



**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

Ein cyf/Our ref:
Eich cyf/Your ref:

NRW, Ty Cambria, 29 Newport Road,
Cardiff, CF24 0TP.

Ebost/Email:

<mailto:> [REDACTED]

Ofwat
Centre City Tower
7 Hill Street
Birmingham
B5 4UA

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Natural Resources Wales's response to Ofwat's consultation 'Creating tomorrow, together: Consulting on our methodology for PR24'

Natural Resources Wales welcomes the opportunity to comment on the consultation.

As the principal environmental regulator in Wales, our purpose is to both: pursue sustainable management of natural resources (SMNR) in relation to Wales and apply the principles of SMNR; in the exercise of our functions. The Well-being of Future Generations (Wales) Act 2015 also places a duty on NRW to apply the principle of sustainable development in our work.

The context for our consultation response is the legislative framework set out in the Wellbeing and Future Generations Act and the Environment (Wales) Act 2016. Together this legislation puts sustainable development at the heart of decision making across the public sector in Wales, including Welsh Ministers. A summary of our key issues is below with further detail in Annex1.

Timing of the consultation

Whilst we acknowledge the work and time pressures of producing such a comprehensive consultation coupled with the need to adhere to the Price Review timetable Ofwat has set, consulting on what is a critical document over the summer period has presented significant challenges and risks obtaining the best contributions from your consultees. Please could you take this into consideration when timetabling future consultations. We would ask that you consider the responses here as complementing our ongoing discussions, including those we have as fellow regulators, as well as through the Wales Better River Water Quality Taskforce and the Pr24 Forum.

Wales and England

The balance of the document is much improved compared to the 'PR24 and beyond: Creating tomorrow, together' May 2021 consultation. However, there are still differences that need to be made clear. In particular, the appropriateness of using Defra's metric 3.1 to assess Biodiversity net gain. This metric and its reference data are not directly relevant to Wales and NRW do not support its use in its current format in Wales. NRW request discussions with Ofwat and Welsh Government regarding this. Further detail is provided below in addition to the other areas needing further clarification e.g. bioresources.

Environment and economics

Economics and, at this stage in the Price Review process, affordability, and customer ability to pay are the dominant themes. NRW acknowledges their importance and the role Ofwat must fulfil. However, without the environment the services of the water sector cannot be delivered for customers. Environment needs to be equal to customer. Again this document is much improved on the 'PR24 and beyond: Creating tomorrow, together' May 2021 consultation. References to 'what the customer can afford' need to be coupled with 'and what the environment can sustain'. Areas of concern are set out in our detailed comments below.

The climate is referenced but the nature emergency isn't. Opportunities to improve biodiversity are, however, the emergency of the impact on nature and biodiversity is missing. PR24 must consider and seek to address **both** climate change and the nature emergency. Potentially, this will require customer expectations and affordability to be superseded by the climate and nature needs.

Bioresources

The future mechanisms for regulating sludge to land in England and Wales are diverging. Ofwat's assumptions and statements are based on the situation currently and proposed in England. The requirements for Wales must be set out equally. NRW requests this and to be involved with decision on appropriate text / guidance prior to publication of the final methodology.

Understanding

The ambitions requiring the companies to reflect an understanding of customers and communities should also require reflection of an understanding of the environment (natural and built). This would support sustainable management of resources and resilience (of resource and systems).

Understanding (customers, communities, and environment) needs to be extended to knowledge sharing, education and creating behaviour change. Without this we will struggle to address the climate and nature emergencies.

Promoting sustainable outcomes and behaviours

Further detail is required to ensure that company submissions are clear on how their PR24 proposals will fit and support achieving the medium- and long-term outcomes. It feels from this document and current discussions with water companies that the short (PR24) and long (e.g. Hafren Dyfrdwy Strategic Direction Statement) are understood but how to link these is not clear, nor is how this progression will be assessed by Ofwat.

In Annex 1, we provide a detailed response to the consultation chapters.

We look forward to continuing to work with Ofwat during the review process. Should you wish to discuss our response or require our comment on any other aspects, please contact Ruth Johnston on 07814 294352 or ruth.johnston@cyfoethnaturiolcymru.gov.uk.

Yours sincerely,





Head of Natural Resources Strategy and Planning

Annex 1 - NRW response to Creating tomorrow, together: Consulting on our methodology for PR24

Executive summary

What happens in a price review should reference what the environment can sustain as well as 'prices customers can afford', and the reference to 'tackling climate change' should also include the nature emergency.

Focussing on the long term refers to outcomes that matter most to customers, the outcomes that are most critical to the environment also need to be referenced as these may differ.

Delivering greater environmental and social value emphasises the need for companies to deliver affordable, best value solutions, this should be caveated with 'that achieve environmental requirements.'

To help companies deliver value for the environment, they need to show a clear understanding of the environment as well as customers and communities. **The ambition to 'Reflect a clearer understanding...'** should be extended to include the environment and require research and data / knowledge sharing on issues and solutions. To achieve this Business Plans should also reflect the expectations that customers and relevant regulators have for the environment that provides the services that companies deliver. Comparable company to company data will also help reflect the needs of the environment in decisions.

These changes need to be reflected in the text throughout the document.

2. Regulating through the price review

2.2 we fully endorse and support the inclusion of the bullet relating to 'combatting climate change...'

