Note on use of this document

(i) members of the Company were invited in September, if interested, to contribute to the development of confidential think pieces on matters relating to the water and environmental sector for potential discussion with DEFRA and as background to Company events (such as the City Water Debate and the Discussion Dinner with the Minister);

(ii) a very significant number of members volunteered to participate in the discussion; this was coordinated by Past Master Peter Matthews; the outcome was the following series of confidential think pieces;

(iii) these are subject to further development as discussions progress; any additional comments from Company members are welcome and should be directed in the first instance to Peter Matthews (slepeymatthews@gmail.com);

(iv) further confidential think pieces may be added in due course.

SOME THOUGHTS OF THE WORSHIPFUL COMPANY OF WATER CONSERVATORS (WCWC) ON THE FUTURE GOVERNANCE AND ECONOMIC REGULATION OF WATER SERVICES IN ENGLAND

FIRST EDITION, JANUARY 2023

Overall Executive Summary

- 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 national 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 2022
- The WCWC supports the 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.
- No matter what system of governance is in place more investment will lead to higher, not lower prices.
- Diverting attention and creating physical or corporate boundaries by restructuring across the whole industry would introduce very significant risks.
- 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.
- Suggestions are made to amend the price review processes.

- Other contributing factors such as Planning Strategies need addressing at the same time.
- If the proposals from Ofwat and the WCWC are followed through, it would seem to be going back to the broad concept of the pre-1989 private equity based statutory water companies and that this needs examination. The WCWC is not advocating a return to a rate of return model.
- The Price Review process has thirty years of accretion and the time has come to determine if it can be simplified. One way of doing this would be to reset the relationship of the Letter of Appointment and the Price Review process. Changes to the Appointment would allow some principles to be set more permanently whilst other could be varied as factors impacting the price review process vary.
- Steps to change company behaviour are suggested.
- There must be a continuing commitment by, and support of, staff for professional development as part of the effort to restore trust in the sector.
- In view of the intense interest in the future of water services, there is an urgent need for a national forum or summit, or preferably a Commission drawing on historic experience, including all interested parties to develop and agree a national strategy.
- Communication on water is distorted by poor information and its presentation and must be remedied.

Full summary

S1 This think piece is produced by the Worshipful Company of Water Conservators (WCWC), the 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 passion 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 Company's purpose is ***Promoting a diverse and sustainable environment.***

S2 It is accepted that this is a long paper covering comprehensively a wide range of relevant topics. So, a short form version based on this Summary has also been prepared and both are archived on the Company's website. It forms part of a suite of papers concerning different aspects of water conservation. To avoid confusion between the use of the term Company and water companies, the acronym WCWC is used.

Why has the Worshipful Company produced this paper?

S3 This year has experienced a very substantial increase in angst in England about environmental water quality, such as the impact of storm sewage overflow, water resources during the drought and the performance of water companies and their regulators. Some criticism is well-founded, some ill-founded. More reasoned debate is needed in order to ensure that whatever changes are made, they are well founded and focussed on productive improvement.

S4 The issue of communication is very difficult. On one hand, it must be recognised that the populist reporting of all matters associated with water conservation is often highly biased against the water companies and even Defra and the regulators and distorting proper debate. Any criticism and counter assertion of this is portrayed as complacent and defensive. The

WCWC recognises the diversity of views across the nation, which must be reconciled in moving forward and even within its own membership there is a range of views for which even it has found a challenge in preparing this paper. The Utility Week Forum in November 2022 shows how much work needs to be done to restore public trust in the water service systems. So, in many ways the challenge is twofold: improving the service provided and being seen to be doing the right things so that myths can be dispelled. Equally, there is a need for other contributors to be equally clear about their responsibilities for other factors, such as the sensitivity of the planning processes.

S5 But right at the start of this think piece, it is worth observing that that whatever the causes of the present situation, a lot more investment is needed at a time when there is a drive to contain and reduce public debt. This has echoes of the 1970s and 80s so it is important to understand how we arrived at the way that water services are managed now. As the cost of borrowing rises, the more likely trend is that extra money will be found through equity and ill-informed bad publicity will deter investors (see Utility Week Forum November 2022). The WCWC wish to provide a place of well-informed debate on the way forward.

S6 This contribution is part of an extended process of engagement by the WCWC. It is also planning to organise a conversation, ‘Running Water’ in London on March 21st 2023, the eve of World Water Day, as part of WET 10, a partnership of City Livery Companies sharing an interest in water. It is planned that the leaders of the water sector, including the regulators, will make contributions.

The dilemmas on which the WCWC are providing views

S7 These are complex and interrelated, but the WCWC has sought to provide a simple summary.

- Changes in public aspirations, better monitoring, and increased demands on the system through development and climate change are making the task of maintaining an excellent water service more difficult.
- Asset inertia is often overlooked; instant solutions are impossible and growth is not the self-funding answer.
- Greater efficiency will not provide all the funds needed to invest in new assets, but operational performance has to improve; the generally held view of regulators and others is that the water companies can do better.
- Customer charges will have to rise to rise to pay for the improvements, but the current regulatory/political agenda is to reduce charges.
- Political and media demand has been for the returns to investors in water services to be reduced and for the governance of water companies in England to be changed, but these alone will not solve the current challenges.
- There is poor alignment between planning and water strategies.
- Getting the balance of communications right should be achieved, avoiding complacency and defensiveness and ensuring that the debate is based on evidence rather than prejudice.

S8 The principles of governance are explored but the intention is to provide further papers on storm sewage overflows and water resources.

S9 The paper is split into four parts:

PART 1: UNDERSTANDING THE ROOTS OF WATER SERVICES NOW

S10 This seeks to provide some understanding of the journey from a pre regional public authority past to now, and, in doing so, contributing the lessons from that journey to help determine the best way in future. There is as much to celebrate as there is to criticize.

S11 An outline of the history of the current industry is given not just as historical background but to understand the underlying dynamics of service delivery today. The integrated regional service delivery was created in 1974 following reviews of water services and local government. But upon entry into the European Community, although the UK led on concepts like river-basin catchment management, it found that in the 1980s:

- It was described as the 'Dirty Man of Europe' because of issues like marine discharge quality and the dispersal of sewage sludge as sea, and was in breach of multiple EC standards on drinking water, bathing water and river quality with no prospect of meeting them in a foreseeable time-frame at the then rates of investment, but with every prospect of litigation and costly fines from the EC
- The regulatory system was not fit for purpose. Apart from the small independent HMIP the RWAs were responsible for both operations and environmental regulation. If monopolies were to be privatised a system of economic regulation was needed as well
- River quality suffered as a result of a lack of government investment

Action was needed particularly to invest a lot more, and the answer was privatisation. This has echoes of the dilemmas today: more investment at a time of fiscal constraint.

PART 2: THE STARK CHOICES FOR THE FUTURE

S12 This looks at the options for organisational change and concludes that the fundamental model of a vertically integrated dual service water company utility operating to comply with environmental and customer services' legal requirements and regulated economically is right for England. But it needs some significant and far-reaching adjustments.

S13. There are undoubtedly major weaknesses and poor performance with the existing model, but WCWC suggest that addressing them does not justify the disruption and extra cost that would accompany major organisational changes:

There are also strong practical and political arguments against the main possible organisational alternatives:

- Re-nationalisation cannot possibly provide the investment required either for the short or long term.
- Franchising-the main form of partial public ownership discussed as an option in public has been found so wanting in other public service sectors

Diverting attention and creating physical or corporate boundaries by restructuring across the whole industry would introduce very significant risks.

PART 3: DELVES FURTHER INTO THE DEBATE SET OUT IN THIS SUMMARY

S14 This points out that the causes and hence the solutions do not lie in simple assertions like excessive company dividends, although these do undoubtedly need to be addressed.

S15 The evidence about the causes of the current dilemmas is equivocal but, after 30 years, it is timely to review the roles of regulators and the companies. This is needed to identify and address some of the unintended flaws that have appeared over the last 30 years including the impact of private equity ownership. Change is needed not only to address better the environmental imperatives but to restore public and investor confidence

Getting the mindset right

S16 In trying to understand the current situation better, it was an advantage to think in terms of' two worlds in which people played roles. In practice, life is never as simple as that. This is set out here in the Summary to provide a framework for understanding the essence and origins of the points being made in the main body of the paper

The Two Worlds of Finance and Operations

S17 One world has been Financial Markets, populated by issues like:

- Dividend and equity
- The best or most effective way of raising money to invest – in bonds, in group loans, in external loans etc.
- It is often impatient

The other world has been water services engineering populated by matters like:

- Capital or operating solutions to real environmental problems
- Operational efficiency
- Customer service
- Compliance with regulations
- The impact of decisions on customer charges

S18 This latter world underlined the Defra consultations on environmental targets earlier this year. It is a world that demands patience. Even with the best will, changes involving operational capital in particular, cannot be made overnight. But do they communicate effectively with each other? Between them lies economic regulation, involving matters such as: the weighted cost of capital, replacement asset value (RAV), return on capital, and natural capital. In these worlds, even the term 'capital' can mean subtly different things to different people.

S19 The problems lie in the communication between these two worlds and that creates myths. Articles in recent editions of Utility Week highlights the complexity, and Ofwat seeks to make that connection. There is no doubt that the consequence has been an accretion of economic regulation over the last thirty years. There but there does not seem to be a direct line of sight between projects like the reduction of storm sewage and overflows and the impact on decisions like how these should be funded directly by revenue or debt or equity. The Generally Accepted Accounting Practice rules will eliminate some of the debate.

