and then when present in storm sewage discharges, is a major cause of public protest quite rightly. But at the moment it is left to the water companies to develop voluntary schemes with producers and retailers of such products and to persuade customers to behave more responsibly.

- S13. The paper contains much more detailed analysis. The Company hopes that the Future Ideas Lab finds this of use and it stands ready to render whatever further assistance Ofwat would find valuable.

### **Introduction**

1. The Worshipful Company of Water Conservators, a City of London Livery Company, has made several submissions to Defra this year in response to consultations relevant to the water environment and these can be found on its website <https://www.waterconservators.org/>. This submission draws on these. The Company does not provide any commentary of the performance of Ofwat, but does seek to provide some ideas which might help Ofwat execute its role in future.
2. The Company is focussed on the long-term health of our water resources and the broader environment. Its members include active and retired senior professionals from water, environmental and related industries and regulators, along with others who share our passion for water and the environment. It is well placed to provide a commentary on the broader issues.
3. The Company supports the changes in water management to protect and enhance the environment and better meet public expectations while also responding to other factors including pressures arising from climate change and the need for more homes. It is also mindful that this is an additional cost to water service customers at a time of economic hardship. But it has expressed reservations on the way that those changes are being delivered.
4. It argues that a more refined approach to setting operational and investment targets and better cost benefit appraisal is needed. Simply setting targets is a blunt instrument and there must be a more local approach using national principles rather than national targets. There needs to be a greater understanding of the practical issues around delivery and this has consequences for the programmes agreed between the Water Companies and Ofwat.

### **The National Context**

5. In simple terms, Government strategy appears to rely on the central triangulated nexus of the environmental regulators, principally the Environment Agency in England and Natural Resources Wales, with Ofwat, and the water and sewerage companies. It appears to rely on its role being setting national targets and leaving it to the nexus to deliver. The consultations have not recognised the roles of other parties nor of other roles of Government, and the Company has highlighted this.
6. The Company has offered an insight that society at large must accept the principle that water and sewerage companies' core business is transport and production i.e. they produce drinking water and transport it to customers and then collect and transport used water and thence produce clean effluent for return to the environment. They have no direct control over what the consumption demands or used water qualities are. It must be recognised that the limits are being approached of what they and the regulators can achieve alone in terms of behavioural change. We all need to think more about what we

put down sewers, be it used care products, phosphate, or surface water, and how we use water wisely. The Company asks whether this is a function for which Ofwat should ultimate responsibility through the Price Review processes.

### **Current approaches**

7. In order to better understand the role of Ofwat in this context, the Company submits that there is a need for a number of changes to the current approach and it has reservations about proposals to effect the changes which are needed.
8. There is a need for a ‘road map’ to explain how the current and future water management initiatives are meant to relate to each other. As presented, they are a collection of seemingly ad hoc proposals, which need to be integrated with other relevant initiatives and policies. For example, targets for phosphate in, and abstraction of river waters, are dealt with in the consultation on 25 Year Environment Plan Targets, sewer blockages (a major cause of sewer overflows) are dealt with only in the drive to reduce single use plastics by proposing a ban on plastic containing wet wipes, sewer overflows are dealt with separately, but its consultation contains a significant narrative about swimming in inland waters (which are influenced by many other factors). There is a plethora of other relevant plans such as WINEP, the Water Industry Environment Plan. Would it be clearer if they were all linked as actions in the 25 year Plan?
9. The lack of the ‘road map’ is a reflection of the seeming absence of an overall strategy, which would contain detailed points of principle. Getting this sorted out would then provide the first step in assessing the role of Ofwat and then deciding how best it can contribute.
10. Meeting the aspiration will mean higher costs. Extra spending in a period of economic difficulties ought to focus on instances where tangible benefits will be attained. Proposals, so far, do not seem to have been subjected to the Treasury ‘Green Book’ on Appraisal and Evaluation (updated March 31 2022). The Company suggests that more focussed and appropriate cost benefit analysis is needed and a view taken as to how this would fit into the background to water economic regulation.
11. The Defra consultations have not demonstrated any role for other parties which have influential roles in economic regulation. An example is the impact of planning on the role of Ofwat. The consultations take account of some of the practical issues of delivery, which the Company anticipates will not be overlooked by Ofwat. The Company’s submissions have highlighted the roles of other bodies in assisting the achievement of targets, for example Planning Authorities, or the potential of an extended role of the Government’s Behavioural Insights Unit, for example. The Company has identified some examples of the broader context, which are appended.
12. There is a need to change the Planning Framework on connections to sewers. At present there is a right to connect to public sewers subject to the connection meeting defined technical standards and there is a connection or infrastructure charge to cover the impact on infrastructure. The Company supports the proposal to remove this right, in the forthcoming review.