2.2.1 the resilience considerations should be extended to include the resilience of the resource that is needed by companies to provide water supplies and wastewater services. Without ensuring resilience is extended in this way then plans may compromise the ability of the environment to meet water sector and / or customer expectations.

Q2.1 is 'rising customer expectations' actually a challenge? Customers are rightly focussing on the challenges, primarily related to the affordability and the environment. This is needed so that customers have the knowledge to understand difficult decisions such as bill increases to protect the environment. The challenges of climate change and environmental degradation by companies are two separate things. Please separate out into individual challenges.

2.3.3 aligning the interest of companies and investors with those of customers must not be at the detriment of the environment. Reference to the role of the environment in providing the service and therefore the opportunity for investment is missing.

2.3.4 we would welcome clarity from Ofwat on how they will assess companies' short medium- and long-term proposal compatibility and relevance to achieve the long term delivery strategies. Planning will also need to take account of environmental need as well as customer views and affordability.

We support the setting of performance commitment levels that reference what should already have been achieved. This will help to maintain progression.

2.3.5 we welcome and support the commitment by Ofwat to closer working with your fellow regulators.

2.3.6 we would welcome sharing of information on what innovation funding Wales has secured previously and any plans for future funding. We support the innovation fund and its expansion. However, we would wish to ensure that it delivers practical solutions that allow the knowledge to be embedded rapidly into operational practice. Innovative delivery projects rather than research. This has been seen in the work on nature-based solutions where the barrier to implementing them is evidence and data gaps on their practical use. The fund should be designed to fund research and delivery.

2.4.1 see comments on appendix 4 regarding bioresources and markets.

3. Design and implementation of price controls

3.2 should include collection and treatment of sludge as well as disposal.

3.3 much of this chapter is about securing more water to meet customer demand. Consider how this is framed – the need to reduce abstraction isn't a pressure on water resources – high abstraction levels are. Whilst reducing leakage is a solution surely system leakage is putting pressure on resources?

The water resource is a finite entity. There needs to be a fundamental shift to require companies to secure behaviour change in their operations and customers to use the existing water resource sustainably rather than taking more from the environment to feed a continually growing demand. Like the need to consider Sustainable Drainage Solutions (SuDS) and problem avoidance first for wastewater so behaviour change, and efficient use needs to be the first thought / action for water resources.

The statement 'Prior to PR19, we did not see sufficient progress in companies taking forward new infrastructure solutions' is relevant to England only, please make this clear. Whilst NRW expect network solutions within Wales we don't have the need for large scale water transfers.

3.3.1 should balance the need to protect the resilience of the environment with finding best value solutions. Additionally the impacts of water resources from Wales benefitting customers of other water companies should be funded by those customers but delivered by the relevant water company in Wales. This must cover existing as well as proposed resource use.

3.3.3 if a trading solution is the best value (environmentally, socially and for affordability) and is required for meeting a forecast deficit why is an incentive required for this? Please clarify.

3.4.4 any decisions about nutrient neutrality must be discussed with the relevant regulators in both England and Wales before decisions are made. The situation regarding nutrient neutrality has yet to be defined for Wales and may differ from England, political changes may also affect this option.

3.6 sludge production may have to change due to the impacts of supply chain vulnerability for the required chemicals, landbank restrictions for disposal, the need to achieve net zero and the move towards nature-based solutions to achieve nutrient removal. These should be factored into the sludge production forecasts.

3.9 liability for any failure of a system delivered by DPC must be clear to enable enforcement action if required. It is unclear if Ofwat have agreed with Welsh Government that direct procurement for customers (DPC) should be the default for projects over £200m in Wales also? Please clarify.

4. Reflecting an understanding of customers and communities

This section is primarily about gaining evidence and knowledge to better understand a system to then be able to meet the expectations of the users. The environment underpins this system. Whilst it does not use the system it is fundamental to its operation. It is strongly recommended that Ofwat extend their expectations of companies to understand customers and communities to include understanding the environment they use. This is the built (e.g. sewerage systems) and natural environment. Some of the problems we are now challenged with, such as storm overflows, are in part due to system failures. Greater knowledge of the systems and their health (linked to resilience) would help to ensure companies are maintaining resilient systems that are managed sustainably and meeting design requirements. Reflecting this understanding and sharing it with others, including NRW, would be beneficial to all.

The environment needs to be included throughout this section and as part of the understanding expectation on companies.

Additionally, the section reads as if the companies gain knowledge and then meet customers expectations. For the system to function healthily there needs to be trust between the relevant parties, trust is a two-way process. The current expectations do not promote companies increasing customers knowledge and understanding so that they are better informed to make decisions understanding the implications of their choices. This section needs to require education and knowledge sharing, plus incentivise behaviour change for customers, communities, and companies. The easy option is to do what you have always done when the reality is that you need to change and do the hard option. This is required to tackle the climate and nature emergencies.

4.1 references current and future customers. It is not clear how Ofwat are defining future customers. The definition should include the future generation yet unborn. This is complementary to Ofwat's requirement for longer term planning and is needed to create the momentum to address the climate and nature emergencies.

