

Blueprint response to the Government's strategic priorities and objectives for Ofwat

April 2017

Blueprint for Water

Blueprint for Water is a unique coalition of environmental, water efficiency, fisheries and angling organisations and a campaign of Wildlife and Countryside Link. Blueprint members come together to form a powerful joint voice across a range of issues.

This response is not required to be treated as confidential.

This response is supported by the following organisations:

- Amphibian and Reptile Conservation
- The Angling Trust
- The Rivers Trusts
- RSPB
- The Wildlife Trusts
- Waterwise
- Wildfowl and Wetlands Trust
- WWF-UK

Introduction

We welcome the opportunity to engage with Defra on the Strategic Policy Statement (SPS) to Ofwat. We are pleased to see that, within the SPS, the environment is highlighted as vital in underpinning the resilience of the sector. A resilient sector will perform better and it is vital that improving and safeguarding environmental resilience be a top priority to underpin long-term resilience of the water sector. This approach will also meet the Government's ambition to be the first generation to leave the environment in a better state. Therefore, we believe it is vital that Defra gives a stronger priority to ensuring a resilient environment be highlighted within the SPS.

We welcome the expectation that companies must further the resilience of the ecosystems upon which they rely, and we propose that Defra requires Ofwat to report on environmental resilience and, in turn, for Ofwat to require companies to report - to address this important issue. A Blueprint sub-group has been working with Ofwat to develop indicators to report on environmental resilience – this is included as Annex A. We suggest that Defra require Ofwat to report on resilience using the indicators we propose.

We are supportive of the Government's expectation of a step change in the treatment and scale of demand management and the expectation that social tariffs should reach all customers struggling to pay their bills.

We also welcome the objective to improve long-term planning for wastewater and support the objective around the sustainable use of natural capital. However, we are concerned that, despite this, companies may delay their investment into important measures that would address existing



environmental issues - such as over-abstraction and pollution - due to the uncertainty of Brexit. Ofwat has an important leadership role to play to prevent this from happening.

Ofwat, as part of the resilience duty set out in the Water Act 2014, have a statutory obligation to promote:

- “(i) appropriate long-term planning and investment by relevant undertakers, and*
- (ii) the taking by them of a range of measures to manage water resources in sustainable ways, and to increase efficiency in the use of water and reduce demand for water so as to reduce pressure on water resources.”*

We believe it is necessary for Ofwat to show much greater leadership on these two issues – while the approaches to totex and resilience in general should enable progress, they are ‘solutions neutral’. This means that Ofwat doesn't take a position on the type of scheme chosen by a company to deliver a particular outcome, unless the scale of the investment merits a 'special cost factor' claim. Ofwat needs to take further action and proactively show leadership on demand management, environmentally sustainable management and long-term planning, to meet the requirements set out in the Water Act. For example, on demand management, Ofwat should set out scale of ambition through challenging comparable indicators and a series of stretching tests for their review of business plans, and take an active leadership role on a national water efficiency strategy. Additionally, the requirement in the resilience duty to promote water efficiency means that Ofwat should actively encourage large-scale demand management approaches, as well as building this into the incentives and tests included within its PR19 methodology.

The Government's commitment to protect, enhance and restore all our waters and to prevent deterioration and achieve good status - as enshrined in the Water Framework Directive (WFD) - is as important as ever. We welcome the clear commitment in the Brexit White Paper to ensure all European environmental legislation is transposed in full, as part of the Great Repeal Bill. With this transposition, the Government will maintain a legal duty to ensure that all water bodies meet good status by 2027, where it is technically feasible and where the benefits outweigh the cost. The Environment Agency estimates that this equates to 75% of water bodies. Given that only 20% of water bodies in England and Wales meet good status, that water companies are responsible for a third of reasons for failure, and that 2027 is the deadline for ecological status to be met (i.e. not just that measures be in place), PR19 (and business plans 2020-2025) provide ideal opportunities for the Government to meet its legal obligations.

It is therefore vital that Defra sets out, in the Strategic Policy Statement to Ofwat, the importance of including measures to support achievement of good status, as well as preventing ‘no deterioration’ and the need to fully consider ecosystem resilience. Final business plans that fail to make significant progress on water company reasons for failure by 2025 risk contravening the Government's statutory commitments.

We have set out our thoughts in more detail below and look forward to engaging further with Defra throughout this process.

Has the Government identified the most relevant strategic priorities for Ofwat?

The foremost issue that Defra has chosen to highlight in its SPS is that of resilience, and the environment is highlighted in paragraph 22 as underpinning the resilience of the sector. With that in mind, we do not believe the environment is adequately reflected in the first priority around securing long-term resilience. Water companies rely on the environment to operate and, therefore, a healthy environment is fundamental to a resilient water industry.