13. The provision of much needed housing is often overwhelming sewers, but the water companies and regulators have no powers to object to development but do have statutory obligations as a consequence of planning decisions. In some cases, the views of water companies and regulators are taken into account but not always. There are already some developments being held back for such matters, and the Company is aware that some MPs are advocating the opposite of what the Company is submitting and that the 'role of unelected bodies should be curtailed'. The Company submits that a very useful change would be to make water companies at least statutory consultees in planning processes and review the impact of the regulators as existing statutory consultees.
14. There also needs to be greater clarity in the relationship between individual connections providing a very small increment of financial contribution and the major provision of additional assets as individual connections increase. There is a difference between the connection of very large development and the constant addition of individual properties. The commitment to remove the right to connect under the Schedule 3 of the Flood and Water Management Act is welcome and we assume that this will embrace the right to connect just foul sewage. The Company foresees that this will be an impediment to development and will thus cause a clash with regular planning permission processes. The Company urges therefore that the Government needs to refine the Planning Framework to complement this change.
15. The other aspect of planning for new build is the commitment to SUDS. An initial reaction is that all new build should have SUDS, but the Company cautions that there are some situations in which this may not be possible, for example, in single property infill in tight urban situations, which of course is going to exacerbate the challenge of the task of water companies. So, there is a possibility that some new build might be connected to the new surface water sewerage systems. The Company submits that planning and building consents must have a legal requirement for SUDS, unless there is an exemption granted under prescribed conditions. It may well be that this could be achieved as a Planning Direction with a Statutory Code of Practice. The Building Regulations might also need attention. Again the role of Ofwat should be examined in this context.
16. The implementation of any changes in the way the water environment is husbanded may take some time, but there are issues which must be addressed by Government, sooner rather than later. In spite of the public demand for action, when it comes to granting planning permission for new assets, like storage tanks, there is less tolerance, as the objections to the Thames Tideway Tunnel demonstrate. This aspect of delivery of the Defra proposals for the Reduction Plan might need to be addressed by planning guidance under the Planning Framework. There is limited patience over the disruption of roads and access. The Government needs to ensure that the New Roads and Street Works Act 1991 is fit for purpose (and any Code of Practice ) and that compensation arrangements under Section 180 and Schedule 12 of the Water Industry Act 1991, as amended, and section 177 and Schedule 21 of the Water Resources Act 1991, are fit for purpose. And these will influence how water companies perform and hence the role of Ofwat.

## **Company suggestions for changes to context**

### **National River Strategy**

17. A theme common to many of the challenges of water regulation is the way rivers are managed, and that is the 'big issue' behind storm overflows. There is an urgent need for a national river strategy. The Government consultations this year have focussed 'piece meal' on algal problems arising from the presence of nutrients lowered river flows due to over- abstraction, pollution from sewer overflows, and a particular focus on the demands for 'wild swimming' .
18. The Company advocates that to effect a concept of local delivery within a set of national principles, a return to river quality objectives is needed. An overarching River Use and Quality Strategy is required to provide a holistic framework into which the proposals will fit. This should evolve from existing Basin and Catchment Plans. In this there are agreed sets of quality criteria for recognisable uses, including the demands of nature, there are public consultations on uses within defined stretches of rivers; once it is agreed what those local uses are, the relevant criteria are combined into a quality specification for each stretch. These are then used to determine discharge consents (including the separated surface waters and river flow regimes, using models such as SIMCAT (SIMulation of CATchments), under the future Regulations of the Environment Act. Such a National Strategy should be linked to the 25 Year Environment Plan.
19. This would then provide the right framework for an inland bathing water strategy, which is the right place rather than being fitted into a consultation of storm overflows (this is discussed in the Appendix), and this would give Ofwat a better framework.