4.2 requires water companies to ensure that their plans are affordable. It is unclear how affordable has been defined and whether affordable takes into account the long term sustainability of the environmental resource to support short term decisions on cost to customers. We are seeing from

the current energy crisis that there is a need for significant investment to make our current (and aging) systems sustainable. The same is needed for the water sector. Decisions on affordability need to be clear on what the long term environmental implications are and how this could impact future customers including those yet unborn.

As well as promoting partnerships, knowledge sharing and behaviour change needs to be required of the companies.

4.2.1 we welcome the expectation on the Wales PR24 Forum to consider the balance between outcomes and affordability but caveat it with our comments above. Decisions need to reflect where customers and communities should be, not necessarily where they are. Environmental resilience and behaviour change must be part of these considerations.

4.3.1 table 4.1 it is unclear if the testing of customer's views is based on their experience to date of services or hypothetical future climate scenarios. We need to better understand what customers are willing to change and willing to pay for to mitigate for climate and nature emergencies. Understanding this now will help to meet Ofwat's long term planning goals. **Q4.1** see all points above.

4.4 how will the open challenge sessions be recorded, and the resultant decisions shared? Will there be any evaluation of their effectiveness? In Wales these sessions should include invites to the Public Service Boards.

Q4.2 we do support the proposal but wish to ensure they are effective and clearly linked to change.

Q4.3 the Forum rather than Ofwat could 'front' the Welsh sessions and each member be required to show how they have reflected the session in their subsequent planning / decisions.

4.5 Please increase Ofwat's expectations of the collaborative approach in Wales to also require it to take account of the environmental requirements, in addition to customer concerns about affordability. Affordability concerns need to be weighed against the need to secure sustainability of the environment to support provision of services to customers.

Q4.4 have a collaborative approach to decide how to meet the points raised by the Welsh open challenge session. So the Forum owns, works and decides on the outputs and the required changes collectively in a Welsh legislative context and then works with others such as Public Service Boards to achieve the outcomes. So the emphasis is on Forum decisions for Wales, not individual company or Ofwat decisions.

Ch5 – Delivering outcomes for customers

Key messages – as well as basing decisions on customers valuations of service attributes, Ofwat should also use regulators valuations of outcomes being met.

Figure 5.1 – for water and wastewater, we would welcome discussion on the appropriateness of a PC for system design / performance linked to legislative compliance.

Companies' compliance with statutory requirements, namely the Urban Waste Water Treatment Regulation 1994 (UWWTR), has slipped to a point where it is affecting the performance, such as storm overflows discharging too frequently. The focus has been on reducing spills, but the system needs to be considered as a whole. UWWTR requires **4.1. that systems are (a)...operated and maintained to ensure sufficient performance under all normal local climatic conditions...(c);**

disposal routes for treated wastewater and sludge minimise the adverse effects on the environment.

There is also a duty imposed by the **Water industry Act** that requires a **WaSC to (94 (1) b)“cleanse and maintain those sewers and any lateral drains which belong to or vest in the undertaker as to ensure that that area is and continues to be effectually drained”, that systems are “(a)...operated and maintained to ensure sufficient performance under all normal local climatic conditions...(c); disposal routes for treated waste water and sludge minimise the adverse effects on the environment”.**

The focus on spills and a PCL related to this maybe incentivising companies to address a problem that should never have occurred if the UWWTR requirements had been met. NRW would welcome discussion with Ofwat about how to best direct companies' investment to ensure the focus is on the need to address root cause/s not just the resulting problems.

This is also relevant to the Ofwat focus on operational resilience.

5.2.3 should also reference Wales's Better River Water Quality Taskforce.

This section also references Defra's metric 3.1. This is not supported for use in Wales and the final methodology should reflect this.

We would welcome further discussion with Ofwat regarding an outcomes-based approach for the NEP.

Q5.1 NRW recommend three separate metrics to ensure that companies adequately tackle both leakage and customer demand (household and business) for water. Although large businesses would be excluded any business metric would need to be mindful for any business / sector expansion. In Wales non-household demand is around a fifth of total company usage and has been decreasing over time, there should be enough flexibility to allow growth where this is sustainable.

5.2.5 **Q5.2** NRW wish to see a bespoke performance commitment for Dwr Cymru / Welsh Water relating to Shellfish waters as we feel that this would incentivise more urgently required environmental improvements in Wales than the proposed common PC for Bathing Waters.

5.4.5 on what evidence do Ofwat expect the outcomes you are incentivising at PR24 to be of enduring interest to the environment. We would like to better understand this statement.

There may also be a clear interest for the environment (as well as customers) for Ofwat to provide greater clarity on your intended approach for PR29. We request that this involves the regulators prior to being public.

5.4.3 Enhanced incentives

Q5.10 Yes, we agree with your proposed approach to knowledge sharing and would wish it to be extended to relevant regulators not just kept within the water sector.

Ch6 – Setting expenditure allowances

This section also needs to reference the needs of the environment, as well as customers and communities, throughout.

Key messages

Both customers and the environment should not have to pay for companies past underspend or under delivery. We would welcome discussion with Ofwat on how to ensure that companies meet their obligations even if the investment was in much earlier AMP periods.

Water affordability also needs to reflect the value of the resource and the environment that sustains it, as affordable may actually mean more costly compared to historical levels and perceptions.