S20 Whilst the concepts of the Water Industry Environment Programme and the Water Industry Strategic Environmental Requirements (WISER, May 2022) are embedded, they help, but what about all the other current initiatives?

S21 A study of the problems of Southern Water demonstrates the lack of communication of these two worlds, but it was private equity and equity injection which avoided its final demise (Utility Week Forum November 2022). They must work more closely in future, or even merge.

S22 In 1974, loose financial systems in municipalities were translated into normal profit and loss accounts and balance sheets. There was some added sophistication with moves to current cost accounting and the introduction of the RAV to determine returns earned in the absence of market forces as part of the construction of economic regulation in 1989. The markets-based approach arrived with the more demanding private equity owners, which resulted in very weak balance sheets. The model worked well initially, but flaws became apparent and were exploited.

S23 In the original concept of privatisation in the economic model of 1989, managing money was a means to an end, for delivering better water services. But now the perception is that the roles are reversed and there needs to be some rebalancing. There is now an apparent complexity of desired outcomes.

S24 Ofwat aspires to make a real drop in customer charges after 2025, the Defra consultation documents recognised the cost impacts of the investments and operational costs of environmental targets, including the reduction of storm sewage overflows. It is claimed this dilemma will be resolved by lowering dividend, by reducing the allowable cost of capital and by increased efficiency, whilst at the same time reducing the sale of product - drinking water, the basis of all variable income? There must be a greater understanding and practical response to this paradox. In the future are charges to go up or down? The pointer appears to be going up.

S25 The paper seeks to make suggestions to bring these two worlds closer together, which is a challenge. That challenge involves regulators as well as the companies. The debate has been made more intense by the demands for higher criminal and civil penalties imposed by the Environment Agency and Ofwat which are not perceived to ensure that what is expected, is delivered.

PART 4: LOOKS INTO WHAT CAN BE DONE TO EVOLVE THE 1989 MODEL TO REFLECT THE REALITY OF 2022

This sets out a number of suggestions for ways forward, which are listed in the key point listing below

Insights for the future

S26 **The headline insight by the WCWC is that 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 national well in the conditions of the 1990s and is still valid. It supports the view that it needs to be adjusted to reflect 30 years of experience and the changing circumstances of water service delivery in 2022.** The model has, in general, delivered large improvements in the quality of drinking water, sewage treatment, the remedy of customer service deficiencies and systematic monitoring and improvement of underground and overground assets. But a revision of the model is needed to address new technical and financial demands and the changes in water and sewage companies (WASC) ownership.

Conclusions and Suggestions

S27 Throughout the paper various specific conclusions and suggestions arise to ease the way forward and for ease of reference in the paper and in this Summary, they are highlighted in red in the text and paragraph numbers are given here:

41-42 Ofwat has already introduced Design Procurement for Customers for large projects, which may ease the development of new reservoirs. Particular scrutiny of the cost assumptions, RAV and returns will be needed to ensure confidence in such projects. The 2013 Water Industry Specified Infrastructure Projects (English Undertakers) Regulations for large projects, might offer opportunities.

44 The WCWC, from practical experience, concludes that, in general, vertical integration should be maintained, wherever possible.

47 The WCWC, from practical experience, concludes that water and sewerage services must not be separated, but this in no way offers any comment on the efficiency of the water only companies.

58-59 The WCWC already opined that the water regulatory framework needs sorting out. It is a jigsaw of initiatives at present. framework for environmental quality and use needs sorting out, it is a jig saw of initiatives at present. The WCWC very much support any initiative to ensure that the rivers of England are not only fit for use but are havens for wildlife. The WCWC has been advocating a national strategy in which there are agreed sets of quality criteria for recognisable uses.

- 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 should then be used to determine 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, but would still embed the principles sought by campaign groups. 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. This will be the subject of a further think piece.

65 The WCWC, from practical experience, concludes that the management of infrastructure and its operation must be kept together, and there needs to be a clearer understanding of the fluid relationships between capex and opex.

67 As stated in the headline insights **The WCWC concludes that the fundamental model of a vertically integrated dual service water company utility operating to comply with their environmental and customer services legal requirements and regulated economically is right for England, although it needs some adjustment.**

68-72 It cannot be determined from the EA data that private equity produces the worst performance now. But all companies are perceived through the same ‘lens’. There is no doubt that other factors must be taken into account in moving forward, such as the contribution of Planning Strategies, and matters concerning use of the water systems, for example water efficiency labelling. But there is a focus in this paper on the impacts of private equity, because there is such intense public interest in them; mitigating those impacts will at least contribute to solving the current problems.

77 The WCWC are of the view that a very useful step would be to determine if and how the extent of the NAO recommendations on Ofwat have been implemented.

80 The WCWC concludes that more accessible and universally accepted headline data are required. This needs to be appropriately detailed and presented in an easily appreciated format so that the debate is founded on fact, rather than assumption. The debate must be about what to do rather than incorporating debate on the validity of the evidential data. It is suggested that this might be a useful ONS project.

85 In making a judgement on the extent of extra cost incurred by the current system, it is notable that a study done a few years after privatisation showed that if the same investments had been made by public finance with an addition to the PSBR it would have been more expensive. It is crucial that up-to-date comparisons such as these are carried out.

99 The WCWC concludes that the extension of Ofwat powers on dividends probably even to dividend capping is right. And that as interest rates rise future investment in assets could come more from equity. But there is also no doubt in the view of the WCWC, that the future system must not allow a market-based approach to be for the unsustainable benefit of investors. This probably means a review and modification of Appointments rather than further elaboration of the Price Determination process. But as later paragraphs argue the whole business of what should be included in the Appointments and what should be included in the Price Review process needs a major single review.

107 In discussion the WCWC have also identified the full definition of RAV and fair rate of return to need attention. It has been suggested that the RAV should be reduced to take out the value of non-performing assets (including those which have been off-line for unaccountably long maintenance works, cost overruns) and even clawback where past returns have incorporated non-performing assets. However, there may be some challenge in agreeing a process of defining non-performance and there is a danger that this will reduce innovation and its associated risk taking and even impact resilience investments. This has led to an interesting debate worthy of being explored elsewhere, which the concept of risk and innovation paired together as part of investment criteria, Should we invest in ‘flying bicycles’ was one comment. The WCWC suggest that UKWIR should be actively involved in the question as to which way forward on innovation. The WCWC supports the focus on innovation in the companies, such Blue Wave in Southern Water, as contributing to a better future.

109 A simple model of company governance used by the WCWC to explain what needs addressing is the relationship between the PLC Board, the Board of the water service company (WSC), the de facto subsidiary (the WSC), the employees led by the Chief Executive, and the assets they own, extend, maintain and operate. This is a unique variation of the usual concept of a Holding Company and subsidiary. The Board of the WSC must hold the executive to account in terms of performance, the executive must hold the Board of the WSC to account for making the right finances available at minimum cost to customers and it must hold the PLC to account to ensure

that the right finances are available. It does recognise that this approach is open to debate.

110 The Board and Executive must continue to make sure that the staff have the necessary skills. This should include the concept of registered status with associated Codes of Ethics. Whilst companies are free to employ whom they wish, it ought to be part of the contract that exists between the monopoly company and the rest of the community that the best people are employed. Hence, the WCWC considers that not only dividends, but also employee remuneration should be linked not only to financial performance, but also substantially to environmental, performance.

111 In the current environment of blame there has to be a distinction between wilful breaches of the legislation, unavoidable breaches of the legislation due to external issues like development and climate change which the assets cannot cope with, and changes in attitudes towards what is acceptable and what is desirable. This does not excuse negligent or wilfully damaging behaviour. The Companies Act 2006 introduced a new duty on directors to “have regard to [among other things] the impact of the company's operations on the community and the environment”.

119 The WCWC suggests that the current voluntary enhancement of the Articles of Association of the WSCs to cover explicitly the commitment to sustainability, maintaining and improving environmental standards and acting in the long-term interests of the community and customers should be made a formal part of the regulatory system. This would improve tangible accountability of Boards and Directors and would enable the government to be in a position to state that it had taken action on a change in the status of companies without massive structural changes. This would have the advantage that there would be a manifest commitment to the environment alongside responsibility to shareholders

120-121 A interesting idea has arisen in the discussions. If some of the ideas put forward find favour it might well be that the 2022 model might be migrating towards the model of private equity ownership of Statutory Water Companies (see paragraphs18-20). Moving to this model might change the nature of the private equity investors that would be more interested in this ‘patient investment’. Therefore, the WCWC are of a view that looking at this suggestion might be worth investigating, as part of any review of the Licence. However, this suggestion is not advocating a return to the Rate of Return model.

122-3 The Price Review process has 30 years of accretion and the time has come to determine if it can be simplified. One way of doing this would be to reset the relationship of the Letter of Appointment and the Price Review process. Changes to the Appointment/Licence would allow some principles to be set more permanently whilst other could be varied as factors impacting the price review process vary. So, rather than current piecemeal changes the WCWC recommend that there must be a major single review as soon as possible.

124 The WCWC suggest that in view of the intense interest in the future of water services, there is an urgent need for a national forum or summit, or preferably a Commission, drawing on historic experience, including all interested parties to develop and agree a national water strategy.

125 And finally the WCWC suggests that there needs to be a national consensus on communications, perhaps with the central entity, suggested above, taking a lead.