### **Creation of a national consensus**

20. Ofwat will note the numerous suggestions by the Company for more coherent strategies and for the strategic and tactical role of many other parties, and it will note many points made in the examples in the Appendix. It is a challenge to determine how best the rhetoric of this submission can be converted to practical reality. A logical conclusion would be to create a national water forum in which all relevant parties can contribute, not necessarily all being standing members. Its purpose would be to bring all parties together to agree a better consensus than that of the moment. Whilst individual pieces of water policy are contained in a series of consultations, it is challenging to bring coherence from each of the responses and this must make life more difficult for Ofwat. Ofwat might like to reflect on how it thinks that this could be better achieved in the absence, pro tem of an overarching strategy.
21. It is clear that Government must have a different role than just setting targets for the regulators and water companies. It must lead in the broader social changes necessary .The Company understands that there must be a balance between the need to avoid too much intervention and the need to provide a framework in which the achievement of aspirations can flourish. The simple truth is that as the demands for environmental improvements increase we all have a role to play in delivery.

22. In that context the consultation document on the Plan for Reduction of Storm Overflows does make reference is made to ‘actions that we can all take to reduce the amount of rainwater entering our sewers and keep them flowing freely’. But there is much more to be done than this. The Company has already advocated this kind of approach in its submission for a holistic strategy for dealing with used care products. The Company would like to see the government take national leadership in this concept of Citizen Delivery.
23. Citizen science is defined as public participation in scientific research, participatory monitoring, and participatory action research, whose outcomes are often advancements in scientific research by improving the scientific community's capacity, as well as increasing the public's understanding of science. It has been used increasingly, for example, in river management. Ultimately, this is leading to a bottom-up social movement that is clamouring for a change in the way we manage our water environment. The Company supports the important role of public participation.
24. The time has come to embrace the reality that environmental aspirations will only be only be reached by a broader coalition of delivery involving all of us, be that individual or corporate. For example, in the Storm Overflows consultation document, reference is made to ‘actions that we can all take to reduce the amount of rainwater entering our sewers and keep them flowing freely’. The Company has already advocated this kind of approach in its submission for a holistic strategy for dealing with used care products. The Company would like to see the government take national leadership in this concept. The Company suggests that the time has come to create a nexus between Citizen Science and Citizen Delivery, and it will be considering how this could be best achieved

### **National Committees**

25. A final overarching conclusion of the Company’s deliberations was that these matters are sub texts in the matter of how much environmental resource have we in the UK to sustain a projected population with current life style expectations. This seemed to be missing from the consultation documents. The Company drew attention to the final conclusions of the work of the Royal Commission on Environmental Pollution in 2011 on Demographic Change and the Environment.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/228980/8001.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228980/8001.pdf)
26. It concluded that in 2011 current trends suggested we can expect a growing population in the UK – fuelled by increasing life expectancy and net inward migration – and an increasing number of households, more of them occupied by only one person. But these trends do not apply uniformly across the UK and the Royal Commission was struck by the intense graininess of the situation at all levels (Chapter 2). Where people are, and how they live, have major environmental impacts. More importantly, policies to influence behaviour and consumption may be more effective than any attempt to constrain or even reduce population size. At the same time the government’s Office for Science Foresight projects were reporting on allied matter, such as food security.
27. It raises many sensitive social matters beyond those addressed in the planning framework, some of which have been highlighted again in the conclusions of COP 26. It focuses on how we will live in future and hence what we need to do now to prepare for that future.

And this most certainly underpins any progress on water management policy. It concluded that if we adopt all the mitigation measures it considered, then the UK could probably cope with the demographic changes projected by the Office of National Statistics. The study did not address the consequences of changing aspirations of the changing demography. For example, it did not envisage the rise in demand for wild swimming or veganism and the impact of these on water management and food production strategies. Since 2011, we have endured the impact of a global pandemic and new energy and food securities being ‘weaponised’.

