AUGUST 2024 WORSHIPFUL COMPANY OF WATER CONSERVATORS (WCWC)

PLAN FOR THE FUTURE, LEARN FROM THE PAST, ACT NOW

An overview of thinking in 2022-2024 to provide an input into the national conversation on the future of water management

CONTENT INDEX

Content by paragraph

1-7: Describes the WCWC, what it has done to contribute to national water conservation policy and practice, why it has produced this overview and provides guidance in using it.

8: The WCWC has made many strategic and tactical observations and suggestions in responding to Consultations etc. A summary of 27 of these is given.

9 -12: Articulates the urgent need for a National Water Strategy.

13-19: Suggests greater cooperation in policy making and the need for a national Commission.

20-48: Provides an in-depth look at environmental water management, particularly rivers, with a particular focus on a template for catchment management, uses of environmental waters, monitoring and the impact of flow variations of sewage (combined sewer overflows etc). Expresses concern over doubts over delays in mandatory sustainable drainage systems.

49-55: Argues the case for greater co-operation in delivery, draws an analogy with the New Towns Task Force and highlights the role of Citizen Science.

56–66: Reviews water resource issues and includes its recent responses on water efficiency.

67-75: Focus on governance, finance and economic regulation. Concludes that the most fundamental principles of service delivery are still valid but that there is a need for a 'once in life-time' review of Licences and the regulatory processes after over 30 years of experience summarises experiences of WCWC members.

76-79: Sets out experiences of the members of WCWC on innovation.

80-81: Manpower issues in delivery.

82-83: Clearer communications needed.

PROLOGUE

1 The Worshipful Company of Water Conservators ('WCWC') is a City of London Livery Company focussed on the long-term health of our water resources and the broader environment. Our members include senior professionals from water, environmental and related industries and regulators, along with others who share our concern for water and the environment. Our experience and knowledge ranges from the complexities of environmental sciences, through the application of engineering to deliver the goals identified by those sciences, and the subsequent management of the assets created. The WCWC's purpose is *promoting a diverse and sustainable environment*

2 It has responded to numerous Consultations and Calls for Evidence. In view of the likely evolution on water management policies and strategies, it has decided to highlight some of its suggestions over the last two and a half years. It recognises that the mosaic of delivery has small and big pieces. And sometimes not sorting out the small issues can get in the way of delivering the big solutions. So key points are summarised in highlighted red, but the reader is encouraged to look particularly at the section dealing with catchment management strategies as these are the engines which will drive the achievement of river, estuarine and coastal water use and quality goals. The reader is also encouraged to read the evidence available on the financing and governance of water services. And, indeed, to delve into the source papers on the WCWC website. There is a circularity about the presentation, in that there needs to be an understanding of the issues before suggestions for the ways forward are set out. In order to capture attention, the principal ways forward are set out first with subsequent elaboration.

3 The WCWC has consistently provided evidence, based on experience; it has not sought to praise or admonish any organisation, but has provided, support and comment and made suggestions as to where it is of an opinion that is needed. It does note that the whole topic of water services has returned to the media and political agenda, as it has many times in the past, particularly in the 1970s prior to regionalisation, and in the 1980s prior to privatisation. This return has been driven by the concerns over the cost of living, the impact of climate change, rising population, greater concerns over a diminishing natural world and greater demands on the uses of environmental waters, particularly wild swimming (driven in part by the social impact of the lockdowns in the covid crisis). But the WCWC has repeated several times that the debate on water management is bedevilled by poor information and presentation and this must be remedied.

4 These submissions have been supplemented by Thinkpieces, all of which are archived on the WCWC website (https://waterconservators.org/policiesand-practices/). This Thinkpiece pulls together some of the consistent messages and some key points which might be of value as contributions to the development of national policy and practice. Inevitably the expertise of the members of the WCWC is focussed more on the detail of water service delivery than on agriculture, but the regulatory experiences embrace all aspects.

5 Firstly it is worth considering how the complexity is addressed. There is a tendency in preparing a summary like this to want 'the top three messages " but as life often

reveals, whilst the focus is on these strategic issues, the tactical issues, set aside for a moment, have tendency to sting unexpectedly. The consultations to which the WCWC has responded have been largely on tactical issues and there has been no advance on the 'big picture'. So, this overview focuses on what the WCWC has suggested for the long-term strategy, and includes some suggestions on key, but not all, tactical issues.

6 It would appear that the new administration will continue with the mix of strategy and 'fine grain' tactics and the WCWC will be contributing from its reservoir of wisdom. Many of the proposals from the new administration resonate with the evidence provided by the WCWC on the strategy and tactics for water administration The proposals, so far for example, are based on retaining the fundamental. structure of the water sector, but making some significant changes, for example by introducing a social purpose for water companies and by announcing a review of the Environmental Improvement Plan.

7 The highest-level message from the WCWC is that there is an urgent need to create an integrated water strategy and a need to bring the leaders together in a more coherent way; this approach is being adopted in other sectors, for example the national programme for New Towns and for renewable energy. Whilst the WCWC would not suggest the same mechanisms, nevertheless the creative thinking behind these drives could be brought to establishing a better consensus on water.

SUMMARY

8 Some key points of suggestions are selected.

A National Water Strategy, Water Commission (maybe a Royal Commission)

- 1. An overarching National Water Strategy for England is needed by July 2026.
- 2. A Water Commission of all relevant parties should be established by the end of 2024 to provide advice to government on this Strategy by July 2026, specifically to advice on environmental water management, particularly sewage disposal by December 2026. Consideration should be given to this being a Royal Commission.
- 3. A swift decision needs to be taken on what essential tactical steps can be taken now by government which can embraced, in due course by the Strategy. This long-term Strategy is needed for the future, based, as the title suggests, on past experience, while the WCWC also recognises that there are matters which need action now. This seems very demanding, but these are the processes necessary for delivering the strategic evolution needed for 2030. And the WCWC can offer its wisdom on delivering tactical changes. The WCWC observed earlier in the Prologue that it is possible to bring together interested parties (in the New Towns Task force) and to review policy in a speedy fashion (in the review of the Environmental Improvement Programme (and the targets therein) in the current context.

4. Apart from the Water Plan the WCWC has observed the continuing fragmentation of initiatives .A very good example is the latest consultation by Ofwat on the Environmental Incentives Scheme Common Framework which does not appear to well connected to the previous consultation on the Water Efficiency Fund and, rather worrying, does state that implementation of Schedule 3 of the Floods and Water Act of 2010 to introduce mandatory sustainable drainage in England is unlikely. The WCWC suggests that this is another example of the continuing stream of tactical change in the Ofwat regulatory regime, when what is needed is a strategic review, which is discussed below.