S28 Members of the WCWC stand ready to develop the ideas put forward.

PART 1: UNDERSTANDING THE ROOTS OF WATER SERVICES NOW

The core principles of water services in the UK

1 The absolute core of water service delivery throughout the UK is through integrated monopoly corporate entities, operating to comply with customer service and environmental regulations and targets set principally by Governments and their Arms-Length Bodies and controlled by economic regulation in terms of service investment and an appropriate return on the regulated asset base. The small variation of that is the survival of water only entities for historical reasons in England and the provision of bulk water supplies in Scotland. This will be considered later. The small variation of that is the survival of water only entities for historical reasons in England and the provision of bulk water supplies in Scotland.

2.The nature and the consequences of these entities varies and this is explored later. Any judgement of these has to be based on service delivery and impact on customer charges.

3 The *raison d'etre* for this paper is the focus of debate about the future of English Water Companies. Scotland and Northern Ireland are serviced by Government-owned companies; Wales is served by a 'not for profit 'company. Of the nine English Water PLCs (WASCs), four are owned by private equity, two are held by international utility conglomerates and three remain as public listed companies on the London Stock Exchange. There are 13 water-only companies (WOCs), all private equity owned (some by the Water PLCs). There are some small local variations which this paper will return to.

4 Comparisons are often made with different service delivery systems throughout the world but the UK is almost unique in working with fully integrated systems and unique in the extent of involvement of the private sector as owners and operators.

5 It is important to understand the historical decisions which underpin what we do now. There are several books and texts on the origins of the water industry, including material provided by Ofwat, the water economic regulator in England and Wales, but few encapsulate the experiences of the 'leaders on the ground;' and the Water Conservators can provide that.

How did we get to the current situation?

6 Many of our older members took part in the events of the origins and the WCWC believes that these experiences can inform the current debate As Churchill said ***"The longer you can look back, the further you can look forward."***

7 Through the Water Act 1973, the government of the day established ten regional water authorities in England and Wales, based on river basins and catchments in order to achieve even greater economies of scale, especially in sanitation, compared to the prior gradual consolidation of water undertakings. The reform was also aimed at putting into practice the

principle of integrated river basin management, especially concerning the planning of investments in wastewater treatment. Given the small size of many river basins in England and Wales, in practice the area covered by each of the regional water authorities typically contained more than one river basin. This is the origin of the geographical location of the principal water companies. The Regional Water Authorities took over the assets and staff of a plethora of bodies.

8 The Regional Water Authorities were not only in charge of water supply and sanitation, but also of rivers, land drainage, and water resources management. This was a deliberate move to allow optimisation of the use of river basins for water resources management and to achieve improved river quality. However, it opened up the possibility of conflicts of interest since the same institution was in charge of abstracting water and discharging wastewater on the one hand, and controlling these same abstractions and discharges on the other hand. The Water Act 1973 left open the possibility to contract out water supply and sanitation services to local authorities. However, in practice this did not happen, and substantial assets were transferred from local governments to the new water authorities. Since the transfer was internal to the public sector, no compensation was paid to local authorities. Local authorities also initially held a majority of the board seats of the new organisations, some with 50 members. The private statutory water companies, which provided water to 25% of the population, were not part of the reorganisation and were left to operate as before. Funds allocated for capital spending fell in the wake of the IFC's bailout of the Government in 1976.

9 With the election in 1979 the water and sanitation sector initially remained public, but the government attempted to make the enterprises operate more along commercial lines. As a result, real operating costs declined, tariffs were increased above the inflation rate and the share of self-financing of investments increased. The pre-1989 governance of the water services as a nationalised industry in England and Wales was marked by the strong link to national macroeconomic policy objectives. It must be remembered that in 1980 inflation was 18%; the government was determined to bring it under control and by 1985 it was 6%. Tightening Water Authority expenditure contributed to that improvement, but there were consequences (see later). Pressure was exerted through DoE and the Treasury to cut back on investments. Whilst the industry became profitable, the rate of return on assets based on replacement cost values remained low at less than 2%. After critical reports by the Monopolies and Mergers Commission reflecting the unwieldy and ineffective nature of governance of RWAs, the Water Act 1983 reduced the number of board members of the RWAs and brought in Chairmen with a business background. However, it also eliminated the local government representation on the Boards and made all Board members appointed by Ministers, thus further exposing the sector to central control.

10 Many members of the WCWC recall working in these times and the challenges they faced. First, the RWAs issued their own consents and licences; sewage effluent consents were reviewed by HMIP before implementation (which was also responsible for taking any legal action over non-compliance, but the principal actions were taken under civil law by groups such as those of anglers). There was concern that the RWAs would be held unreasonably liable for sewage effluent non-compliance before they had been able to affect the necessary investments and improvements for the inherited assets. Thus, all consents were reviewed to reflect very best performance and long-term targets were derived for consent variations once the works had been upgraded. This in turn led to the development of river quality objectives within catchment models, which underpinned the setting of all consents and river abstraction licences. The WCWC is considering a separate paper on this.

11 During this time, the Annual Expenditure Plans were approved by DoE with the intervention of the Treasury. There was capital investment control and, post 1983, stringent external finance limits (EFLs) in response to the need to control the PSBR which were enforced strictly. In fact, in 1984 following a public expenditure white paper objective of holding public spending constant, the water industry was required to reduce its borrowing to nil by 1987/88   The Plans embraced impact on charges. For example, under those circumstances it was impossible to make proactive investments or to invoke planning embargoes until a sewage treatment works was unequivocally statistically non-compliant. Thus, sewage treatment works performance and river quality declined in the 1980s and this became one of the drivers for privatisation, a fact which is almost forgotten. The senior leaders of the water sector were keen to do the best job, but the fiscal and economic demands of the 'investor and regulator' (Government) meant that this was difficult. In 1982 the DoE and RWA Chairmen had agreed that their objective was to "offer a quality of service that is acceptable having regard to costs and to effects on the environment and to remedy recognised deficiencies over a reasonable period".

12 In order to reduce public debt and introduce the opportunity of private finance coupled with the efficiency benefits of the private sector, the government, elected in 1979, favoured privatisation of utilities as the way forward and throughout the 1980s made more than one proposal for the water sector. Indeed, one proposal involved privatising everything in the RWAs included the regulatory function. This was one step too far, particularly as sewage treatment performance was declining. But the entry of the UK into the European Economic Community brought a whole series of new demands on water services including the reduction of nitrate and pesticides in drinking water threatened EC infraction proceedings), the Bathing Water Directive, the impending European legislation on sea outfalls of sewage, and so on. The UK was under pressure as the 'dirty man of Europe' The cost of these investments was unavoidable and amounted to many hundreds of £ millions which could not be contained within the nil EFL limit. The RWAs were faced with demands for more investment, criticisms of poor performance, restrictions on finance, which was a major contributor to the push for privatisation.

13 After the 1987 election, the drive for the current model of privatisation culminated in flotation of the Water and Sewage Companies (WASCs or Water PLCs) in 1989. But not without substantial opposition by environmental and political groupings with fears about universal metering, the privatisation of a natural resource, nitrate pollution of drinking waters, and the privatisation of a natural monopoly which did not easily lend itself to competition.

14 There were fears that the interests of shareholders and those of public health and environmental standards were incompatible. This was resolved partly by the creation of a mechanism which allowed the companies to claim for a review of prices in response to significant changes in statutory obligations. The drive for profit had to be balanced by tight and detailed regulation to ensure delivery of agreed outputs and compliance with standards. Hence, the legislation creating water companies also created the independent Drinking Water Inspectorate, the National Rivers Authority and an economic regulator, Ofwat, which would oversee investment, expenditure and charges of what would be monopoly water service providers. The process for this is discussed later.

15 The modus operandi of transition gives some illumination on the state of affairs and debates of today. The government took over the water service functions of the water authorities into ten state-owned water companies in September 1989 and shares were created and floated on the London Stock Exchange in December 1989 to a total value of £7.6 billion. There was also a Golden Share held in each by Government to give it some residual determination on the fate of the companies. The government assumed responsibility for the sector's total debts amounting to £5 billion and granted the companies a further £1.5 billion — a so-called “green dowry” — of public funds.

16 The Water Service Companies (WSCs) were created as the direct successors of the water authorities with an Appointment (or Licence) under the legislation and it is this which connects through to the five-yearly Price Reviews and Asset Management Plans at which point the delivery of investment programmes, and efficiency improvements of what would be monopoly water service providers would be subject to detailed examination. The detailed letter of Appointment of Water Service Companies, and the terms of the Water Act which set out duties, responsibility, accountability and mechanisms for dealing with new obligations, were subject to long negotiations with the Chairmen of the RWAs and Statutory Water Companies (SWCs, also known as WOCs). This process, although frustrating at the time, for some of the members of the Company, forced a detailed examination of risks and resilience which has withstood many tests.

17 There was another driver, often forgotten, and that was the government objective to grow the economy and boost exports (perhaps in the current jargon; growth, growth, growth). The perception was that the English water companies could compete with the then internationally dominant French water companies and add to the export market and there was an expectation that the water companies could also leverage their commercial capabilities internationally. The way that this was resolved was that the floated companies were PLCs with principal subsidiaries, Water Service Companies (WSCs), which had ring-fenced operations.