28. The Company submitted that it might be time to appoint another similar review body to revisit the conclusions of 2011 and determine if they are still relevant.
29. This raises a fundamental question about independent sources of advice and wisdom. In the past we had, for example several national standing and ‘one off’ technical committees and working parties (eg detergents, storm overflows, sludge management, sewage disposal), regular Inquiries by Royal Commissions (we still refer to ‘Royal Commission Standards for sewage treatment’), and a more active Foresight programme.
30. Now we have a plethora of sources ranging from government task groups (such as the storm overflows task force), higher profile committees (such as the Committee for Climate Change), the less active Foresight programme (the last horizon scanning report was 2016 and the only current project is looking at the role of future societal change within UK pathways to net zero, due to report later this year), regulator and trade body committees, and the work is often contracted out. The concept of a standing technical committee seems to be vested more in the work of the Commons Select Committee: the Environmental Audit Committee, which has a somewhat more political hue than the former Royal Commissions, and of course House of Lords Committees. But these are just examples and there is an urgent need to map out what and how these reports are produced and how they all fit together, and then decide if any changes are needed.
31. The old system of Standing Technical Committees and Royal Commissions was dismantled gradually, first after the election in 1979 and then after the election in 2010. The question is, has this left a gap which we have not filled properly yet. The advantage was that it brought all relevant and interested parties together to provide overviews on broad or specific topics, such as the last Royal Commission.

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## Appendix

### Sewage borne litter

- A1. These materials block sewers and cause overflows .So far Defra has only addressed this through proposing a ban of wet wipes containing single use plastics .But the solution is much more comprehensive. To date solving the problem of what is disposed in toilets has been left to the Water Companies customer care campaigns and voluntary initiatives by the industry with woven fabric manufacturers. The time has come to change that and Ofwat can play a significant role .There should be national approach driven by a national consensus group with a wider range of parties than just the water and woven fabric industries. It must include behavioural scientists.
- A2. The Company has suggested that
- The solution to the problem must be recognised as being not just the responsibility of the water industry. The national attitude must change from ‘out of sight out of mind’ and it must be accepted that controls must be exercised over what is put into the sewerage system.
  - The principle must be to make it easy to product users to do the right thing and be aware of the consequences of not doing so
  - All used care products must be disposed by bagging and binning. Designated products must meet standards of degradability and biodegradability. This recognises that used products will still be flushed away from time to time. As back up, to minimise the problems arising as sewage borne litter, products must meet these standards, which will also be relevant to ultimate disposal of solid waste. This builds on the principles laid down in the Water UK report of 2017 and follows the advocacy of City to Sea.
  - Some products will be exempted, temporarily, from the standards, because of the lack of alternative materials, eg condoms. Research should be directed at removal of products from the exempted list.
  - Designated product standards will be regulated using a recognised system drawing on the experiences of REACH, possibly using a BSI Standard kitemark.
  - All products will be labelled very clearly ‘bag and bin’ under the appropriate regulations to help consumers.
  - Monitoring compliance would probably lay with Trading Standards.
  - The strategy will build on the foundations laid by Water UK, but the terms ‘flushability’ and ‘fine to flush’ should be dropped.
  - The object of ‘nudging ‘ will be to encourage ‘bag and bin’ all used products
  - Consideration should be given as to how biodegradable disposal bags can be made very accessible, including their inclusion with the retail products, or even with water bills. Bathroom and toilet designers and product suppliers should be involved to ensure that facilities embrace the need for used care products to be disposed properly.
  - Consideration needs to be given to good practice on toilet and bathroom facilities outside of homes.
  - Messaging will be very important and could include regular communications on social and print media on current issues.