Management of Environmental Waters particularly Catchments, inc Monitoring

- 5. The Strategy should embrace all the main 'planks' of policy and, in particular, a much stronger national leadership on catchment management. The WCWC provides some detailed suggestions on this point, and this is one of the highlights of the Overview. A diagram of suggestions for future arrangements is given on page 6. It is worth noting that in recent times there has been more focus on the impact of highway drainage, but this has not been reflected in consultations and the WCWC suggests that this needs remedying. There has been discussion on separating out flood and land drainage management from the EA responsibilities. Members of the WCWC have experience that even when this was arms-length within the EA there were problems. Such a change would be counter to the best practice in terms of integrated catchment management and would lead to more fragmentation of delivery.
- 6. In the context of such management the WCWC has advocated a water use and quality objective approach which was used successfully by the National Rivers Authority. This will require national agreement on water use standards.
- 7. The Strategy should address the need for integrated monitoring governance and, in particular, improved effluent quality assurance, probably as a matter for immediate tactical response.
- 8. Consideration must be given to the metrics of measuring and reporting environmental water quality, as indeed the existing Water Plan highlights. It is right that everyone knows what is happening in our rivers, estuaries and coastal waters, but in wise ways, so that investments are made most effectively, and individuals are not held responsible unfairly. The evidence must expose inappropriate practices. Maybe a balanced scorecard approach. One point from this debate is that which has bedevilled quality planning for many a long year; it is absolutely vital that the monitoring programmes and judgment of compliance is exactly the same as those used to set performance standards. Levels of sensitivity must be the same in target setting as performance assessment and this was spelled out in the response to the consultation on EA charges in March 2022. And that will be a key issue in moving forward with the proposals for regulations on real time monitoring of effluents. But the WCWC has warned on the challenges of managing 'Big

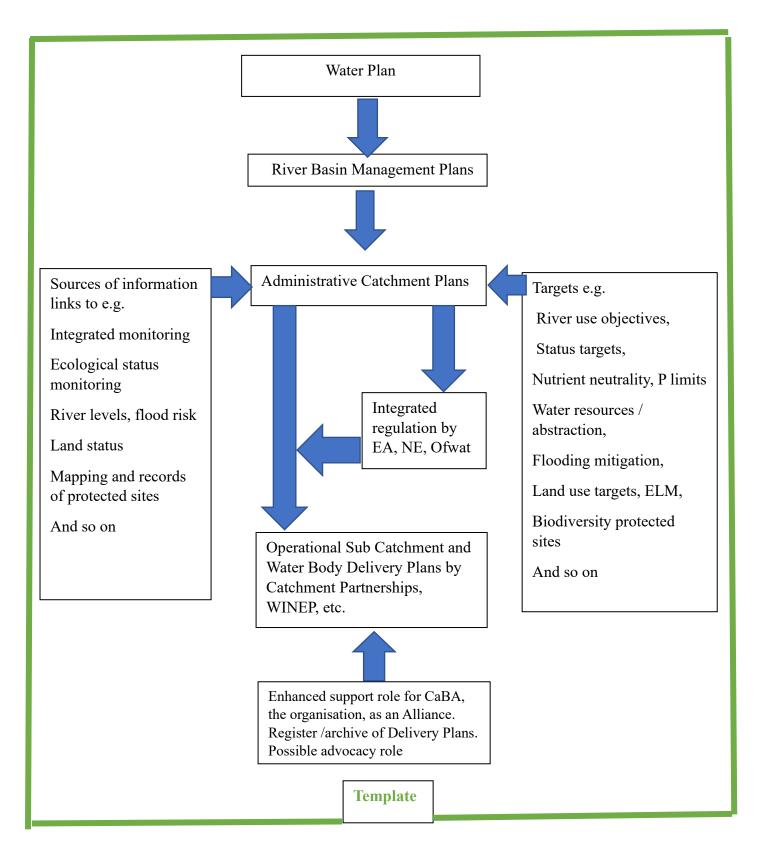
Data'. There is a challenge in unravelling the greater insights of more extensive monitoring from real changes in status.

9. The WCWC has provided extensive commentary of the impact of varying sewage flows and in particular the operation of combined sewer overflows. The WCWC has consistently supported the introduction of mandatory sustainable drainage systems in England. It is disappointed by the comment by Ofwat in the consultation on environmental incentives that this is now unlikely.

Co-operation in delivery

- **10.** The WCWC highlighted many tactical issues around the delivery of strategies, and in many instances, these involved more than one body, be it government departments or bodies within their spheres of influence, such as local authorities. This Overview highlights several examples of policy and practice overlap, but its purpose is not to dwell, per se, on specific issues, but to exemplify that different government departments have roles to play in the rollout of programmes. This would seem to suggest a multi- agency delivery planning task force to iron out issues. And would involve Defra, Department of Levelling Up, Housing and Communities (DLUHC), Department of Business and Trade (DBT), and the Treasury, and to determine who would have place on the Commission. This has been made more urgent with the expanded commitment to new housing.
- 11. The WCWC has suggested particularly that there needs to be a concordat of delivery between the water industry and local authorities. With the planning rules being changed the WCWC welcomes the benefits to infrastructure development, with offers caution in the impact that new housing etc. is going to have on the delivery of water services (see footnote at end).
- 12. The Department of Business and Trade consulted on how the provision of water can be an effective and safe enabler of a resurgent economy and the WCWC responded by suggesting that this must form part of the National Water Strategy. It needs the 'smart' integration of the growth duties of all the relevant regulators. Efficient water management must be part of a sustainable economic growth must be environmentally sustainable and incorporate the principles of Natural Capital. Of course, economic growth of water use will also have the associated domestic growth as outlined above.
- **13.** The Strategy needs to be clear about what government can, itself, provide by leadership in the enabling policy architecture to support delivery and help Citizens play their roles beneficially.
- 14. The WCWC has identified a number of instances wherein individuals can be part of the delivery teams by adopting behaviours consistent with the National Water Strategy, eg Citizen Panels in catchments, what not to flush down toilets and how little water to use. The WCWC has dubbed this as Citizen Partnerships, in this context the WCWC has advocated a greater role in employing the skills of the Behavioural Insights Team.

Suggested Template for Catchment Management



Water Resources

- **15.** The WCWC has supported the direction of travel with the plans for the provision of new reservoirs and suggested ways that resources can be supplemented. But in recognising that leakage reduction and water use efficiency are key parts of delivery, the WCWC has highlighted numerous initiatives as part of the way forward and offered some suggestions to facilitate them.
- **16.** These need to be integrated. There is an urgent need to review building and water fittings regulations, and the Water Efficiency Roadmap.