Our proposal is to amend the existing Priority under paragraph eight as follows:

Ofwat should challenge the water sector to plan and invest to meet the needs of current and future customers and the environment, in a way that offers best value for money over the long-term.

Will the supporting objectives effectively underpin Ofwat's delivery of the strategic priorities?

The supporting objectives do effectively underpin Ofwat's delivery of the strategic priorities, providing the point made above is taken into account.

We are pleased to see the Government highlighting the importance of a step change in **demand management** as part of the solution to meet future supply needs (paragraph 15). We consider that Ofwat's current strategic approach should enable this, but more leadership is required to actively promote demand management as set out in the resilience duty. We look forward to this step change being reflected and incentivised in the methodology for PR19. We support the Government in its expectation that companies will cut leakage and increase metering penetration. We also support the call for ambitious action to reduce leakage and consumption. We believe that companies calling for supply-side solutions should be leading the way in the UK and Europe on demand management. Where companies outside of water-stressed areas wish to invest in supply-side options to secure future resilience, it seems illogical that they are prevented from introducing metering to first manage demand. The restriction on compulsory metering should be removed.

We would like to understand more about the Government's plans in paragraph 14 for a **National Policy Statement (NPS)**, and the Blueprint for Water is keen to engage with the Government in its development. Whilst the Water UK *Water Resources Planning Report* (referenced in paragraph 11 of the consultation document) was a useful strategic step forward, the environmental impacts of future drought and growth are not adequately addressed, and we believe this to be a fundamental element of the statement of need. This gap should be addressed as part of the NPS. We consider that the NPS should not green light planning consent for large supply-side schemes without significant scaling up of demand management. The Government has an opportunity to develop a more holistic approach across the sector through the NPS, working with Water Resource Management Plans.

The Water UK report also outlines extended water efficiency practices (smart metering, tariffs, retrofitting 65% of properties, new home standards 105 litres per head per day and reduced leakage

through active leakage control and pressure management) as well as enhanced water efficiency. The report also highlights significant policy and regulatory support to achieve cost effectiveness, to deliver the 'extended' demand management strategy.

We welcome the call in paragraph 17 of the consultation for greater transparency and evidence of **strategic long-term wastewater planning** and believe this is a pre-requisite for realising greater resilience in this part of the water industry. We want to see Defra and Ofwat being more directive to companies on this issue. It has been discussed for more than a decade - now is the time to ensure it is done.

In paragraph 21 of the consultation, we would like to see the Government encouraging companies to consider **upstream approaches to reduce flood risk**, through catchment management and SuDS, alongside upgrading flood defences around sites.

We welcome the expectation set out in paragraph 22, that companies will further **the resilience of ecosystems** underpinning water and wastewater systems and services. In recent years, Ofwat has consistently emphasised the importance of the resilience of all systems and services customers rely on, including ecosystems. It is therefore essential that companies look beyond the resilience of pipes, processes and power, investing in the resilience of the environment in the locations where their operations depend on it. Furthermore, the impact of climate change and population growth require companies to invest in the natural resilience of catchments now. This investment in natural resilience of catchments can increase or maintain water quality and quantity, without causing unacceptable pressures on the environment.

We want to see companies proactively identify current and future ecosystem resilience vulnerabilities and develop plans to increase resilience and protect environments. In turn, this would increase the resilience of their own operations for the benefit of customers. Companies operating in Wales already have similar duties arising from the Environment Act (Wales) 2016. It would be useful to reflect this emphasis on expectations on companies in the SPS.

The statements in paragraph 22 provide a more effective objective than the current objective around encouraging water companies to have appropriate regard to natural capital, by having appropriate regard to wider costs and benefits. We propose that the objective under paragraph 24 is amended as follows:

Ofwat should encourage companies to further the resilience of ecosystems that underpin water and wastewater systems, promoting the sustainable use of natural capital and encouraging companies to have appropriate regard to the wider costs and benefits to the economy, society and the environment.

The references made within paragraphs 23 and 24 to the forthcoming 25-year environment plan are welcomed. To ensure a healthy natural environment, we must have a joined up approach to water and environmental management. However, we would also suggest that a similar approach be required within the 25-year plan for food, farming and fisheries (and indeed any land management

policy that follows from the Common Agricultural Policy), as the connections between agriculture and water management are considerable.

We are concerned that the current wording in paragraph 26 may inadvertently lead to a **back loading of investment programmes** in AMP7 (Asset Management Period 7), while companies await potential changes to legislation following Brexit. This will result in important environmental measures to address existing problems, such as over-abstraction and pollution, being deferred. We want to see the Government working with Ofwat and companies to ensure this does not happen.