## **Water consumption**

- A3. In the 25 Year Environment Plan Targets, Defra has proposed significant reductions of water consumption with the primary deliver tool being leakage reduction regulated by Ofwat. The Company has suggested a number of changes relevant to the role of Ofwat, including an effort to change of domestic behaviours on water use through a national ‘nudging’ programme which goes beyond the efforts of water companies.
- A4. The Company has also suggested
- Changes to planning and building regulations; all new properties must be designed as far as possible to be consistent with the consumption target for expected average occupancy e.g. low flush toilets, rainwater harvesting, etc.
  - Change of retailer behaviour, e.g. regulation of water usage by white goods <https://www.affinitywater.co.uk/news/eco-settings-on-white-goods> Maybe a national standard with another role for BSI?
  - That in water scarce areas, mandate ‘smart’ garden irrigation systems as adopted in Australia and Texas.
  - Understanding the impact and consequences of reducing water consumption in food production. Water footprints for foods to be included in all their packaging.
  - Changes in trade and industrial water consumption by strengthening the regulations for Environmental Permitting, which will succeed the IPPC Regulations possibly by strengthening the regulatory role that water companies might exercise for trade effluent control.
  - Requiring Ofwat to develop tariff concepts which reward water saving through smart meters. For example studying the Australian examples where smart meters are actively used as a two-way engagement tool to enable customers to optimise their water consumption.
  - Getting the public acceptance of direct use of reclaimed sewage effluent as a source of drinking water and the necessary investment in new technologies recognised in Price Determinations.
  - Further examining the feasibility of seawater as a source of drinking water which would require a step change in the viability of desalination, again recognised in Price Determinations. But, at the moment, desalination is very expensive and has a high carbon footprint, which runs counter to the commitments of COP26.

## **Phosphate reduction**

- A5. In the proposals for Targets under the 25 Year Environment Plan, Defra has proposed a national reduction of phosphate discharged in sewage effluent. And whilst this is another example of a blunt national target the expectation is that this will be achieved by additional sewage treatment and the phosphate removed will be contained in biosolids used as fertiliser, which brings in another set of environmental rules.
- A6. Conservation of the increasingly diminishing phosphate resource, no consideration was given to reduction of phosphate discharged into sewers. The Company has offered an innovative thought that one contribution to phosphate targets might be to reduce phosphate in diets. Half is added artificially for a variety of reasons and the NHS already issues advice on its reduction for patients with renal problems.

## **Inland swimming**

- A7. The current drive for 'wild swimming' and the designation of inland bathing waters has made matters more complex, because achieving good ecological or chemical status does not necessarily make the water fit to swim in. The relationship between storm overflow and sewage discharges, and water being fit to swim in, is strengthened by the Defra Consultation Document. The reference to make it easier for community groups to apply for bathing water status is made in the context of coastal bathing waters, but will embolden pressures for inland waters. Surfers Against Sewage are advocating that all rivers should be designated for swimming. The media are promoting wild swimming. For example, the Times on 2 April 2022 ran an article 'Bathing alerts to dish dirt on our rivers'. In it, the article encouraged readers to apply for inland bathing water status and pointed out how easy it can be and provides a map of the numerous sites, where people have asked for alerts when sewage is released. There is some ambiguity because such designations require much more than monitoring and notification, it puts additional demands on quality management.
- A8. In recent time the reluctance to designate inland bathing water sites, held not just by the water sector, but by government as well, has evolved. The Company's own submission to Defra on Wolvercote Mill Stream recognised this, but pointed out that the concerns expressed in the past, remained as important criteria to be satisfied. In The Times article, the Sustainability Director of Thames Water said that bathing water status will not guarantee that the water is clean and safe - there are always going to be hazards in an open environment, whether it is bacteria or viruses or boats or strong currents or submerged vegetation.
- A9. Recent publicity on locations for wild swimming (The Times 9 April 2022) focussed significantly on enclosed controlled waters, such as lakes, and these present more manageable challenges than river waters. The Company submits that this should be made clearer in any strategy for bathing waters.
- A10. The Company submitted that by focussing on the issues of bathing water within a consultation on storm overflows, this missed the essential point of all the issues involved. It created an expectation which may not be delivered in practice. Storm overflows are a major, but not sole factor in healthy bathing waters. Bathing water designations should be considered in a more holistic approach and, in themselves, form part of a national river strategy.