18 The Water PLCs developed a variety of non- regulated businesses ranging from energy supply to waste management, but particularly in developing overseas businesses. Five of the Water PLCs made a concerted effort to enter international concession markets in the wake of the emergence of this sector in the early 1990s, after a few years some internal functions such as Laboratories, Property holdings, Systems, Technology were made into independent unregulated companies. But unlike perhaps more patient French, Spanish and German utility investors, after a few years the concept of overseas investment became unpopular, considered to be a distraction by Ofwat and investors impatient for returns. And the Water PLCs started divesting. In the early 1990s the government gave up the protection of its golden shares, thus allowing ownership by a variety of investors including those with an interest in exploiting the balance sheet headroom, which had been negotiated for the benefit of public services, and incurring debt in financing the acquisition. The effect was quite the reverse of the original vison, instead of English Water taking over the world, we allowed the world to take over English Water, with the unforeseen consequences with which we are coping now. The subsidiaries have their own board of directors and Ofwat takes a view on these appointments.

19 Statutory Water Companies were not incorporated in the 1973 creation of water authorities. These were private companies, usually formed by local businessmen, with share capital, incorporated under individual Acts of Parliament. They were restricted by central government on the rate of dividend payable to shareholders, the amount they could borrow and the amount of profit they were permitted to retain. But the 1989 Water Act set them on

the same footing as the main WASCs / Water PLCs and they have been acquired either by Water PLCs or, mostly, private equity investors. For example, York Waterworks, which was acquired by Yorkshire Water or Hartlepool Water acquired by Anglian Water. So, in those cases, the Water PLC will have at least two subsidiaries, each with its own appointment. The SWCs were restricted by central government on the rate of dividend payable to shareholders, the amount they could borrow and the amount of profit they were permitted to retain. But the 1989 Water Act and 1991 Statutory Water Companies Act set them on the same footing as the WASCs and the 29 SWCs operating at the time of privatisation have either been bought by WASCs or private equity investors.

20 However, there is an interesting twist in this tale. The South Essex Waterworks Company and the Southend Waterworks Company merged to form the Essex Water Company in 1970. In 1994 the Essex Water Company merged with Suffolk Water Company to form Essex and Suffolk Water. At that time both were owned by Lyonnaise des Eaux-Dumez (which became Suez and was subsequently merged with Veolia), who went on to buy Northumbrian Water to create Northumbrian Water Group. This is now owned by a CKI, a Hong Kong based infrastructure holding company. Likewise, Générale des Eaux (now Veolia) acquired six SWCs during this period. In both cases, the returns allowed by SWCs in the 1980s and 1990s was attractive to the two leading international private sector investors.

21 Privatised water and sewerage operators have clearly demonstrated that they are capable of providing services effectively and efficiently under the structure agreed in 1989, which has been recognised by Sir Ian Byatt and by Ofwat. However there have been some significant failures of execution both by companies and regulatory authorities. There are also issues where public expectations of environmental standards involve levels of expenditure which outstrip the criteria of affordability and where some prioritisation, trade-off and financing process is necessary.

PART 2: THE STARK CHOICES FOR THE FUTURE

22 Whatever the reasons and justifications for change, it boils down to:

- A fundamental restructuring which would involve nationalisation of the WSC subsidiaries. This would involve significant investment by government and the creation of debt at a time when there are worries about government borrowing. It could also incur significant disruption of water management services and investment programmes at a time when focus on solving the problems is the primary need. Where would water be in the funding queue?
- Leaving the most fundamental principles in place as they are at the moment seem totally appropriate at this point, but the WCWC believe that some significant adjustments are needed.

What does fundamental restructuring mean in practice?

23 A fundamental restructuring which would involve a return of the 25-year Appointment, assets and operations of the WSC subsidiaries to the public sector probably under a nationalised industry regime. This would involve significant compensation to shareholders /owners and massive legal and transactional effort by incumbents and government in registering assets, legal agreements and employees. It could also require the establishment of new parent entities to carry responsibility and accountability. This will involve significant

disruption of water management services and investment programmes at a time when focus on solving the problems is the primary need. It is unlikely that the sector would be self-financing with the consequence that an additional burden of borrowing will fall on the PSBR or that the sector will be inadequately funded. It would require a very convincing public case to ensure the support of the public through a period of transition which will inevitably highlight different levels of charges and quality of service geographically. Standardisation inevitably produces winners and losers with huge controversy.

24 Water PLCs are very complex businesses requiring serious seasoned leaders and managers, where missteps can create crises of public health which carry criminal liability. Each entity has specific physical characteristics which vary with geography and history and need strong continuity of staffing and detailed local knowledge. Wholesale disruption across the whole sector would involve significant operational risk and is certainly not advised

25 This depends on whether that fundamental restructuring focusses on governance or entails changes to operational delivery. A governance change only, would involve the water companies being owned first by Government, as with Scottish Water; but that transfer would be complex with due diligence processes and significant costs. That would involve potential conflict between the needs of the Treasury (as the new investor) and the economic regulator. And the experiences of Scotland and Northern Ireland are relevant where water companies under public ownership cannot be said to be performing better than privatised companies and are just as prone to operational mishaps (witness the huge supply interruptions in N Ireland over Christmas / New Year 2011/12. Members of the WCWC have experienced circumstances in which the governments, as investors in water services, can exhibit financial constraints on the water companies in spite of what the regulators would like. As a counter argument, Sandra Laville in the Guardian on July 1st 2020 (www.theguardian.com/environment/2020/jul/01/england-privatised-water-firms-dividends-shareholders) stated that Scottish Water, which is publicly owned, has invested nearly 35% more per household in infrastructure since 2002 than the privatised English water companies, according to the analysis. It charges users 14% less and does not pay dividends.

26 This might cause less operational disruption, (although the transaction itself would require a huge input by incumbents and legal professionals to specify all relevant assets involved), but would not solve the perceived problems of debt, investment and dividend management of the current water companies. Indeed, it would add to national debt at a time when the national focus is on debt reduction, the same dilemmas as those faced in the 1980s

27The WCWC recognises that renationalisation is not ‘on the table’ at the moment, but there are enough advocates for it to have considered the matter in some depth, for future reference, based on its members’ experiences, as was clear in the discussion at the Utility Week Forum in November 2022.

28 Of course, the government could divest nationalised companies by privatising in a different mode, perhaps that of a ‘not for profit’ company. Glas Cymru Cyf was created by the 2001 buyout of Dŵr Cymru Welsh Water from Hyder, a failed merger of Welsh water and electricity utilities. The difference between Glas Cymru and the nine English WASCs is that it gave a series of undertakings to the Senedd (the Welsh Assembly Government) with Ofwat and Westminster’s blessing, while no comparable institutions exist in England. There would still be the requirement to pay compensation to shareholders and to provide access to the debt markets. Glas Cymru was created as the successor to a failed WASC and remains as

a model which can be applied in the instance of specific failures of privatised entities rather than as a model which would apply to the whole industry.

29 It seems almost inconceivable that there should be a simultaneous nationalisation and the introduction of new arrangements for operational and asset management for which there is no prior experience at a time when there is such a demand for increased investment. Reorganization is not the answer (as Marcus Aurelius observed). The risks of such an approach are very high.

Breaking up the utility

30 If the next step is to pass onto another non-public body such as a franchisee or concessionee, then the status of employees becomes complex, insofar that they would transfer from a private company to a government company and then onto a new operating entity and TUPE would apply (Transfer of Undertakings (Protection of Employment). A ‘TUPE transfer’ happens when: an organisation, or part of it, is transferred from one employer to another.

31 But if this is the first step in further changes, there are several options each with challenges.

Changes to vertical integration

32 Analogy is often drawn with other utility services such as telecoms, gas and electricity. In the latter, distinction is drawn between resources, management of production, the distribution of those products and customer choice at the point of use. This also raises the issue of disaggregation and competition.

33 Can this work say for water supply? The relationship between what happens in a water treatment works, in the distribution system and at the customers stop tap is much more closely interlinked than other utilities. This is a consumable product where there is liability for quality throughout the integrated system. For example, high chlorine in a customer’s supply can be resolved either by changes in distribution or by changes in treatment. Changes in taste and hardness can provoke significant customer reaction including sickness so a unit of service is not standardised as it is in the case of electricity or gas. So, the most effective delivery of service is by the most effective integration of these functions.

34 However, the services in Scotland provide an insight into the success of separating treatment from reticulation (but not competition at the point of service delivery (cf. electricity) The network of water and sewerage pipes in Scotland is wholly owned by Scottish Water. Scottish Water acts as the wholesaler in the market, selling water and sewerage services to the water companies, known as retailers. Having bought their wholesale services from Scottish Water, the retailers then bundle these services with other value-adding offerings and sell them to non-household customers. Anglian Water is one of the licenced retailers.

35 It is only available to commercial organisations, certainly not domestic customers, in part because the political parties in Scotland are vehemently opposed to domestic metering, but there would be other problems as well. The retailer buys wholesale water from Scottish Water and sells it on but the water is delivered through Scottish Water pipes which are

operated by Scottish Water. In truth, the retail competition is about the billing and associated customer service function for water supply. It is a small part (15%) of the overall Scottish Water estate.

36 The Water Industry Commission for Scotland (WICS) is the economic regulator for the water and sewerage industry in Scotland. To protect customers, WICS requires retailers to provide default services to all business customers (regardless of the location or size of their business) at a price no higher than a default tariff. And Scottish Water is the supplier of last resort, (regardless of the location or size of their business) at a price no higher than a default tariff. A major obstacle to competition is the ability of an independent supplier to offer resilience of supply especially during drought conditions. This requires a supplier of the last resort.