6.2 NRW would welcome understanding from Ofwat why water sector productivity has stagnated since 2011, the expectations (with likelihood and assumptions) for the future and the implications of this for meeting environmental requirements.

Will Ofwat support enhancement funding to achieve behaviour change where that will result in environmental improvements?

The reference to markets, particularly the bioresources markets, references the England SPS. This section needs to be reviewed to ensure the Welsh situation is clearly set out as well.

Having the Outstanding business plan rates equivalent to the standard business plan ones does not seem correct to incentivise companies to achieve outstanding.

6.3 as well as understanding operational resilience and asset health, we need to understand and have evidence that systems are designed for and achieving the right purpose especially for capacity. This is a key part of being able to have insight on compliance with legal obligations and whether past investment has achieved its expected and required outcomes.

6.4 1. Do Ofwat base models reflect geographic and demographic differences between companies?

6.5 we support the requirement for companies in Wales to reflect the outputs of the collaborative approach in their long-term delivery strategies.

Ofwat expectations of WRMPs and DWMPs should include these plans taking account of environmental need.

NRW welcome and wish to engage with Ofwat's offer to support an outcomes-based approach in Wales working together.

Nature-based solutions and other enhancement activities delivered by companies should also meet environmental requirements as well as being appropriate and best value.

Ofwat's drive to address storm overflow spills is acknowledged but the wording of the methodology needs to clearly set out the differences in approach between England and Wales and equally reference the Environment (England) Act 2021 with the Wales Better River Water Quality Taskforce action plans.

As well as requiring companies to provide compelling evidence for alternative storm overflow target, Ofwat should acknowledge that alternative targets will require the agreement of the relevant regulator, NRW for Wales.

The transition funding programme will allow investment to address urgent environmental impacts to be brought forward. We support maintaining it and for Ofwat to work with regulators to agree on the priorities and scope for the programme. For Wales this is likely to include nutrient removal in Special Areas of Conservation (SAC) river catchments.

Ofwat state that 'we want to ensure that customers and the environment are protected from the non-delivery of funded schemes' and have ODIs to reimburse customers. What mechanism is there for the environment? This is not clear. Returning enhancement funding to customers for non-delivered outputs or outcomes is logical but it is not clear how the environmental impact is then mitigated for the non-delivery. Only if an impact was found could enforcement action be taken by the regulator, this may still not result in the required improvement in a timely manner. We would welcome clarity on Ofwat's thoughts on this aspect.

6.6 Sustainable drainage systems (SuDS) can also achieve water quality improvements, this should be included in the text.

Q6.6 Common performance commitments – whilst this recognises the difference between Wales and England it should be clear that Ofwat will consult Welsh Government and NRW on specific

commitments for Wales, especially where we may want stronger commitments. Also where companies are leading the industry in a specific performance area then a common metric may disincentivise them from keeping up the effort in this area. It may be more effective to have a common 'baseline' for all and then specific 'enhanced' targets for others – with the aim to bring all companies up to the enhanced (through relevant incentives).

Ch7 – Aligning risk and return

We can foresee the risk of uncertainties in investment needs for the environment, for example where investigations may not be completed in time, or where we anticipate that new evidence may emerge. We would welcome further discussion with Ofwat on their approach to managing uncertainty where the costs for an item or the scale of investment is uncertain at the time of the final determination, yet which must proceed within the 2025-30 period. We can also see the benefit of what was previously termed “an early start” programme of work and would welcome discussions similarly.

Ch8 – Financeability

No comments.

Ch9 – Promoting financial resilience

9.4 incentivising resilient capital structures should also better protect the interests of the environment as well as customers.

Ch10 – Companies' PR24 submissions

The need to reflect a clearer understanding of the environment and environmental acceptability, as well as customers and communities needs to be referenced in this section.

10.3 We welcome and fully Ofwat's requirement for company business plans to be more focussed, succinct, accessible, and easier to navigate. We hope that Ofwat also reflects this in their future publications for price reviews.

10.4 for the long-term delivery strategies the associated risks and assumptions behind the decisions need to be set out to allow full understanding of the decisions put forward. The strategies should also refer to the UK and Welsh government's Strategic Policy Statement, EA's WISER and NRW's Expectations documents.

10.9.1 Board's must be required to consider the environmental implications of their companies' business plans and give assurance for its acceptability and sustainability. This should include companies outside of Wales that benefit from the resources of Wales having regard to the outputs of the collaborative approach in Wales.

10.9.2 Table 10.1 should include the environment as a specific area requiring board assurance, and assurance that they are happy that the relevant company plan is meeting the company statutory and legal obligations regarding the environment and mitigating any risk.

10.10.3 if a company requests an intervention, then they should also set out how they will get back on the expected track after exceptional events.

Ch11 – Encouraging quality and ambitious business plans

Ofwat should require the companies to provide business plans that are concise, logical, and accessible (including use of plain English) as well as the evidence, assumptions and feedback points listed.