Governance, Finance and Economic Regulation

- **17.** The headline insight by the WCWC is that the fundamental 1989 model of a privatised, vertically integrated, dual-service water utility operating to balance affordability and maximum efficiency to satisfy service and environmental aspirations and regulated economically, served the nation well in the conditions of the 1990s and is still valid. The WCWC supports the view that it needs to be adjusted to reflect thirty years of experience and the changing circumstances of water service delivery in 2024.
- 18. The WCWC has suggested that the merits of the pre privatisation model of statutory water companies should be re-examined. The WCWC observed that even if the nature of asset ownership changed, the fundmaster, be it the Treasury or private finance, will be demanding. No matter what system of governance is in place, more investment will lead to higher, not lower prices. The evidence shows that while the behaviour of some private equity firms has been simply impossible to defend, it is by no means the only problem. Nevertheless, taking steps to mitigate a financial markets-based approach will contribute to the way forward and restoring public trust.
- **19.** The WCWC is pleased that the government is taking forward the suggestion that the Water Companies should add social and environmental objectives to their Purpose.
- **20.** Thus on the premise that Ofwat will have role in future and that any kind of water company will be Licenced it is recommended that after over 30 years of experience and accretions of stepwise changes in Licence conditions there needs to be 'once in a life time' full review of the Ofwat price review, Appointment Letters and determination processes rather than the current approach of 'piece-meal' changes (as advocated earlier). The WCWC suggests that this should be ready for 2027 for PR29 (as set out earlier in the creation of National Water Strategy), implementing the lessons of this experience and acceptance of the economic and financial consequences of all the current demands for improvements to water services. This would embrace the principles of smart regulation but preserve the principles of commercial viability. An urgent first step will be a major review pro tem of the 25-year Strategic Direction Statements.

- **21.** In this context innovation in financing models is to be welcomed and the WCWC has commented extensively on the thinking behind NAVs (New Appointments and Variations.) And whilst this approach might work successfully for entities such as the Thames Tideway Tunnel or even reservoirs, the WCWC warned over the risks if it is applied to treatment work, wherein the interface on maintenance responsibilities becomes more complex.
- **22.** The WCWC has provided some in depth knowledge on the interface between the world of operational delivery and investments and argues for a much clearer line of sight between project investment and its sources.

Innovation

23. The WCWC has supported the drive for innovation, while cautions that technical innovation has to take account of risks to human and environmental health, and hence it will be slow. A comparison of how services are delivered now, compared to how they were delivered in 1989 show very substantial progress. Several insights into innovation in water services are given.

Manpower

- 24. The WCWC is very mindful of a skills and manpower shortage which needs addressing, and whilst this has not been the subject of any Thinkpiece, it underlies many of the points made. The WCWC supports many of the initiatives to build skills and works closely with professional bodies in the sector. The WCWC notes the paradox that just at a time when dedicated, professional, ethically driven young people are needed in the sector, the adverse publicity is a deterrent to water management as career as a career choice. The WCWC does all that it can to highlight the attractions of such a career. This is another dimension to the need to rebuild public trust.
- **25.** The WCWC has supported the provision of adequate resources for Regulators and welcomed the increase in inspection resources in the Environment Agency.

Clearer communications

- 26. Last but not least, everyone must be focused on the clarity, accuracy and accessibility of knowledge shared. Communications are paramount, and data must be accessible and set out in context to facilitate wise decision making. This iterates back to the impending challenges of managing 'Big Data.'
- **27.** The WCWC supported the proposal by Ofwat to establish a national campaign on water efficiency.

A NATIONAL WATER STRATEGY

9 The WCWC has reiterated several times that there are many initiatives often seeming not be aligned or connected and without a sense of priority and has asked which of these would achieve the greatest relative benefit. There is a plethora of guidance documents from DEFRA, Ofwat, the Environment Agency, Natural England, Department of Business and Trade and so on. Yet there is no single handbook, and even for aficionados within the WCWC, it is challenging to fit them all together and, hence, sometimes the media takes a superficial or biased view.

10 The WCWC has advocated that an overarching National Water Strategy for England be developed urgently. Highlights may be found in many responses, in particular, in responses to the contributions made to consultations by the Department of Business and Trade in the Winter of 2023-24. A further thought is that this must align with other national strategies in the UK.

11 This Strategy must rebuild public trust by being clearer about the objectives and consequences of delivery plans; this would include a review of the resources available to the regulators and to ensure that the economic regulatory processes embed the principles of trust and customer care.

12 It must be recognised that, in order to meet current aspirations, very substantial investments are needed with associated operating costs and hence will require a rise in water prices irrespective of a prevailing governance. This must pull together all the relevant plans including the April 2022 Water Plan, or whatever follows on, and embrace all of the issues of concern at the moment, for example, from the long-term provision of water resources, to water use efficiency and the management of discharges to ensure that the environmental waters of England are not only fit for user and are havens for wildlife. There has been a particular focus on river management in the recent consultations to which the WCWC has responded, and this should be a major feature / subset of the overarching strategy. This should be set out as a much more evolved catchment management strategy with agreed templates flexible enough to be applied locally.

COMMISSION

13 In an effort to envisage how the sundry themes of water management policy could be brought together the WCWC offered a suggestion in a Thinkpiece in February 2023 that there would be great value in having a national Water Commission. This has been updated in July 2024. Its purpose would be the recommend to Government a commonly agreed framework for managing water in England; it would be accountable to the SoS for DEFRA and have core membership of relevant government departments and regulators as well as those sectors responsible for the delivery of the objectives, such as water companies, agriculture and industry. It could also have membership of the most populous relevant NGOs, but clearly membership of the Commission will be an exacting decision. It would take independent expert advice. The notion of a Commission in such circumstances is not novel. It could serve the purpose of bring bodies together as envisaged later, it would still require an interdepartmental delivery team as suggested earlier

14 Clearly this is going to create some debate, but the WCWC suggests that there are two immediate, and interconnected, issues, which could be addressed:

- Confirming recommendations for the changes to the current overall model of effective water service delivery including such matters as the balance of Appointment Letter and Price Review processes.
- Confirming recommendations for a streamlined approach to the integration, regulation, planning and delivery of river management within catchments and basins.

15 It would be appropriate for the Commission to look at the creation of national river quality and use strategy as a subset of the overarching National Strategy; there needs to be a lead Department owning the recommendations while leaving each government department and regulator to define its own route of implementation. The WCWC does not foresee the Commission engaging in the detail, for instance, in how the WFD UK TAG might refine the criteria used to plan, monitor and report on river quality. But it would embrace catchment management.

16 The WCWC suggests that there is a decision to be made on where such a Commission would sit in the framework of progress. In the 2023 submission summarised above it was recognised that the output from the Commission might only be relevant until PR29 .The PR 24 process is already well advanced and is being debated as this Thinkpiece is being produced .This started in July 2022 when the Ofwat methodology was published .Thus it would be appropriate for any outputs from a Commission to be presented to government by July 2026 so that they can be taken into account ready for the methodology announcement in 2027. However, there will some immediate tactical decisions, which can be blended into the strategic outputs from the Commission. This suggests that a Commission needs to be established by no later than the end of 2024.