37 But, what real choice can be provided at the point of domestic water supply service delivery? Domestic customers want constant quality and pressure and customer support when things go wrong with a single point of contact. Trust in the quality of public water supplies is currently high and this should not be undermined in any way. This billing and customer service part of the value chain is small with little impact on total charges. The WCWC is not aware of public demand for competition at the tap, a la, electricity supplies.

38 In England there have been, legal provision for so-called inset appointments for bulk water supplies since 1998. The 2014 Water Act extended these opportunities for retail competition to all non-household customers of English water companies from April 2017 and provided for possible future competition in wholesale markets. Ofwat's role includes regulating such water and wastewater markets and promoting effective competition wherever appropriate. There are a limited number of such open supply zones which are specified in the letter of Appointment of the relevant company.

39 One option of some speculation is to create distinct separate entities developing water resources assets. In Eastern England, Water Resources East (WRE) Ltd is an independent, not for profit, organisation which has cocreated a multi-sector strategy for long-term collaborative water management across Eastern England. The leading members are the water utilities, but there are many other partners. Following the guidance contained within the recently published Environment Agency National Framework for Water Resources, Water Resources East (WRE) is now working with over 100 organisations representing water users from right across Eastern England to prepare a Regional Plan for water resources management, which will be published in 2023. Water Company Water Resource Management Plans (WRMPs) will be required to have clear line of sight to the relevant Regional Plan and in turn to the National Framework.

40 Anglian Water, Affinity Water and Cambridge Water, where appropriate, are developing three strategic water resource options to deliver social, environmental and economic benefits beyond public water supply resilience for the region and communities they serve. These projects form part of the companies' long term Water Resources Management Plans, and are linked to the wider regional plans led by Water Resources East.

41 Following on from the publication of the National Infrastructure Commission report on the urgent need for 30 new reservoirs, some analogy has been drawn with the Thames Tideway Tunnel. Because of the size of the project (£4.3 billion) a separate entity was licenced in 2015. Bazalgette Tunnel Limited (BTL) is the licensed infrastructure provider

for its finance, building, maintenance and operation. It has as investors: Allianz, Amber Infrastructure, Dalmore Capital and DIF. Ofwat examined the proposed tariffs and found that they envisaged a return based on Thames Waters’ 2009-10 return on its RAV, and adjusted this to its 2010-15 RAV return, a far lower figure. Since the licence award, it also trades as Tideway. Could such an entity be created to finance, build maintain and operate water resource assets. Ofwat has already introduced Design Procurement for Customers for large projects, following on from experiences with the Thams Tunnel, which may ease the approach as long as adjacent water companies are prepared to co-operate. The 2013 Water Industry Specified Infrastructure Projects (English Undertakers) Regulations for large projects, might offer opportunities

42 If such an approach of creating separate entities was to be adopted to fast-track new reservoirs, there would not be any visible difference for water consumers. This idea might be worth examining in more detail and it would appear to be viable where more than one water company has an interest in the resources. Particular scrutiny of the cost assumptions, RAV and returns will be needed to ensure confidence in such projects. Whatever, the operation of a reservoir must be completely compatible with the fluctuating supply demand and all the stages, including leakage control and changing customer habits must fit together to contribute to the government’s target to reduce water demand. Development of reservoirs and water resources is the subject of a separate think piece

43 What about waste water? Ofwat is keen to promote competition. but the interrelationships of what customers do and how the sewerage and sewage treatment systems operate effectively, is an important key factor in how storm sewage operates. Whilst competition may well have some advantages, the WCWC are not of an opinion that more competition in services will address the problems being addressed. There is already internal competition, for example in the delivery of effective bioresources management, in terms of allowing water companies to extend their environmental services but also to outsource their bioresources operations to other parties. The integration of what customers put into sewers, the operation of sewerage and sewage treatment systems are intimately connected, particularly in times of storm, as the current focus on storm sewage overflows attest.

44 Thus the WCWC, from practical experience, conclude that, in general, vertical integration should be maintained, wherever possible

Can water and sewerage services be separated?

45 This question is asked because water only companies operate successfully within areas served by water companies with a licence to provide sewerage service but this is matter of inheritance rather than current strategic choice.

46 The experience of the members of the WCWC, and indeed one of the drivers of the 1974 amalgamation, suggests that the management overheads of running both arms of services together (economies of scale) are less and there are technical benefits in terms of technology cross fertilisation on matters such as pipeline and process technologies, scientific services and capital planning. But very importantly it provides a single point of contact for customers. This is not to be taken as any criticism of the efficiency of the Water Only Companies.

47 The WCWC, from practical experience, conclude that water and sewerage services must not be separated.

Can asset management and operation be separated?

48 Paragraphs 45-47 revisit some of the debates of the late 1980s. It could represent the next stage after the government has nationalised the water services. Once the government has nationalised the water companies it would then have to disaggregate them into asset entities and operational entities which would be transferred to whatever came next; a concession or a franchise? Would the government wish to retain control of the assets?

49 This suggestion draws on the observations of water service delivery in other countries in which the assets are owned separately from the operational service entity. The media has also speculated on alternative delivery models, for example, in drawing comparisons with train services. It raises the concepts of franchises or concessions. Those members who have experience of the Rail Industry note that the fragmentation of responsibilities leads to numerous boundary disputes with blame for safety or punctuality disputed and acting as a distraction to sound management.

50 Withdrawal of franchises for non-performance has not been a significant sanction to ensure good performance. The lesson is that a culture of high performance and safety is best instilled in an integrated organisation. Strong leadership and engagement in detailed risk management associated with specific operations and assets is the key to the avoidance of catastrophic risk and public acceptability.

51 In the case of water and sewerage the deliverables are not frequency of service, punctuality and avoidance of crashes but continuity of uninterrupted high quality compliant supplies at adequate flow and of sewage treatment compliant with formally agreed consent standards. Catastrophic public health incidents must carry strong sanctions. Sewerage and sewage treatment due to operational failure leading to gross pollution must face similar sanction.

52 If the government took on ownership of the WSCs and chose to franchise their operations the government could sell the rights to operate regional water services to a non-public entity such as such as an international utility conglomerate. That entity would then aim to make a profit as an independent business, subject to whatever restrictions (service level, schedule, etc.) that the government put in the contract. If it does well, it keeps the profit. If it does not, it goes out of business. But this is an unstable model for an essential long-term utility-like water services, where there are intimate relationships between capital and operational investments; and even the government is thinking about converting train operations to the more stable concession model.

53 In a concession a private company enters into an agreement with the Government to have the exclusive right to operate, maintain and carry out investment in regional water services, for a given number of years. In this case, both assets and operations are transferred and the issue of TUPE is equally important. In France this is a common form of contract limited by law to a maximum of 20 years but it suffers from the problem of contract incompleteness i.e., unforeseen future investment needs. This is well accommodated by French public service law which allows for extra claims where the company is in financial difficulties for reasons which could not have been predicted but this does not easily transfer to UK contract law.

54 A core issue of the debate is the length of time of the concession and if the concessioner does invest in assets what happens to these at the end of the contract. These sorts of issues have even bedevilled the train operators franchise system. Who owns what and for how long? And one of the demands for the future of water management is a longer- term view. There would still be a need for an independent economic regulator, but with a different framework of reference. Currently, the Appointment has a commitment to adapt prices to new obligations via a review process and an obligation on Ofwat to ensure a business can finance its functions an alternative franchise or concession structure would necessitate a different arrangement.

55 Other forms of contracts between public and private entities, namely lease contract and management contract (in the water sector often called by the French term *affermage*), are closely related but differ from a concession in the rights of the operator and its remuneration. A lease gives a company the right to operate and maintain a utility, owned usually by the local municipality, but investment remains the responsibility of the public. However, the private operator is remunerated directly by consumers with a proportion paid to the municipality to cover its investment costs. of operator are expected with say 5-year contracts

56 Under a management contract the operator will collect the revenue only on behalf of the government and will in turn be paid an agreed fee. This is an unsuitable model where there are large backlogs of investment and where competitive transfers of operator are expected with say 5-year contracts

57 Other models have been developed over the past three decades for international private sector participation in water and sewerage:

- Management – billing and so on. An element of a utility’s operations.
- Operations and maintenance (O&M) – taking on the running of a utility’s activities while having no involvement in the development of new assets.
- Build-operate-transfer (BOT and many variants) – develop new assets (a sewage treatment works, for example) and operate and maintain them for an agreed period before handing them over to the utility. Variations of this include Build Own Operate Transfer (BOOT) and Design Build Operate (DBO).
- The full concession model (BOT extended to the entire network and customer operations) was popular in the 1990s. The risks associated with these contracts were not properly appreciated at the time.

O&M and management contracts tend to run for two to ten years, with BOT and full concessions lasting for 25-40 years. The BOT/ BOOT model offers limited opportunities in specific situations, such as new reservoirs. But this fragmented approach does not resolve the issues of ‘the two worlds’

58 The WCWC already opined that the water regulatory framework for environmental quality and use needs sorting out, it is a jigsaw of initiatives at present. The WCWC very much support any initiative to ensure that the rivers of England are not only fit for use but are havens for wildlife.

59 The WCWC has been advocating a national strategy in which there are agreed sets of quality criteria for recognisable uses.

- 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 should then be used to determine 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, but would still embed the principles sought by campaign groups. 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. This will be the subject of a further think piece.