The quality assessment must also cover environmental sustainability and acceptability as the equivalent to customer affordability, so needs to be seven areas. **Q11.3**

1. *Data, information, and assurance* – it should be specified that companies clearly demonstrate the assumptions, certainties, uncertainties, risks, and links to their 2050 outcomes as part of this. Without the context it will be hard to value the statements made by companies.
2. *Long-term delivery strategies* – strategies should also be assessed against their compliance with current and future legislative requirements.
3. *Customer affordability and acceptability* – it is unclear what horizon affordability must be considered against; what time horizon do Ofwat expect future customers to be defined as?
4. *Costs* – relevant companies should also demonstrate the risks of not taking in account the outputs of the collaborative approach in Wales.
5. *Outcomes* – no comment
6. *Risk and Return* – the assessment should also consider whether a company's business plan adequately and in a timely manner addresses environmental risk and uncertainty and demonstrates Board assurance that this has been done.

We support the need to find a balance between affordability and delivery but caution that this must not be at the detriment of the environment and the resource on which the water sector is wholly dependent. Potentially environmental need will make affordability difficult to attain if we are to ensure that the needs of current and future customers can be sustained. Sufficiently ambitious plans will require innovation rather than acceptance of delay. In the face of the Nature and Climate emergencies there is an imperative to find innovative ways of addressing issues, for example through nature based solutions which could deliver the outcomes we need to see for less money. This should be the approach (to keep bills lower), rather than deferring essential investment, which is needed now, to avoid future generations paying for it.

Appendix 4 – Bioresources control

Executive Summary: The requirement for stretching cost forecasts (page 5) may be limited in Wales. There is an expectation from Ofwat for company business plans to be based around the information provided in the OFWAT Bioresources Market Review. This is not acceptable for Wales as the review does not account for the differences in Wales. Further work will be needed to understand the market opportunities in Wales and England vs Wales implications.

1.1 Background: Page 7 refers to barriers to the bioresources market. Please could Ofwat share the evidence that supports the defining of these barriers with NRW. Does it include regulation? There is reference to regulation being a barrier to the water sector. The waste sector is regulated and to have a true market there must be 'a level playing field' to ensure a transparent market exists and is not unfairly skewed by a sector remaining under the regulatory radar. Regulation is an opportunity not a barrier for the water sector provided they engage with it and comply. The section on barriers should be "evidenced" so that these can be considered as true barriers as opposed to opinions.

3.3.2 We note that Ofwat has done an assessment of the Defra Farming Rules for Water (FrW). These do not apply in Wales. Has Ofwat also done an assessment of the Water resources (Control of Agricultural Pollution) (Wales) Regulations 2021 as the relevant Welsh legislation? If not this should be done for the final methodology. NRW would be happy to review this for Ofwat in advance of the final methodology publication.

This section also refers to the WINEP Driver for sludge. Relevant equivalence for the NRW Driver should also be included.

The regulatory requirements must be amended to reflect Wales. The transitional requirements for The Water Resources (Control of Agricultural Pollution)(Wales) 2021 (not FrW) will impact biosolids applications to the landbank in Wales. In addition, there is no recognition that currently it is only England that are heading towards regulatory reform of the Sludge Use in Agriculture Regulations (SUiARs) into the Environmental Permitting Regulations (EPR) 2016. Welsh Government have yet to make that decision for Wales. This has implications for companies especially cross border ones, and for markets. This needs to be clear in Ofwat's methodology. NRW are happy to review Ofwat's changes to address these points.

Appendix 6 – Performance Commitments

Q6.5. Do you agree with our proposed definition for the biodiversity performance commitment?

We agree that water companies can play a critical role in maintaining and enhancing biodiversity and should be incentivised to do so through the PR24 process. We support proposals that allow such improvements to take place on company owned land and on third-party land managed in partnership. We consider that this performance commitment has the potential to help incentivise improvements in water companies' contribution to targets to be included in the Convention on Biological Diversity's post-2020 Biodiversity Framework and to the promotion of ecosystem resilience under the Environment (Wales) Act 2016.

We agree with the need to measure change as part of any biodiversity performance commitment. We also agree with the need to establish a pre-intervention baseline to measure change through site visits undertaken by suitably skilled and qualified individuals as proposed. To increase the robustness of such assessments we recommend before any site visit ecologists should review the available species records and habitat survey information for the site (Local Records Centres as well as existing Habitat Survey information) and take this into account for the baseline. Site visits must be timed such that important species and habitats can be detected and their condition assessed. This may require a visit in more than one season.

We agree that a rolling assessment programme will be necessary to establish adequate biodiversity baselines and to monitor progress against these.

We note the proposal to use DEFRA's Biodiversity Metric to both establish a pre-intervention baseline and measure subsequent progress against the performance commitment. However, we are currently unable to agree with this specific proposal for the following reason. Whilst the Metric is likely to have a level of applicability in Wales, it has been produced for use primarily within England. As a result, it is unlikely to adequately reflect important ecological considerations relating to Welsh habitats and species such as representivity, distinctiveness or irreplaceability for example. A technical review of the Metric is needed to understand what risks might be associated with its use in Wales and how these might best be overcome.

In addition, legislative and policy drivers in Wales include the Environment (Wales) Act 2016 (Section 6 duty) and Natural Resources Policy, which require all public authorities and bodies including water companies to take account of a wider range of considerations than those currently included within the Metric. This may not preclude use of the Metric as part of the performance commitment, but we recommend that additional requirements will be needed at part of PR24. This may be implemented through Price Control Deliverables (PCDs) specific to individual companies operating in Wales ensuring that Welsh legislation and policy are more adequately reflected. This

should include qualitative approaches such as describing how actions contribute to the aspects of ecosystem resilience alongside a focus on protected sites, priority species under Section 7 of the Environment (Wales) Act and key pressures such Invasive Non-Native Species (INNS).