17 The intense focus on the impact of sewage discharges on river quality is redolent of the debates at the end of the 19th Century. At that time, the government response was the establishment of a Royal Commission on Sewage Disposal in 1898. This focussed on well-defined remits and produced 10 reports culminating in the final one in 1915. The Eighth Report (Cd. 6464), published in 1912, dealt with the standards that should apply to sewage discharges to rivers and tidal waters and specified concentrations of constituents that should not be exceeded. These standards are still at the very heart of effluent regulation, including the EU Urban Waste-Water Treatment Directive.

18 Thus, the WCWC now suggests that there would be an advantage in the proposed Commission being a Royal Commission. The most recent Royal Commission on Environmental Pollution was highly regarded but disbanded along with other Royal Commissions 2010. In its final Report on the impact of demographic changes on the environment is still relevant to current debates.

19 There would be a number of ways in which this could proceed. A primary task would be to address Sewage Disposal. It would not take twenty years to report as did the one at the end of the 19th century, as the knowledge basis is massively larger

than it was in 1898, and it could be given a target of reporting back on this topic within one year. A rapid establishment of such a Commission would be an iconic signal of intention.

MANAGEMENT OF ENVIRONMENTAL WATERS PARTICULARLY RIVERS

20 River quality has been at the forefront of recent political campaigns and, at its heart, is catchment management, which the WCWC has supported wholeheartedly and produced a major Think piece in May 2023 which set out the history, current practices and a way forward. This has been updated in July 2024. Because of its central importance more details are given on this aspect. It sets out suggestions for a revised hierarchy of delivery below. To aid insights, a diagram is on page 6.

Administrative Catchment Plans for objectives, targets and data sources:

21 There needs to be greater clarity of separation between what the targets are and how they will be delivered. So, the headline Administrative Catchment Plans are where the targets for the Water Environment Regulations of 2017 (WER, 2017), nutrient reduction programmes, Nature Recovery Plans etc., are set out. This is also probably the best place for other data such as water resources, flood risk, river levels, river water quality, Status compliance, etc., are placed (or at least with links to those data sources). The WCWC suggests that Administrative Plans should be driven by the Environment Agency (EA) and Natural England (NE) in partnership, but maybe hosted by the EA. This template should apply across the country. From these it will be possible to achieve greater integration of regulation by the Environment Agency.

22 Control of discharges must be determined by catchment models. These Plans will need to be managed with the principles of 'Big Data', as the WCWC has already opined in its response to the consultation in May 2023 on the monitoring of discharge impacts, as per S81 and S82 of the Environment Act 2021.

Monitoring

23 Monitoring is at the heart of catchment management. Indeed, the last few months have focused increasingly on monitoring of rivers and discharges and the accessibility and understandability of the data obtained. The WCWC in working with CIWEM (the Chartered Institution of Water and Environmental Management) has advocated integrated monitoring governance which should be linked to catchment plans. This would involve treated sewage effluent monitoring, Event Duration Monitoring (EDM) of storm overflows, programmes executing the requirements of S82 of the 2021 Environment Protection Act and the measurement of sewage flows. The WCWC contributed to the discussion on which works must be monitored a per S82 in its response to the consultation in May 2023 and its suggestions for the exclusion of smaller works with non-numerical permits was reflected in final decisions.

24 The WCWC has consistently supported the extension of monitoring, as this has revealed hitherto unknown insights into river water quality. There must be an understanding that data on its own are of no real value, this must be collated to

provide information, contextualised as knowledge and the applied beneficially as wisdom; this has been highlighted recently in the debates over the monitoring of sewage flows. A major dilemma as highlighted in the Water Plan, for example, is that Chemical Status is driven by compliance of determinands not affected by sewage or agriculture. This point has been made repeatedly by the WCWC. At the 2024 Catchment Debate in Bakers Hall a suggestion was made for balanced scorecard approach to be developed There is a challenge in unravelling the greater insights of more extensive monitoring from real changes in status.

25 It is right that everyone knows what is happening in our rivers, estuaries and coastal waters, but in wise ways, so that investments are made most effectively and individuals are not held responsible unfairly. But the evidence must expose inappropriate practices .One point from this debate is that which has bedevilled quality planning for many a long year; it is absolutely vital that the monitoring programmes and judgment of compliance is exactly the same as those used to set performance standards .Levels of sensitivity must be the same in target setting as performance assessment and this was spelled out in the response to the consultation on EA charges in March 2024 .And that will be a key issue in moving forward with the proposals for regulations on real time monitoring effluents.

26 The WCWC suggested initially in its response to the EA Consultation on charges for monitoring effluents in March 2024 that these programmes should be constructed in ways which comply with the principles of Quality Assurance under the jurisdiction of an Effluent Quality Assurance Manager in each company with a status somewhat similar to that of a Health and Safety Manager, and these suggestions seem to be gaining traction.

Operational Catchment Plans for local tailored delivery:

27 The Administrative Plans should have links to the Operational Catchment and Water Body delivery planning, and each should have a Delivery Partnership interfacing local community and business interests with Delivery Plans. Water Companies may act alone through the Water Industry Environment Programme WINEP or as part of local Catchment Delivery Partnerships. This builds on what is happening now. There is a need for greater consistency of Delivery Partnerships planning across the country and it seems reasonable that the Catchment-Based Approach (CaBA) is the organisation to deliver further Guidance. It is suggested that there would be value in developing a framework of best practice which would provide the balance of consistency suggested by 'joining up' and 'coordination' in the Water Plan, whilst allowing for 'local tailoring.' They must focus on transforming activity rather than just end of pipe solutions.

28 In its response to the consultation on green spaces in October 2023 the WCWC emphasised that each catchment will have unique issues. Whilst the overall iconic descriptions of catchments tend to be rural, there are different issues in urban catchments and the WCWC emphasised that the concepts behind the proposals for green spaces must include blue spaces. Similar views are expressed by SSWAN (see the report of the Bakers Hall Debate in November 2023).

An enhanced role for CaBA the organisation:

29 CaBA as an organisation should be rebranded as an Alliance of Delivery Partnerships, perhaps the CaBA. It will continue to provide support to local Delivery Partnerships. The operational plans will be where the responses to Local Nature Strategies needs will be addressed. It would sensible if the CaBAA hosted an archive of plans so that best practice was visible to all and may even facilitate bench marking. The WCWC suggests that this should be a done as quickly as possible.

30 The Water Plan envisages that Catchments will be 'engines' which are drivers of the Water Plan, but that Plan, and indeed practical experience shows, that any Catchment Plans must include land management, as indeed, occurs now in many places. There is an argument that in, due course, catchments will play a much bigger role across all interests of environmental management, including planning, with, as a minimum, links to all the initiatives, site overlaps and strategies relevant to the catchment. The experiences of Natural Resources Wales (NRW) in moving forward the notion of Catchment Based Integrated Natural Resources Management might be a useful reference (<u>https://naturalresourceswales.gov.uk/about-us/what-we-do/sustainable-management-of-natural-resources/?lang=en)</u>.