60 There are very practical reasons why any option which separates investment from operation will not deliver what will be needed to satisfy Government targets. The essence of the disparity of comparison, say, between water service delivery and that of energy delivery or train franchises, is the much greater intimate relationship of operation and asset design, investment and maintenance, expressed within the economic envelope, as the relationship between capex and opex.

61 Experiences of members of WCWC highlight the working relationship of capital and operational expenditure. Unrestricted freedom to manage the cost implications of achieving a target leads to different outcomes and each local decision is a balance of capex and opex. So, for example, phosphate removal from sewage by activated sludge is principally opex, but by reed bed technology, is partly capex and partly opex and the struvite process has significant capex and opex. Managing storm overflows is principally capex, but will involve opex if more sewage is treated. It has to be remembered that capex has associated opex (known as RICS, revenue implications of capital spend). Any quick fix *pro tem* solution might be all opex. These are ‘in line of sight’ with questions such as from when are the finances are generated?

62 It depends on where the principal pressures are to reduce impact on charges. An opex solution has immediate impact on revenue spending, whereas the capex solutions might have a longer-term cost profile arising from any borrowing but the immediate impact on charges might be less. If the economic model of regulation has the concept of a return on assets, the whole process favours capital solutions and that is something which this paper address later. These issues lead to the concept of totex which combines the capex and opex. This agile relationship is much more difficult to manage if capex and opex are vested in different entities. Ofwat has sought to replace capex and opex with a unified totex (total expenditure) measure since 2015.

63 Implementing totex has caused confusion throughout the industry. It has come to be interpreted erroneously of comparing capex with lifetime opex without considering the lifetime value of money. To be meaningful the analysis must be discounted at the regulatory rate of return and that will give the lowest Net Present Value which is the most economically preferred option.

64 The reason for dwelling on this that the separation of asset ownership, say by the State, and operation of those assets by another entity, would make the fluid relationships of capex and opex much more difficult to manage and probably reintroduce macroeconomic constraints which will bias the solutions.

65 The WCWC, from practical experience, concludes that the management of infrastructure and its operation must be kept together, and there needs to be a clearer understanding of the fluid relationships between capex and opex.

66 The current system has achieved a lot, which is often overlooked for example, drinking water quality compliance is very high (99.9 % compliance with EU standards), life has been restored to major rivers such as the Thames, there has been a big extension of Blue Flag Bathing Waters and there have been significant contributions to the reduction of carbon dioxide emissions.

67 As stated in the headline insights the WCWC concludes that the fundamental model of a vertically integrated dual service water company utility operating to comply with their environmental and customer services legal requirements and regulated economically is right for England, although it needs some adjustment.

PART 3: DELVING FURTHER INTO THE DEBATE SET OUT IN THE SUMMARY

68 In July 2022 the Environment Agency published its annual report for 2021 on the environmental performance of the nine water and sewerage companies, including the Environmental Performance Assessment (EPA).
(https://www.gov.uk/government/publications/water-and-sewerage-companies-in-england-environmental-performance-report-2021)

Northumbrian Water	4 stars
Severn Trent Water	4 stars
United Utilities	4 stars
Anglian Water	2 stars
Thames Water	2 stars
Wessex Water	2 stars
Yorkshire Water	2 stars
Southern Water	1 star
South West Water	1 star

69 It cannot be determined from the EA data that private equity produces the worst performance now. But all companies are perceived through the same ‘lens’. Nevertheless in response to the public intertest, at the Moody’s UK water conference on October 20th (https://www.ofwat.gov.uk/publication/david-black-ofwat-chief-executive-officer-environmental-ambition-and-delivery-from-challenge-to-opportunity/), David Black, Chief Executive of Ofwat gave an insight into the direction of travel of economic regulation. He said that aligning corporate behaviour on matters like linking pay to performance with public expectations of water companies will be a key objective of the next price review. Licence changes at PR24 will also require dividends to be linked to performance, (but not necessarily capped our words) and will tighten the regulatory ring-fending around financing.

70 For the next price review period, he said that operational performance will only grow in importance for investors as key to determining the returns they earn. He added that for the financially resilient structures the regulator wants to see in the sector, investors should be committed for the long term.

71 He also said investment requirements may necessitate companies to raise more equity as well as debt to cover the needs of AMP8 (2025-30) and said overseas investors may find opportunities through competitive procurement, which would enable companies to finance major infrastructure schemes without burdening customers with high bills.

72 Ofwat has also made it clear that the sector is facing real challenges on its environmental performance and questions over resilience to drought. But the evidence does not point to a quick fix in governance. The experience of the members of the WCWC is that there are many factors influencing performance, some can be fixed quickly, such as investment strategy, employee skills and attitudes to planning. Some have to be assimilated, for example, the impact of regional meteorology, topography, hydrogeology, demography including population density and distribution), and asset condition. Some aspects lie between, such as asset age and this can be a slow problem to resolve. This think-piece seeks to explore those issues. There is no doubt that other factors must be taken into account in moving forward, such as the contribution of planning, strategies, and matters concerning Citizen Delivery concerning the use of the water systems, for example, water conservation and use of sewerage systems.

73 There is a focus on the impacts of financial markets, because there is such intense public interest in them. Mitigating those impacts will at least contribute to solving the current problems. All water utilities in the UK are natural monopolies and they need independent regulation of expenditure and charges, even the government owned companies in Scotland and NI. They all have a concept of return to shareholders. It is the size and destination of those returns in English Water Companies which has caused most angst, albeit that some of the issues have been exaggerated by the media in sometimes ill-informed critiques of the industry. The perception is that the Companies are only serving their own interests rather than the benefit of the communities and environment. They are 'for profit' companies' The relationship of capex, opex and impact on charges is made more complex by the impact of growing debt, the split of profits between reinvestment and dividends, by the impact of growing gearing which is putting pressure on reinvestment versus dividends. This dilemma has been made much worse by the growing scale and shareholder value focus of private equity ownership, which is not exposed to regular comparative analysis and commentary by the City. This form of ownership was not foreseen in the original 1989 model which had the simple notion that well managed businesses would, in the interests of shareholders, comply with licence conditions and make a fair profit whilst doing good. The problems reflect performance and behaviour as well as structure and governance.

74 There are numerous articles about this dilemma of making fair profit whilst doing good. For example, *Private equity and the regulation of financialised infrastructure: the case of Macquarie in Britain's water and energy networks Kate Bayliss, Elisa Van Waeyenberge, Benjamin O. L. Bowles, June 2022* (https://www.tandfonline.com/doi/full/10.1080/13563467.2022.2084521#)

75 An apposite reference is that of the NAO in its report '*The economic regulation of the water sector'* published in 2015. It has several recommendations but the first relates to

proving services. It states that "*the regulatory framework has contributed to major improvements in water quality since privatisation. It has provided the conditions to encourage private investment and has promoted environmental and quality improvements. Most measures of service quality have improved markedly. Under Ofwat's measure of the ability of networks to continue providing services, no company showed 'deteriorating' performance between 2009-10 and 2013-14. Environmental and drinking water quality measures have also improved and the UK has avoided fines for non-compliance with EU obligations. Ofwat expects water companies to spend £44 billion on improving water services, improving resilience and protecting the environment between 2015 and 2020. At its 2014 price review, Ofwat looked to companies to take more responsibility for improving services, for instance by requiring them to agree a system of incentives for achieving good outcomes and improving asset quality"* (The economic regulation of the water sector (nao.org.uk) .

76 It provided statistics on the achievements at that time since privatisation:

- £11.8 billion total water company turnover in 2014-15
- £396 average annual household bill for water in 2014-15
- 40% real terms rise in household bills since privatisation in 1989
- 5% expected real terms fall in household bills between 2015 and 2020
- £126 billion capital investment by water companies since privatisation
- £64.7 billion March 2015 regulatory capital value on which the water sector earns a financial return
- £44 billion amount Ofwat expects the water sector to spend between April 2015 and March 2020 on improving water services, improving resilience and protecting the environment
- £29.1 million cost of running Ofwat in 2014-15
- £840 million (NAO estimate) of the savings to customers between 2010 and 2015 if Ofwat had used an indexation approach to calculate the allowed cost of debt £410 million Ofwat's estimate of the gains to companies between 2010-11 and 2014-15 from reductions in corporation tax rates after price limits had been set

77 The WCWC are of the view that a very useful step would be to determine if and how the extent of the NAO recommendations on Ofwat have been implemented.

78 In July 2020, David Hall and Karol Yearwood of the Public Services International Research Unit of Greenwich University published an oft-quoted article that the nine privatised companies in England have amassed debts of £48 billion over the past three decades – almost as much as the sum paid out to shareholders. The debt cost them £1.3 billion in interest in 2019. Hall concluded that the companies have borrowed to pay dividends, rather than to invest in infrastructure projects. The £123 billion of capital expenditure spent by the companies has all been financed by customer bills, the analysis states. "*A large amount of debt has been borrowed. But since the revenue from user charges covered capital expenditure, this debt has been this debt has been used to finance dividends rather than capital expenditure*," Hall said. In the past 10 years, the companies have paid out £13.4 billion in dividends. Dividends paid 1991-2019 were £57 billion. (www.theguardian.com/environment/2020/jul/01/england-privatised-water-firms-dividends-shareholders)

79 There are claims in the press that the £72 billion has been paid out in dividends since privatisation and compared to the £130 billion in investment. Far too much information regarding the WASCs is buried within inconsistently applied regulatory disclosures, limiting the scope for informed analysis by stakeholders. However, these data means that on average £2.18 billion in dividends are paid per year. If it is that the rate of is somewhere between the 5% and the 10% rates often quoted (say, 8%), that gives an 'equity' value of £27 billion. The disparity of data in the preceding paragraphs should be noted.