We note proposals at 3.1.3 of Annex 7 to exclude biodiversity units associated with conditions of planning permissions in England. In Wales it would be similarly appropriate to exclude any biodiversity performance commitment activity associated with planning conditions (or obligations) for parity.

BS8683:2021 Process for designing and implementing Biodiversity Net Gain. Specification published by the British Standards Institute (BSI) may provide a useful framework through which to consider biodiversity maintenance and enhancement in relation to PR24. Whilst it is independent of any country-specific legislation and not reliant upon the Metric, it does reflect the different legislative and policy circumstances of Wales.

We would welcome discussions with OFWAT and Welsh Government colleagues on the range of matters we have raised as part the methodology for biodiversity within PR24, including a technical review of the metric, PCDs and BSI standard.

4.1 Biodiversity (text)

4.1.2 Complexity bullet 1. is not directly true in Wales. Wales has very good baseline data for habitats and species. The quality of this will be site-specific but in general there will be sufficient at most locations to give a realistic idea of the nature of the site prior to any visit.

Bullet 3. Biodiversity metric 3.1 does not take account of species. This may mean some decisions made using the metric are lacking in sensitivity to species needs. Metric 3.1 also uses a habitat classification scheme that is not accepted in Wales and condition metrics that do not follow UK agreed guidance. 3.1 is not supported by NRW for use in Wales until issues with the Habitat Classification and Quality measurement are resolved so it takes account Welsh Government Biodiversity Objectives as set down in Sections 6 and 7 of the Environment (Wales) Act 2016. Defra's target refers to increasing species abundance by at least 10% by 2042. However, metric 3.1 cannot measure this. Clarity will be needed to know how water company use of the metric will be able to count towards this Defra target. For Wales, we would like to work with Ofwat, Natural England, Welsh Government and Defra to explore the possibility of extending the metric 3.1 functionality to assess species directly or the value of a habitat for threatened species. Reference to the England-level GB red List should also reference the Section 7 list from Environment (Wales) Act 2016.

4.7 River water quality

Note that Phosphorus is spelt incorrectly in several places.

The reference to phosphorus should be extended to 'phosphorus and other pollutants' to encompass the need to systems to do more than one thing and to highlight the multiple benefits that can be achieved. To fully capture this please include two additional bullets:

- 'the water quality benefits delivered by these measures'
- 'wider freshwater and terrestrial ecosystem benefits delivered by ecosystem-based measures delivered under this target'

4.7.2

Whilst we acknowledge Ofwat's focus on river water quality, it would be more relevant to target river ecosystems of which river water quality is an aspect. For example we recommend changing the reference to river as follows 'our proposed river water quality performance commitment is

focussed on the overall health of the **ecosystem**.' And deleting the reference to water here 'As discharge **permits** are tightened it should lead to improvements in **river quality**'. Please note under the Environmental Permitting Regulations 2016, permits rather than consents are now issued.

Loads discharged from wastewater treatment works: Whilst in the current climate we understand why Ofwat has decided to focus on phosphorus and nature-based solutions, it would be more helpful and balanced to recognise the range of pollutants and to have scope to focus incentives wider than just phosphorus, plus other options such as river ecosystem enhancements and catchment management.

We recommend changing 'The main pollutants from the sewerage system are compounds of nitrogen and phosphorus' with 'Sewage includes a range of pollutants including phosphorus and nitrogen compounds, pharmaceuticals, microplastics and metals.

Companies should consider long term sustainable solutions. This section should promote partnership and spatial solutions. For example, actions such as establishing riparian corridors, reconnecting floodplains, clean and dirty water separation (Sustainable Drainage Systems – SuDS) plus upland catchment management including ditch blocking and peatland restoration such as in the Vrynwy catchment by Hafren Dyfrdwy.

QA 6.8 Following a meeting with Ofwat on the 18th August 2022, NRW understand that the consultation will be amended to reflect other stakeholder feedback, and the options and next steps are being reviewed. As such, this feedback is based on the content of that meeting, as opposed to the information in the consultation alone.

- NRW are looking for commitments to outcomes, not outputs. To secure these what rates of incentives and penalties will Ofwat be setting and how will they be balanced between monetary and behaviour improvements by companies.
- Drawing parallels from Bathing Water class to company performance is not considered appropriate.
- Clarity is needed around the approach that only Bathing Waters where there is a known impact will be included. Ofwat has stated that this will only be the case where they can guarantee it is not a water company impact.

NRW wish to hold further discussion with Ofwat to ensure a better understanding and agree on the benefits of looking at 1 vs 4-year data sets.

- The PC needs to consider that in Wales, diffuse pollution is a contributing factor at most Bathing Waters.

Nature-based solutions and catchment management should be built into how a company makes decisions and operates as opposed to being an additional enhancement. This should be adequately covered by the biodiversity section provided it includes ecosystem resilience.

NRW wish to understand how the Environmental Performance Assessment (EPA) could be included as a performance commitment. Common PCs could work for EPA. What are Ofwat's thoughts on this?