31 One point which need addressing urgently is local community engagement in what the uses of water bodies are, is important and formed part of past water quality programmes. The Environment Agency and Natural England must be informed about local views. This will be challenging to organise and is worth some further debate The EA and NE could go to local consultation direct or could use Catchment Delivery Partnerships. The WCWC suggests that the latter might be preferable. This would replace the current programmes of consultation on uses such as for bathing waters. It is suggested that support should be offered to Catchment Delivery Partnerships to apply stakeholder engagement best practice. This needs to be resolved if the Water Plan is to achieve widespread understanding and engagement.

32 The WCWC has also advocated the reintroduction of River Use and Quality Objectives. The quality specification for a defined stretch of river should be created after public consultation to agree sets of quality criteria for recognised uses using agreed national criteria for each use, including protection of habitats. These then form part of catchment management strategies, including discharge consents, abstractions and river flow regimes, using models such as SIMCAT or SimBasinQ based on Monte Carlo simulations. And must incorporate costs associated with outcomes. This would be much better approach rather than the random one currently evolving for inland bathing waters, yet it would still embed the principles sought by campaign groups.

33 More local water body standards are needed, which might involve a review by the UK Technical Advisory Group on the Water Framework Directive (UKTAG). This would form a part of the regulatory streamlining and may take some time to implement, but greater coherence can be brought more quickly to what is done now. A major dilemma as highlighted in the Water Plan, for example, is that Chemical Status is driven by compliance of determinands not affected by sewage or agriculture. This point has been made repeatedly by the WCWC.

34 This would incorporate 'protected areas' and be much better approach rather than the random one currently evolving for inland bathing waters yet would still embed the principles sought by campaign groups. This would understand that even good quality effluents, satisfactory for ecological reasons might not satisfy the criteria for bathing waters and this could lead to significant extra costs for disinfection beyond storm overflow control and this. This suggestion formed part of the WCWC submissions, as well, to consultations on the designation of bathing waters. This would be a good step in evolving the creation of Catchment Plans under the future Regulations of the Environment Act and would be focused on activity rather than just end of pipe solutions.

35 Much is made about 'nature-based solutions' (NBS) within catchments, with offsets and nutrient credit trading as opposed to hard technology solutions. These innovations should be supported within catchments, but there is a current push towards 'end of pipe solutions' which may be counter-intuitive, although NBS can be used as an' end of pipe' approach. It can be argued that Catchment Management is the overarching NBS in a catchment and that all the nature-based schemes fit in under this concept. This came out in the highlight debate organised by the WCWC in Bakers Hall in March 2024. The summary of the Debate was published in CMS Water News in April 2024.

36 Does the 'Catchment Movement' have any role in advocacy for good practice in catchment management, possibly with the CaBA acting almost like sector body? There are many topics in which the Catchment Sector could play a useful role. Could it advocate for example that one way of reducing phosphate in sewage is to reduce its excessive use in food products. What view can it contribute in the current tussle over Farming Rules for Water? Partnerships could provide useful insight into sustainable practices of uses of manure and biosolids which avoid the reintroduction of high carbon emission processes?

37 The WCWC has suggested several times that there is a need to recognise that every person has a role to play in delivering clean and plentiful water and it has termed this citizen delivery. The Water Plan recognises this, but what role can the CaBAA nationally or as 'Catchment Partnerships' locally, fulfil? For example, should it be left just to the Water Companies to promote 'Bag it and Bin It' for used sanitary products or can the Catchment Partnerships play a role? Can they likewise help in reducing water demand? A new dynamic is the proposal to by Ofwat to set up a new national body to promote water use efficiency.

Next steps in developing a template for catchment management

38 The evolution of catchment planning must start with the 100 or so administrative catchments identified already and build on what is being done. But there are some changes needed. The WCWC suggests that the 'Catchment Revolution' comes in two phases.

39 First, a fairly quick fix in the initial Administrative Plans, making understanding, and access easier, and to bring greater coherence in the current system of setting out targets and making relevant information available. And it is suggested it would be very useful to come to an understanding as to how the CaBA can play an enhanced

role in improving delivery, coordination and tailoring of Delivery Plans. The WCWC suggests that there is an urgent need to set up an archive of existing Partnership activities

40 Second, a more radical look at what is expected within catchments with changes which might be associated with regulatory streamlining.

41 The WCWC is not suggesting any initiative which makes Catchment Plans too big to handle. Whatever happens next has to confront the complexity behind the Water Plan notion of 'joined up water management in catchments.' This approach could be formalised in due course in whatever Regulations emerge from the review of the Water Environment Regulations 2017 as part regulatory streamlining. A key suggestion from the WCWC is that there is an urgent need to update the 2013 Defra Guidance on catchment management, which could incorporate some of the ideas set out in this paper and the WCWC would be ready to help. Whatever approach is adopted, it will probably follow a period of urgent consultation.

42 It is worth noting that in recent times there has been more focus on the impact of highway drainage, yet this has not been reflected in consultations and the WCWC suggests that this needs remedying. There has been discussion on separating out flood and land drainage management from the EA responsibilities. Members of the WCWC have experience that even when this was arms-length within the EA there were problems. Such a change would be counter to the best practice in terms of integrated catchment management and would lead to more fragmentation of delivery.

43 To illustrate the WCWC suggestions, for clarity, a diagram is provided on page 6.

The impact of sewage flow variations

44 The incorporation of storm overflow control is a very big topic and one of immense media and political sensitivity and specific attention is given in this overview. The WCWC has provided Thinkpieces and submissions to consultations in May 2022, July 2023 and July 2024) and made several referces in other policy papers, which have observed that the expectations for the control of storm overflows have shifted significantly in recent years, for example the connection between these and the suitability of rivers for swimming.

45 In moving forward, there needs to be a strong evidence base for investment in storm overflows on the priorities of what and where needs attention to ensure that investments will provide the maximum benefits. The WCWC has supported the evolution of regulatory attention, monitoring and reporting on overflows and this is referred to elsewhere. The Storm Overflows Action Plans and Drainage Area Plans have to fit in with Catchment Plans as part of the overall strategy. It has also warned over the hidden consequences such as planning challenges, road closure, and so on, as well as the costs of providing new assets and the demands of monitoring. This whole topic is interconnected to many other matters, such as planning as outlined earlier. Once more this drives the need for a national delivery task force.