80 The WCWC concludes that more accessible and universally accepted headline data are required. This needs to be appropriately detailed and presented in an easily appreciated format so that the debate is founded on fact, rather than assumption. The debate must be about what to do rather than incorporating debate on the validity of the evidential data. It is suggested that this might be a useful ONS project.

81 But a question that needs to be asked as to whether or not this is as bad as it has been portrayed. Some companies have had dividend holidays to contribute to operating costs and it has been argued that financing through debt is the most cost-effective way to fund new infrastructure. But from whence is that debt incurred? And does this reflect the new realities of rising interest rates?

82 Ofwat sets out the case for companies needing to make profits (Profits and dividends - Ofwat):
Companies do not collect from customers all of the money they invest in the year in which they spend it. So, companies must fund a large proportion of this investment from the competitive financial markets, either through borrowing (debt) or through investment from shareholders (equity).
Water companies must provide a reasonable return to providers of capital. This means that they must make a profit to reward their investors. And a basic premise of privatisation was that the companies must have sufficient funds to sustain operations.
Although the water and sewerage companies are largely monopoly service providers they must compete for capital with other companies. If they do not offer comparable returns to other companies, after taking into account relative risks, they will be unable to secure the capital they need to finance their investment programmes.
The cost of capital is not intended to guarantee shareholders' returns. A poorly managed water company might earn a lower return because it underperforms our assumptions, for example on efficiency savings. On the other hand, outperformance of our efficiency assumptions will increase returns. This is important for preserving incentives for companies to deliver services efficiently.

83 The price review process is set out in the licence and adjusts prices for additions to the Regulated asset base by capital investment for delivery of required outcomes. Ofwat is suggesting that licences should be modernised under the Environment Act 2021 to ensure that they support high performance. In PR24 there will be a greater focus on environmental performance working closely with the EA.

84 This will require significant additional investment which presents an opportunity for growth to investors but comes with caveats about who pays. Inevitable there is an expectation that the approach will be based on outcomes and the risk of delivery will fall on companies. They may be expected to raise equity as well as debt to finance the investment. "Financial structures that make equity raising difficult are likely to face challenging times "in the words

of David Black. “There are dangers in moving too far from the appointment processes which ensure that price determination reflects the cost of meeting any new or revised obligations but commitment to practices such as best value investment, harnessing competitive procurement and supporting customers in need through trust funds make good sense”.

85 In making a judgement on the extent of extra cost incurred by the current system, it is notable that a study done a few years after privatisation showed that if the same investments had been made by public finance with an addition to the PSBR it would have been more expensive. It is crucial that up-to-date comparisons such as these are carried out.

PART 4 WHAT CAN BE DONE TO EVOLVE THE 1989 MODEL TO REFLECT THE REALITY OF 2022?

86 There is no ‘silver bullet’ to fix the problems. It does not matter if the lens of perception is changing, or that more monitoring is identifying more problems than were thought to exist, the reality is that company performance has to change. Equally there has to be recognition that problems cannot be fixed overnight, no matter what the desire by any party to do so, and it must be recognised that bills will have to go up and that raises several issues, hence the focus on the world of financial markets. And some of the opinions expressed in the Utility Week Forum in November 2022 need critical examination.

Dividend Policy

87 The angst about dividend policy has been with us for some time and there are perceptions that debt has been incurred to sustain dividends but the rising focus this year on the investments in storm sewage overflows and water resources infrastructure have made this more compelling.

88 Ofwat has no formal powers to control profits. It has a statutory duty, under the Water Industry Act 1991, to make sure that companies are able (in particular by securing a reasonable return on their capital) to finance the proper carrying out of their functions. It sets price controls, which control the revenue the companies can collect from their customers in bills. In setting price controls, it must make a judgement on what is a reasonable rate of return on the capital investors have provided. This return must be sufficient for the company to attract investors and lenders to finance the investment programmes and maintain a large volume of infrastructure.

89 In setting price controls, its aim is to allow for a return on capital that is no more than necessary for an efficiently run company to get the funding they need from capital markets.

90 Ofwat has had no formal powers to control dividends. But each company’s Licence requires it to declare or pay dividends only in accordance with a dividend policy which has been approved by its Board and which complies with both of the following principles:

- The dividends declared or paid will not impair the ability of the company to finance the regulated water and sewerage business.
- Under a system of incentive regulation, dividends reward efficiency and the management of economic risk.

91 Ofwat requires the regulated companies to report any dividend paid to their parent company in their regulatory accounts. They must also explain the basis of the dividend. Over the past few years, Ofwat has belatedly challenged how companies use their dividends and the impact of this on gearing. It expects companies to have strong governance arrangements and to be fully transparent about how dividends reflect delivery of obligations and commitments to customers and the environment.

92 In April 2018, Ofwat launched a consultation on new measures for the 2019 price review which would see customers share the financial gains made by water companies with high levels of debt. It set out more details on the transparency expected on shareholder dividends and executive pay.

93 One of Ofwat's proposals was for customers to share any financial gains water companies make from adopting high levels of gearing. Some water companies had replaced equity in their business with cheaper debt, which can result in higher returns for shareholders, without an equivalent benefit for customers. Ofwat wanted companies taking this approach to share resulting gains with customers.

94 As part of that consultation, Ofwat also asked for views on proposals that would require water companies to be more transparent about their dividend policy and explicitly set out, in their business plans for the forthcoming price review, how their approach to paying dividends related to the service they provided to customers.

95 There was also a proposal for more openness about the performance related element of executive pay, with companies needing to demonstrate how any performance related component of executive pay is a reward for delivering in customers' interests, not just shareholders.

96 And then in July 2022 Ofwat set out new proposals to improve financial resilience in the sector. These would give the regulator extra powers to stop water companies making dividend payments if the company's financial resilience is at risk. The move would also enable Ofwat to take enforcement action against companies that do not link dividend payments to their performance, or those failing to be transparent about their dividend pay-outs. (https://www.watermagazine.co.uk/2022/07/28/ofwat-proposes-extra-powers-to-stop-water-companies-making-dividend-payments)

97 Ofwat suggested that inadequate financial resilience puts customer money at risk and undermines focus on customers and the environment. By strengthening the financial resilience of the sector, Ofwat believes it will also improve the attractiveness of investing in water and wastewater companies, which in turn helps ensure the sector can continue to improve performance. As part of these proposals, companies will be required to transparently demonstrate how dividends take account of service delivery for customers and the environment, investment needs, and the company's own financial resilience. If the company falls short, Ofwat will be able to step in and take action.

98 The proposals will also ensure that companies will be able to weather financial pressures and unexpected shocks to their business, without compromising their delivery for customers. As such the regulator is seeking:

- to raise the cash lock-up trigger to BBB/Baa2 with negative outlook. This is designed to prevent companies from paying dividends where there is a risk of further damaging the company's financial resilience. The change would be effective from 1 April 2025.
- to require companies to hold two issuer credit ratings, with the cash lock-up trigger being met if only one of these ratings hits the required level. This would remove the ability for companies to hold one issuer rating that is significantly higher than the others available.
- that companies would need to notify Ofwat of any change to their credit rating (currently only required for material changes).

99 The WCWC concludes that the extension of Ofwat powers on dividends probably even to dividend capping is right. Moreover, that as interest rates rise future investment in assets could come more from equity. Nevertheless, there is also no doubt in the view of the WCWC that the future system must not allow a market-based approach to be for the unsustainable benefit of investors. This probably means a review and modification of Appointments rather than further elaboration of the Price Determination process. But as later paragraphs argue the whole business of what should be included in the Appointments and what should be included in the Price Review process needs a major single review.

Fair Return on Regulated Asset Value

100 The WCWC has also given attention to the use of the RAV as part of the price determination process. This is a relatively simple concept but quite complicated in detail, but it is considered that a high-level overview of its use will expose the problems and allow some high-level remedies to be developed. Essentially the privatised water utilities are natural geographic monopolies and therefore the market place cannot set either prices or profit margins. To get round this problem the concept of rate of return generated by the fixed asset base evolved. Effectively the value of the assets would generate income, the level of which would be determined by the economic regulator who would fix the level of return at each Periodic Review. An efficiency driver was included which allowed capital efficiency gains to be kept for a period before being used to reduce customer prices. Unfortunately, the construction industry was moving in the opposite direction with large contingency provisions and cost overruns becoming the norm.

101 It is the outturn cost, not the bid cost that passes into the RAV and many water companies came to realise that they obtained a better return from cost overruns than capital efficiency. Financial discipline was eroded. This does not reflect the market place where cost overruns on investment projects can destroy a company (e.g., the cost overruns on the Channel Tunnel meant that the owners were unable to service the debt and the shareholders were wiped out). A new factory that is over budget cannot compete effectively with rivals and sales will fail to meet forecasts, thus reducing shareholder returns. The privatised water companies are immune to this risk, expenditure is always rewarded.

102 A similar problem exists with quantity of output. If a new factory is completed within budget but then fails to deliver the predicted output, sales of product will fall below expectation, and the shareholders again suffer reduced dividend, with water treatment plants, there is no penalty, the full cost of the partially deficient plant still passes into the RAV and generates the predicted income.