Drought resilience – there are differences between England and Wales, which need setting out clearly. Also explain the roles of the respective parties including Ofwat, NRW and Welsh Government. This metric will also need to consider how to include adaptive plans.

Appendix 11 – Allowed return on capital

The aphorism “all models are wrong, but some are useful” is frequently attributed to the statistician George Box. The question that immediately comes to mind with respect to the allowed return on

capital is whether the Modigliani-Millar theorem and the Capital Asset Pricing Model is more useful than false with respect to the regulation of monopolies extracting resource rents where average cost always exceeds marginal cost because of rising returns to scale. The Department for Business, Energy and Industrial Strategy has recently stated:

“Critically, a clear economic regulation framework is vital to delivering the Government’s Net Zero Strategy, helping to attract and sustain investment in greener technology and empower regulators to balance key trade-offs and take decisions that will ensure the UK reaches its net zero targets. This is particularly relevant where infrastructure investment will play more of an enabling role. Equally, the framework plays a vital role in achieving wider efforts to protect and enhance the environment, as set out in the Government’s 25-year Environment Plan.”¹

Although Welsh Government would not state the case in quite the same way, it too is committed to meeting the challenges of the nature and climate emergency. The Welsh Government has a comparable statutory commitment to net-zero, and it has voluntarily adopted the same target as the UK Government despite the recommendation of the Climate Change Committee that it take slightly longer to achieve net zero because of the greater challenges it faces in attaining this goal than other parts of the UK.

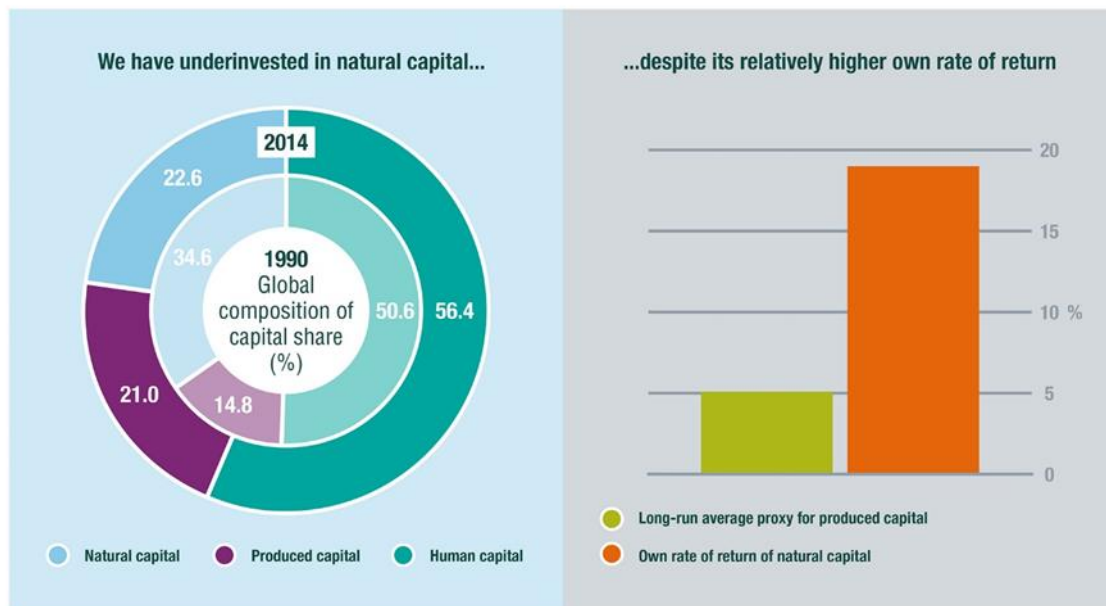
The Welsh Government has done this because it has a constitutional duty to pursue sustainable development enacted in S79 of the Government of Wales Act 2006, and currently expressed as the sustainable development principle in the Well-being of Future Generations Act (Wales) 2015 and the definition of the sustainable management of natural resources (SMNR) in the Environment (Wales) Act 2016. The principle repeats the Brundtland formulation, and the Welsh Government has endorsed a Well-being Economy that goes beyond GDP by emphasising comprehensive wealth and value added less the investment required to sustain that comprehensive wealth (an extension of the Blue Book concept of Net Disposable Income). The current administration in Cardiff has stated its commitment to make the nature and climate emergency central to everything that it does. The Office for Environmental Protection, reporting under S29 of the Environment Act 2021, has suggested something similar for the UK Government², urging the Prime Minister and the Cabinet Office to take the lead in breaking down the silo’s that impede delivery of the 25 Year Environment Plan.