46 One aspect of such overflows is that sewer blockages are a common cause of the problem, which frequently arise from consumer practices. DEFRA took a long time in

consultations (February 2022 to November 2023) to come to a conclusion that the sale of wet wipes containing single use plastics should be banned from April 2025. The WCWC supported this but has consistently advocated a much broader and deeper policy on all sanitary litter including labelling. It has expressed disappointment that a more helpful labelling system has been left voluntarily and has advocated a mandatory scheme

47 There has not been any real consultation on the management of estuarine and coastal waters except in the context of the consultation on the impact of storm overflows to such waters and the extension of the Storm Overflow Action Plan to those waters. The WCWC response highlighted that there are, again, many requirements for these waters often driven by different legislation that are not correlated. Just as the WCWC has advocated a strategy for use and quality for rivers, again separate strategies are needed for uses of these waters, as a subset of the overarching National, Water Strategy and aligned, even incorporated, into Catchment Plans.

48 The WCWC has consistently supported the introduction of mandatory sustainable drainage systems in England. It is disappointed by the comment by Ofwat in the consultation on environmental incentives that this is now unlikely. It has concerns that allowing the continuation of new build housing to discharge into combined sewers will exacerbate the CSO problems, it would be pleased to assist in developing a stripped-down interim alternative which would facilitate discharge of surface water into existing surface water sewers some way from the development and also allow new SUDs to discharge directly into water courses thus significantly reducing costs.

CO-OPERATION IN DELIVERY

49 The WCWC has repeated several times that such a strategy must be' owned' by all the relevant government departments and arms-length bodies and formal cooperation must go beyond the current limited arrangements within Defra , and this includes Defra and its ALBS including Ofwat , the Environment Agency , Natural England and the Marine Management Organization , the Department of Business and Trade , the Department of Levelling Up, Housing and Communities ,Local Government association and even the Treasury(, if only through the Infrastructure Commission) for example. Whatever strategic frameworks are in place in future, enabling actions by government departments are essential, this it cannot be left just to water companies and the regulators.

50 So, for example the drive for new housing must be connected to the speed of sewerage extension and renewal and the WCWC has advocated and supported the swift implementation of mandatory Sustainable Drainage Systems under Schedule 3 of the 2010 Floods and Water Act (the WCWC is dismayed at the suggestion that this may not happen), a review of the functioning of S106 of the 1991 Water Industry Act regarding rights of developers for sewage connections and the functioning of the Water Fittings Regulations also under the1991 Act (and these will be of relevance in relation to the future of Environmental Incentives) and a review of Water Resources Plans. In another example the WCWC pointed out in its submissions on storm overflows that at any enhanced programme of pipe laying will require a review of the

Code of Practice under the 1991 New Roads and Street Works Act to establish if it is fit for purpose (this would apply equally to the provision of new water pipes as well), and of course the disposal of spoil therefrom. There are also tensions over the impact of the effluents arising from new communities on rivers e.g. nutrients (nutrient neutrality etc) so the Planning Framework needs to be reviewed particularly with the prospect of an increased provision of housing (see footnote at end).

51 The Department of Business and Trade consulted on how the provision of water can be an effective and safe enabler of a resurgent economy and the WCWC responded by suggesting that this must form part of the Water Strategy. It needs the 'smart' integration of the growth duties of all the relevant regulators. Efficient water management must be part of a sustainable economic growth must be environmentally sustainable and incorporate the principles of Natural Capital. Of course, economic growth of water use will also have the associated domestic growth as outlined above, and again in the complex maze of initiatives this will be related to the way forward for Environmental Incentives.

52 As the purpose of this brief is not to dwell, per se, on specific issues, rather to exemplify that different government department have roles to play in the rollout of programmes. This would seem to suggest a multi-agency delivery planning task force to iron out issues. This would involve DEFRA, the Department of Levelling Up Housing and Communities, the Department of Business and Trade, and the Treasury, along with determining who would have place in the Commission. The WCWC has suggested that there needs to be a concordat of delivery between the water industry and local authorities. This would have some resonance with the New Towns Task force.

53 The WCWC has suggested consistently that involvement of the public, consumers and customers, needs to must form part of any strategy. Citizen Science has played a valuable role but data emerging therefrom must be used with caution as it does not necessarily have the same quality controls as data from monitoring processes with quality assurance. The massive extension of monitoring by the regulators and water companies, in particular, has provided data as never before. The WCWC has opined that data must be accessible and understandable. Citizens will have a role to play in catchments. Whilst the WCWC has not offered any formal opinion yet on the requirement for customer panels to be established by water companies announced on the 11 July 2024, it supports this development.

54 The WCWC has also suggested more needs to be done to create an understanding that to achieve the aspirational goals; it is more than just the performance of the water companies, farmers and regulators. Water management is about everyone contributing, by using water wisely, not putting sanitary litter in toilets nor, fats and greases into sinks etc. The WCWC asks is it right that sink garbage disposal units are still available for sale. There is need to engage the kitchen and bathroom designers in the way forward. There has been a propensity to leave the water companies to work with customers on changing behaviours but more needs to be done at a national level to provide support. The first steps in this approach are the proposals for water efficiency labelling and campaigns, whilst the ban on certain kinds of wet wipes is welcome it is disappointing that more has not been done on the wider issues of labelling and bathroom design with respect to sanitary litter. 55 Citizen Science needs to be supplemented by Citizen Delivery in a partnership but facilitated by a drive from government. The WCWC has opined that the social purpose Business Insight company (the Nudge Unit), established by government must play a more significant role, particularly in its most recent response to Ofwat. It must address issues of efficiency in water use, effluent recycling, disposal of food, cosmetics and sanitary wates in sinks and toilets and hence must be harmonised with a national initiative on more effective management of household waste .There is no doubt that anything to do with sewage or sewage effluent starts off with the hurdle of the faecal aversion barrier, the psychology of which has been explored by the WCWC.

WATER RESOURCES

56 The WCWC first produced a Thinkpiece with its views in December 2022 in which it was generally supportive of the general direction of water resources planning. The whole topic has moved on whilst not changing the basic tenets. Water abstraction is very much part of catchment management. It is essential that there must be very close alignment, even harmonisation of water resources and catchment plans. The WCWC agrees that the whole matter of water resources is aligned with the drive for water use efficiency and reduction of leakage.

57 The WCWC suggested that the NAV model for alternative financing might be way forward for reservoir assets because the risks arising from relative responsibility for maintenance were less than for treatment asset. This is set out in more detail in its response to the DBT in January 2024.

58 But, planning can be difficult as the public discussion on the Thames Water proposal for Teddington demonstrated and to which a submission was made.in Mach 2023. There were objections which highlighted the 'yuck factor' in any water reuse initiative which seemed to involve more treated sewage effluent, whilst not realising that such effluents already comprise significant proportions of our major river flows and this will be a more of an issue to confront as more recycling is needed. There is also concern about landscape impact. The members of the WCWC recall the objections to the proposals to build Empingham Water, later renamed as Rutland Water, in the 1960s, also the objections to closure of public access during the blue green algae crisis of 1989. So, reservoirs can be landscape and recreational enhancers.