103 Again the problem is repeated with quality failures, if a water treatment plant is completed and passes the “tests on completion.” But then suffers problems which put it out of action, it continues to earn the full rate of return. The same is true of sewage treatment works and storm overflows. If a factory were to suffer these quality problems it would be unable to sell its products, again the shareholders would be faced with the decision to rectify or abandon the asset.

104 The WCWC suggest that it is a relatively straightforward solution to these problems:

- The RAV must be revisited so that cost overruns do not pass into it.
- If plants fail to produce the output volumes expected the value in the RAV must be reduced pro rata to the volume shortfall.
- If the quality of outputs is below that required the asset should be suspended from the RAV until such time as the deficiency is rectified at the shareholders expense or the plant is abandoned.

To make this work effectively Ofwat will need to publish annual high-level tables of:

- The amount of investment excluded from the RAV in relation to cost overruns.
- The value of reduction in RAV due to negative volume variances.
- The value of assets suspended from the RAV (temporarily) until such time as the regulators are satisfied that quality standards are being met consistently.

105 Publishing this data for each company may help to encourage owners to focus on the amount of expenditure which is generating no return, and might help persuade the media that the water companies are being rewarded for expenditure rather than outputs. However, it is recognised that this might lead to intense debate on the impact on the use of innovative technology and the attitude to resilience investment.

106 The process of introducing an adjustment to the RAV for assets which remain unused or which fail to comply with expected cost envelopes would appear to be fair as would the proposal to modify the determination to reflect the regulators expectations of dividends and to make this expectation reflective of performance and the Water Conservators suggest that it will be worth investigating this further.

107 In discussion the WCWC have also identified the full definition of RAV and fair rate of return to need attention. It has been suggested that the RAV should be reduced to take out the value of non-performing assets (including those that have been off-line for unaccountably long maintenance works, cost overruns) and even clawback where past returns have incorporated non-performing assets. However, there may be some challenge in agreeing a process of defining non-performance and there is a danger that this will reduce innovation and its associated risk taking and even impact resilience investments. This has led to an interesting debate worthy of being explored elsewhere, which the concept of risk and innovation paired together as part of investment criteria, Should we invest in ‘flying bicycles’ was one comment. The WCWC suggest that UKWIR should be actively involved in the question as to which way forward on innovation. The WCWC supports the focus on innovation in the companies, such Blue Wave in Southern Water, as contributing to a better future.

Changing Company Behaviours

108 The WCWC consider that a reset of the governance relationships is necessary not only to ensure a better focus on environmental outcomes, but also to restore public and investor confidence. This should include the concept of licence to practice and the increased need for on chartered status for leadership staff.

109 A simple model of company governance used by the WCWC to explain what needs addressing is the relationship between the PLC Board, the Board of the water service company (WSC), the de facto subsidiary (the WSC), the employees led by the Chief Executive, and the assets they own, extend, maintain and operate. This is a unique variation of the usual concept of a Holding Company and subsidiary. The Board of the WSC must hold the executive to account in terms of performance, the executive must hold the Board of the WSC to account for making the right finances available at minimum cost to customers and it must hold the PLC to account to ensure that the right finances are available. It does recognise that this approach is open to debate.

110 The Board and Executive must continue to make sure that the staff have the necessary skills. This should include the concept of registered status with associated Codes of Ethics. Whilst companies are free to employ whom they wish, it ought to be part of the contract that exists between the monopoly company and the rest of the community that the best people are employed. Hence, the WCWC considers that not only dividends, but also employee remuneration should be linked not only to financial performance, but substantially environmental, performance.

111 In the current environment of blame there has to be a distinction between wilful breaches of the legislation, unavoidable breaches of the legislation due to external issues like development and climate change which the assets cannot cope with, and changes in attitudes towards what is acceptable and what is desirable. This does not excuse negligent or wilfully damaging behaviour. The Companies Act 2006 introduced a new duty on directors to “have regard to [among other things] the impact of the company's operations on the community and the environment”.

Enhancing the Articles of Association of the WSCs

112 One suggestion for changing behaviours, which has emerged is that the Articles of each water service company are extended beyond the main one to take money from investors (their creditors and shareholders) and generate profits on their investments, i.e., a new additional purpose, and this reflects the Directors duties within the corporate entity itself

113 The Articles of each Water Service Company would be extended to cover explicitly the commitment to sustainability, maintaining and improving environmental standards and acting in the long-term interests of the community and customers.

114 The water companies seem to have understood the importance of this. In recent years, with the climate emergency accelerating and the challenges of providing resilient supplies to our growing population becoming ever more acute, there were industry-wide discussions around the social and environmental purpose of a water company (highlighted by the British Academy in its influential report “Principles for Purposeful Business”, published in November 2019).

115 In April 2019 the water industry published its shared Public Interest Commitment, in which each committed company committed to enshrining public interest in their company's purpose and signed up to five ambitious goals to tackle leakage, carbon emissions, plastics, affordability and social mobility.

116 Enhanced Articles of Association would require a water company to conduct its business and operations for the benefit of shareholders while delivering long-term value for the company's customers, the region and the communities it serves, and seeking positive outcomes for the environment and society. Put simply, this means that the Board must take account of the wider impact the company has on our customers, communities and the environment, as well as delivering a fair return for our shareholders.

117 One water company already has this as an enhanced purpose in its Articles with a public statement "Our Purpose is to bring environmental and social prosperity to the region we serve through our commitment to Love Every Drop." With an explicit commitment to consider:

- the impact of our operations on communities and the environment;
- the interests of the company's employees;
- the need to foster good relationships with customers and suppliers;
- the need to maintain our reputation for high standards of business conduct; and
- the consequences of decisions in the long term.

118 Others have less formal, brand commitments. This concept could be given some formality for all water companies. For example, in Regulations under Schedule 3 Regulation 4 of the 2006 Companies Act, the government publishes Model Articles. It is possible that this route could be used to prescribe an enhancement of the Articles for WSCs and then these would be reflected in the Terms of Appointment. The suggested enhancement could be evolved further. There is a need to establish a chain of command by which facility managers have felt obliged to neglect their duties by senior management or indeed directors (therefore triggering the 2006 Companies Act) and in turn, directors by their investors (if private equity investors are to be appropriately penalised, it is simply a case of caveat emptor).

119 The WCWC suggests that the current voluntary enhancement of the Articles of Association of the WSCs to cover explicitly the commitment to sustainability, maintaining and improving environmental standards and acting in the long-term interests of the community and customers should be made a formal part of the regulatory system. This would improve tangible accountability of Boards and Directors and would enable the government to be in a position to state that it had taken action on a change in the status of companies without massive structural changes. This would have the advantage that there would be a manifest commitment to the environment alongside responsibility to shareholders.

Evolutionary steps

120 A interesting idea has arisen in the discussions. If some of the ideas put forward find favour it might well be that the 2022 model might be migrating towards the model of private equity ownership of Statutory Water Companies (see paragraphs 18-20). It is interesting whether this highly conservative model is appropriate for the challenge of high investment in a constrained and inflationary economic environment. What is needed is are companies which are prepared to invest in scale, deliver performance while the contribution from charges is adequate to continue to provide incentivised returns to private equity. Issues of

affordability will be critical to the evaluation of the scale of investment along with issues of public perception on the effectiveness of the sector. This will require inclusive consultation processes and an attitude which convinces government that the sector can continue in private ownership in the face of the investment challenges. Undoubtedly players who are prepared to take risks and inject equity are likely to command the attention of Government. This may require some modification to the regulators view on the desirability of maintaining a large number of providers for comparative purposes.

121 Moving to this model might change the nature of the private equity investors, which would be more interested in this ‘patient investment’. So, the WCWC are of a view that looking at this suggestion might be worth investigating, as part of any review of the Licence. But this suggestion is not advocating a return to the Rate of Return model.

122 The Price Review process has 30 years of accretion and the time has come to determine if it can be simplified. One way of doing this would be to reset the relationship of the Letter of Appointment and the Price Review process. Changes to the Appointment/Licence would allow some principles to be set more permanently whilst other could be varied as factors impacting the price review process vary.

123 Ofwat is already stating that it wishes to amend the company Licences to tighten requirements concerning minimum credit ratings for listed companies and the calculation of bonuses and dividends (David Black, Utility Week Forum, November 2022). At the same event there was also a suggestion that the period of notification of withdrawal of Appointment could be reduced to 5 years. The WCWC observe that such a reduction would cause a great deal of investment and operational instability and that alternative means of bringing the desired changes in discipline should be sought. So, rather than the piece-meal changes the WCWC recommend that there must be a major single review of the balance of the Appointment and PR processes, including the suggestions it has made, as soon as possible

124 The WCWC suggests that in view of the intense interest in the future of water services, there is a need for a national forum or summit or preferably a Commission drawing on historic experiences , including all interested parties, to develop an agreed national approach to the future of water services. Its purpose would be to agree the principles of a national water strategy and that could embrace the river use and objectives strategy which the WCWC have outlined. It could also agree the principles of the shape of water services governance. It would leave each component to deliver based on regulatory responsibilities.

125 And finally the WCWC suggests that there needs to be a national consensus on communications, perhaps with the central entity, suggested above taking a lead. The Water industry’s representative body, Water UK, publishes information though Discover Water, but much more needs to be done. More information is needed, tailored to each WSC, it also needs to be more swiftly and effectively communicated. The problem is that if the media produces bad news stories all the time, then the public will come to believe that there is only bad news. This does not imply that bad news should not be reported, but that it should not be created. News and information should be balanced.