As Sir Partha Dasgupta argues in his independent review commissioned by the then Chancellor of the Exchequer, Philip Hammond, in the spring of 2019³, we are not very good at portfolio management. Portfolios of assets should be constructed so that the risk adjusted returns of the assets they contain at the margin are the same, otherwise risk adjusted returns could be improved by restructuring the portfolio. The CAPM is based on a similar argument. However because many of the flows of environmental goods and services are not mediated by markets (because they are non-excludable in consumption, to use the Samuelson taxonomy, they are common goods or public goods, but not club goods or private goods) we fail adequately to consider their marginal returns. So in practice we have run down natural capital to invest in produced capital despite natural capital having a far higher marginal return, as illustrated by this graphic from the Dasgupta Review.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051261/economic-regulation-policy-paper.pdf page 7

² [Taking stock: protecting, restoring and improving the environment in England | Office for Environmental Protection \(theoep.org.uk\)](https://www.theoep.org.uk/taking-stock-protecting-restoring-and-improving-the-environment-in-england)

³ <https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review>



Because of this analysis the Treasury has taken the lead in establishing a Taskforce on Nature Related Financial Disclosure⁴, closely modelled on the Taskforce on Climate Related Financial Disclosure⁵ that was led on behalf of the G20 Financial Stability Board by Mark Carney when he was Governor of the Bank of England. The TCFD will be incorporated into the International Sustainability Standards Board, which will presumably also take over the work of the TNFD when it is complete. These standards will be reflected in the Transition Plans that will be produced by all major corporations; regulated utilities should be exemplars.

The Modigliani-Millar Theorem takes a very narrow view of corporate value, one that would not be endorsed by thinkers like Colin Meyer⁶ or Baroness Shafiq⁷. The example of ICI, once a titan of British Industry, is well known. Its original mission “to be the finest chemical company in the world,” was replaced in the 1990’s by a Friedmanite mission “to maximise shareholder value.” The result was, as they say, a matter of history. ICI was taken over and split up in 2008. In applying the Modigliani-Millar Theorem to Water Companies themselves (as opposed to the participants of financial markets in which they raise and service capital), Ofwat is ignoring the sort of missions that they need to embrace. According to the Water Industry Forum, the Natural Capital Approaches adopted by its members should, *inter alia*:

“Facilitate balanced decisions that will meet the needs of the present without compromising the ability of future generations to meet their own needs.”⁸

⁴ TNFD <https://tnfd.global/>

⁵ TCFD <https://www.fsb-tcfid.org/>

⁶ Professor of Management Studies at the Saïd Business School at the University of Oxford; Principal Investigator of the recently completed British Academy programme *The Future of the Corporation*; and author of *Prosperity: Better Business Makes the Greater Good*, OUP 2019

⁷ Director of the London School of Economics and Political Science; a former Deputy Governor of the Bank of England 2014-17; and author of *What we Owe Each Other: A New Social Contract*, The Bodley Head, 2021

⁸ *Natural Capital Principles for the Water Industry*, Atkins for the Water Industry Forum, November 2020

That is not to say that the Modigliani-Millar theorem is not useful in certain circumstances, but not when dealing with massive institutional failure running from the neighbourhood to the globe that has existential implications for human race⁹.

In the real-world markets are never complete, as the insurance industry well knows when it applies concepts like moral hazard and adverse selection. Arrow argued that the axiomatic general equilibrium theory he developed with Debreu demonstrates this¹⁰. However all markets are institutions. Monetary exchange always depends upon trust¹¹. So while all market failures are institutional failures, not all institutional failures are market failures. The salve for institutional failure is governance, including but not restricted to regulation. Regulators of monopolies that manage natural resources and the resultant rents must be alive to the broader rather than the narrower concept. For example, the imperative in the Environment Act 2021 that water companies in England (recognising that the approach to their reduction in Wales differs) *'significantly reduce the frequency and volume of sewage discharges from storm overflows'* reflects the broader concept. As BEIS states:

"We expect Ofwat to challenge the water industry to meet these expectations and legal duties."¹²

To achieve these outcomes the water industry must invest and innovate, and the innovation will be as much about social innovation as technological innovation. Which is why considerations of reciprocity, as advanced by Baroness Shafik, and of trust and social capital, as advanced by Mark Carney¹³, are very salient. BEIS argues:

"Boosting investment will also help improve outcomes for present and future customers."¹⁴

The interests of generations yet unborn is conspicuously absent from Appendix 11.

The calculation of Regulatory Capital Value (RCV) is nuanced and ambiguous. The discussion of the Cost of Equity and the Cost of Debt in Appendix 11 is both sophisticated and somewhat otiose. It could be usefully augmented by some whole systems thinking along the lines recommended by the Government Office for Science¹⁵ and tools like Mechanism Design Theory¹⁶. NRW would be very pleased to explore this further with Ofwat.

⁹ Dasgupta, op cit and Sir Patrick Valence <https://www.gov.uk/government/speeches/weve-overexploited-the-planet-now-we-need-to-change-if-were-to-survive>

¹⁰ "Uncertainty and the Welfare Economics of Medical Care," Kenneth Arrow, *The American Economic Review*, L111, No 5, 1963; for a more general treatment of the economics of asymmetric information see "The Market for Lemons: Quality Uncertainty and the Market Mechanism," George Akerlof, *The Quarterly Journal of Economics* 84, No 3, 1970; for more on decision making under Knightian uncertainty see *Radical Uncertainty: Decision Making for an unknowable Future*, John Kay & Mervyn King, The Bridge Street Press, 2020

¹¹ See, for example, *Value(s): Building a Better World*, Mark Carney, William Collins, 2021 and *The Third Pillar: The Revival of Community in a Polarised World*, Raghuram Rajan, William Collins, 2019

¹² op cit p8

¹³ op cit

¹⁴ op cit p7

¹⁵ <https://www.gov.uk/government/publications/systems-thinking-for-civil-servants>

¹⁶ <https://www.nobelprize.org/prizes/economic-sciences/2007/ceremony-speech/>