59 The WCWC regarded desalination and reuse schemes as schemes of last resort as these are energy and chemical intensive with high maintenance and running costs, and lower reliability than traditional treatment processes. However, research must continue to reduce the environmental impact of these technologies.

60 The WCWC has suggested that a further option is to look at the potential for increased abstraction at the fresh water / tidal boundary thus ensuring the maximum amount can be abstracted, as a potentially faster, lower carbon, reduced cost and energy alternative to desalination / storage schemes. Any such scheme should include a study to assess the potential impact on the ecological status of the tideway downstream.

61 It has supported the development of The Environmental Targets (Water, England) Regulations 2023 in responding to the consultation in May 2022 on the Environmental Improvement Plan, with some caveats on the practical issues around delivery of the targets. These set targets for the reduction of potable water supplied by water undertakers in England. The volume supplied per day per head of population be must at least 20% lower than the 2019-2020 baseline by 31 March 2038. This has been set based on a trajectory to achieve per capita consumption (PCC) of 110 I/h/d, 50% reduction in leakage and a 15% reduction in business demand by 2050. The glidepath is such that the estimated target at 31 March 2038 is based on a PCC of 122 I/h/d, leakage reduced by 37% and business demand reduced by 9%. The WCWC looks forward to responding to any consultation on the current review of the Plan.

62 The WCWC also supported and provided further suggestions to the consultations on water use efficiency campaigns in June 2024 and labelling in Nov 2022, commenting on how the Water Fitting Regulations need to be reviewed in discussions with Defra in June 2023. At the time of writing the WCWC is considering its response to the consultation by Ofwat on the Common Framework for Environmental Incentives and it has some concerns. It has supported a drive for universal metering, particularly smart metering, and the development of tariff innovation. Whilst there has been no specific consultation or indeed Thinkpeice on leakage per se during this period , the WCWC has supported proposals with some caveats .From a practical point of view there needs to be consensus on what is achievable in leakage control and that embraces a contemporary agreement on the acceptable economic levels of leakage and the practical implications of managing numerous restrictions and closures of roads as pipe repairs or pipe laying and disposing of spoil from this.

63 In June 2024, the WCWC responded to a second consultation on a proposal by Ofwat to set up a central Water Efficiency Fund and the creation of a social purpose central delivery body. More detail is given on this as it is the most recent consultation and raises a number of tangential issues. The WCWC opined that the focus was changing consumer behaviour, the proposal lacked the right 'nudge' architecture. With this insight, the WCWC suggested that any drive to increase water efficiency, either by individuals in households or by organisations for non-household consumption, needs two steps:

- · Create the choice architecture which favours water efficiency; and then
- Campaign to raise awareness of the benefits of the right choices.

64 Once more there is a plethora on initiatives and many of these could be brought together as nudge architects and the WCWC has identified central government and supporting organisations which have a role to play in creating the right architectural framework, for example, Defra on water efficiency labelling, metering, water fittings (and WaterRegs UK), dual supplies and a wider communications campaign, DLUHC on building regulations, DBT on smart regulation, Ofwat itself on tariff innovation, WaterSafe for reliable plumbers, local authorities on building controls, IPPC and Trading Standards, the Environment Agency on coordinating initiatives with NHH

uses of water and IPPC. There is a challenge in understanding how the latest proposals on Environmental Incentives will fit in.

65 Then the water companies and the entity emerging from WEF as the CDB, will be nudging people by conducting a campaign to persuade customers to save water within that framework. The balance of the national and local messages is likely to vary from region to region according to water stress. Indeed, a further question by the WCWC was, does the WEC provide the national message framework for water companies to use, or does it do some messaging itself and that would be a key part of its remit and affect its budget and the skills of its employees and CDB board members? A major challenge in the initial stages must be to define exactly what remit the CDB will have. The WCWC offered some suggestions including the structure of the CDB.

66 There is a technical and economic advantage in metering, but one of great political sensitivity; and associated with this is the question which acceptable tariff structure will best meet the achievement of 110l/h/d ?.And even within the WCWC there is a variety of views on the benefits of rising block/falling block tariffs around the fulcrum of 100/l/h/d .The WCWC suggests that Ofwat should launch a consultation on this part of a reviewed Water Efficiency Roadmap. The WCWC suggests that the way forward is on the basis of strategic pieces being viewed not in their own right as the consultation seems to be, but as part of a bigger picture.

GOVERNANCE, FINANCE AND ECONOMIC REGULATION

67 The WCWC has avoided expressing opinions or making suggestions which can be interpreted as 'political'. However, in its Thinkpiece on governance in early 2023, the WCWC set out the evidence from the reasons and debates about regionalisation water services in the 1970s and privatisation in the 1980s. It observed that there are examples of different asset ownership and operation in the UK: government owned companies in Scotland and Northern Ireland and a Not-for-Profit company in Wales, along with public equity and private equity and foreign utility company ownership in England. All are experiencing similar problems and the same is reported from France where asset ownership and operational delivery are separated. This thinking underpinned the submission to the Department of Business and Trade in January 2024.

68 The headline insight by the WCWC is that the fundamental 1989 model of a privatised, vertically integrated, dual-service water utility operating to balance affordability and maximum efficiency to satisfy service and environmental aspirations and regulated economically, served the nation well in the conditions of the 1990s and is still valid. The WCWC supports the view that it needs to be adjusted to reflect thirty years of experience and the changing circumstances of water service delivery in 2024. The WCWC observed that even if the nature of asset ownership changed, the funder, be it the Treasury or private finance, will be demanding. No matter what system of governance is in place, more investment will lead to higher, not lower prices. The evidence shows that while the behaviour of some private equity firms has been simply impossible to defend, it is by no means the only problem. Nevertheless, taking steps to mitigate a financial markets-based approach will contribute to the way forward and restoring public trust.

69 It will be noted that when decisions on investment efficiency and the provisions of investment are vested in the same oversight body, such as existed in the 1970's and 80s by the control of government through the DoE and Treasury, there are problems. The public spending borrowing requirement reduction is a major factor in decisions. Even now with government owned companies, there is a need for an economic regulator, both entities being accountable to government. Asset ownership is an entirely different issue to asset regulation and asset operation; the WCWC has recognised the need for a clear 'line of sight' between these.

70 The WCWC sought to shine a light on the two worlds of finance and operation which often collide, and this interface needs better articulation in the future of regulation. The WCWC submission to DBT provided a window on the worlds of opex, capex, and totex and provided distinctions between routine capital and operational maintenance. Members of the WCWC have drawn attention to the experience of the risks of separating asset ownership and operation and suggested that this must be taken into account in applying the concepts of net asset values (NAVs), which might be suitable for reservoirs but not so suitable for water treatment works. The WCWC also suggested that the concept of statutory water companies which existed before privatisation might be explored again. However, diverting attention and creating physical or corporate boundaries by restructuring across the whole industry would introduce very significant risks.

71 The WCWC supports the continuing primary duty of Ofwat as being to ensure that the functions of water and sewage undertakers are properly carried out and that Appointees can finance them. Subject to that, the economic regulator must protect customers, and promote economy and efficiency by comparative competition using provisions in the Appointment to adjust prices to ensure that both customers and investors benefit from efficiency gains and to meet the cost of additional obligations. Customers should be protected from unnecessarily high charges or a poor service or both and companies must invest wisely to maintain an adequate infrastructure of assets and expect to be monitored on outcomes. In return for effective delivery, companies and their investors should be able to expect the economic regulator to help achieve an objective, balanced and affordable/financeable scale of obligations arising from changing expectations and circumstances. The WCWC did not advocate a return to a rate of return model.

72 On the premise that Ofwat will have a role in the future and that any kind of water company will be Licenced it is recommended that after over 30 years of experience and accretions of stepwise changes in Licence conditions there needs to be 'once in a life time' full review of the Ofwat price review, Appointment Letters and determination processes rather than the current approach of 'piece-meal' changes (as advocated earlier). The WCWC suggests that this should be ready for 2027 (as set out earlier in the creation of a National Water Strategy), implementing the lessons of this experience and acceptance of the economic and financial consequences of all the current demands for improvements to water services. This would embrace the principles of smart regulation but preserve the principles of commercial viability. An urgent first step will be a major review pro tem of the 25-year Strategic Direction Statements.

73 The WCWC suggests that any strengthening of the regulatory process must include extended powers for Ofwat to investigate and regulate the financial structures of the holding companies, all of their subsidiaries and their licenced subsidiary water companies. This would include an extension of a Social Purpose for the water companies. This will contribute to the rebuilding of public trust but must be done in ways which do not discourage investment. This was set out in the response by the WCWC to the consultation by Ofwat on an extension of Licences to include a focus on customers I /December 2023. The WCWC was, therefore, pleased to see that this has been embraced as part of the way forward by the new government in its announcement in mid July 2024.

74 The WCWC supports the view that Regulators must be resourced properly as set out in its submission to DBT in January 2024. It was pleased therefore with the announcement of increased resources for the Environment Agency inspections.

75 The WCWC is pleased, therefore, that this line of thinking seems to be consistent with the direction of travel of the government.

INNOVATION

76 This leads on to the topic of innovation. The WCWC submits that the sector has been criticized unfairly for lack of innovation and is working on a Thinkpiece and it is worth sharing the insights so far. The WCWC shared its views in response to the Ofwat consultation on the innovation fund in April 2024.

77 Innovation is referred to in the DBT Duty of Growth consultation, yet it must form part of all smart regulation; and in its submission, the WCWC has pointed to many examples of specific innovation in new investment models, by expanding the appellant functions of Ofwat, by the use of drones for inspections, the evolution of catchment management and so on. The WCWC supports any development of tariff innovation, which is balanced fairly.

78 The WCWC is very supportive of innovation and has pointed out that any technical innovation must always be accompanied by caution in application so that no risks to health and the environment occur. It is co-operating in producing a think piece on innovation since 1974. It is, however, essential that operational and technical innovation must produce a tangible and measurable benefit if it is successful, and the regulators should insist that the benefits must be clearly stated before the innovation is adopted.

79 Some of the key insights are:

- Innovation is a concept which applies not just to the technology of water services but all aspects of its management, for example, the shift from customer services to customer care. It is also about making organisations innovative by sharing best practice, successes and failures and by rewarding innovation, making it part of the 'day job.'
- Innovation, sometimes, progresses unappreciated because it is achieved by many small steps rather than a few big steps. Good examples exist in the

evolution of the contributions of analytical methods and remote monitoring and control.

- Innovation has to be part of 'wisdom management' (the beneficial application of knowledge) and recognise that past experience is relevant and 're-inventing the wheel' can waste resources. Some basic facts do not change. A good example of this in technology innovation has been the desire to speed up activated sludge processes and hence reduce plant size, but there is an optimum retention time below which the processes become stressed and do not function properly, whatever the enhancement.
- The need for standardisation in technology is not inconsistent to innovation. Innovation must include a final step in which it is embedded into standard practice.
- There is a difference between internal innovation and being a ready adopter of external innovation. It cannot have room for 'not invented here'. Innovation partnering has played a significant role in the evolution of water services. This may fall foul of procurement rules for technology and so these need to be accommodating.
- Innovation involves risk. A maxim is that research and development stage of innovation can fail for good reasons when applied, albeit not too often and not in situations in which failure is a threat to health or the environment. So, application of research and development in practice can be in water management, rightly cautious.
- Most of these lessons could have been experienced in many other industries, but water innovation in the current system is different. There are often comparisons with the slow nature of innovation in water management, for example, comparing it with, say, photography innovation. The essential difference is that water service customers expect constancy in product, such as water pressure, but innovation in service. The economic regulation of water companies as major developers and customers of innovation, whether internally or externally sourced, has been a complicating environment, particularly in the early years after privatisation when Water PLCs had commercial subsidiaries which could also benefit from innovation. So, there were always challenges in deciding what innovation costs could be ascribed to shareholders as compared to water service customers

MANPOWER

80 The WCWC is very mindful of a skills and manpower shortage which needs addressing and whilst this has not been the subject of any Thinkpiece it underlies many of the points made. The WCWC supports many of the initiatives to build skills and works closely with professional bodies in the sector. The WCWC notes the paradox that just at a time when dedicated, professional, ethically driven young people are needed in the sector, the adverse publicity is a deterrent to water management as career as a career choice. The WCWC does all that it can to highlight the attractions of such a career. This is another dimension to the need to rebuild public trust. 81 The WCWC has supported the provision of adequate resources for Regulators

CLEARER COMMUNICATIONS

82 Last but not least, everyone must be focused on the clarity, accuracy and accessibility of knowledge shared. Communications are paramount and data must be accessible and set out in context to facilitate wise decision making. This iterates back to the impending challenges of managing 'Big Data.'

83 The WCWC supported the proposal by Ofwat to establish a national campaign on water efficiency but now emphasises that this must part of a broader review on the Water Efficiency Roadmap.

84 This overview highlights the issue of customer behaviours and the involvement of the 'Nudge Unit' And a particular issue is that of dealing with faecal or sewage aversion. This will require very carefully crafted communications .

Footnote

As this overview was being signed off, the WCWC became aware of the Consultation by the Ministry of Housing, Communities and Local Government the new name for the DLUHC on a review of the Planning Framework. It will comment separately. The WCWC is pleased that this review is taking place, it has long advocated it. However, the first reaction is that this is yet another example of the 'silo' approach and demonstrates the need for more 'joined up' government.