We would like to see Ofwat encouraging companies to explore **partnerships with housing developers**, to ensure that class-leading water efficiency and reuse measures are built into developments in water-scarce areas. This can contribute to ensuring resilient water supplies for the benefit of the wider customer base in that area - see paragraph 27. We suggest that Defra explicitly states its support for Ofwat working with water companies to deliver rebates on infrastructure charges linked to water efficiency and integrated water management networks (e.g. water reuse). Several companies, including Southern Water, Severn Trent Water and Anglian Water, are currently considering these measures and they are consistent with the new charging rules context.

We are pleased to see the expectation, set out in paragraph 31, that the social tariffs companies provide should reach all eligible customers. Blueprint has urged Ofwat to make this a common outcome measure for PR19.

We suggest that 'and water efficiency advice' is added to the objective relating to business customers (paragraph 34); it is important that the loss of these customers through market reform (retail competition) does not prevent water companies from contributing to advice schemes which would see demand reduction within their supply area, simply because they are no longer billing those customers directly.

Upstream competition, as outlined in paragraph 43, should also include demand management services, as was highlighted in the Cave Review. Defra could give guidance to Ofwat around demand management as part of strengthening upstream competition. Where water companies are setting out their requirements for public procurement based on supply-demand deficit (i.e. requiring x MI/d of resource), large-scale demand management services offered by new providers should be considered as a means of meeting this by reducing water use. Ofwat should consider how incentives on water companies could enable the supply chain to develop this way, and actively promote this as an option. Although this could happen under the current regulatory regime, we are unaware of any upstream competition bids based on demand management to date.

Finally, in relation to markets for environmental services (paragraphs 46 and 47), we welcome Defra's recognition of the role that these could play - we believe that companies should be increasing catchment management and reducing pollution events during AMP7. We encourage companies to learn from the experiences of others in this area, such as Wessex Water's schemes to control nutrient pollution. As well as ensuring that customer interests are protected, Ofwat should

be required to ensure that environmental safeguards are put in place when such schemes are trialled or introduced.

Do you consider that this statement to Ofwat is clear and easy to understand?

Whilst the SPS is generally clear and easy to understand, we feel paragraph 27 could be misinterpreted. The use of phrases such as “timely connections to new developments” and “not holding up getting homes built” could unintentionally steer companies away from exploring the use of techniques such as sustainable drainage, in favour of business as usual. We believe that hold-ups should and could be avoided by closer working between local authorities, developers and water companies, as well as through the development and use of strategic wastewater plans, as highlighted previously. There are important levers for Government in ensuring the strategic objectives of resilience and affordability set out in the SPS - namely, sustainability requirements (water efficiency, sustainable drainage, water re-use etc.) - are also integrated for new housing.

This approach is currently being trialled with developers and Southern Water in Eastleigh, Hampshire. Developers are being offered a 50% discount in their water infrastructure connection charge for new builds, if they use fittings rated A or B under the European Water Label. The incentive is simple and easily verifiable, using market incentives to reward developers for environmental improvements. This allows developers to improve environmental standards at no cost and with almost no administrative burden, householders to gain higher quality fittings and lower running costs, and also providing benefits to the aquatic environment. The discount - funded by Southern Water - should be offset by the water efficiency savings generated. This trial is a good example of public, private and third sector organisations working together to develop solutions that work for everyone.

How should we measure Ofwat’s success in securing the Government’s strategic priorities and objectives?

Government can measure Ofwat’s success by assessing whether the priorities, objectives and expectations of the Statement more generally are:

- Reflected by Ofwat in its draft guidance to companies in July and final guidance at the end of 2017
- Reflected by Ofwat in the common outcome measures and resilience metrics being developed for PR19
- Reflected in water company business plans and Ofwat’s assessment of them

We propose a **new resilience reporting requirement** on companies in PR19, linked to the Government’s priority, objectives and NPS in this area. This would allow the Government to measure

success in securing its strategic priorities and objectives around resilience. Our recommendations on this are included in Annex A.

Annex A

WWRAG Resilience Metrics – Environmental Metrics Paper

The following paper was produced by a Blueprint sub-group and submitted to Ofwat on 31 March 2017.

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1. Introduction

We start from the premise that a healthy natural environment is at the heart of a resilient and successful water industry. The water industry depends on the environment to source water and to receive wastewater. Our rivers and aquifers are the natural capital upon which all our water services depend.

Healthy, diverse ecosystems are much better at coping with, adapting to and recovering from gradual change and short-term extremes such as drought, pollution or flooding. It follows that by investing in improving and maintaining the quality of the environment on which it depends to operate, a water company is investing in improving the resilience of its operations. It is very pleasing that this crucial premise is reflected in Defra's recent draft Statement of Strategic Priorities and Objectives to Ofwat (March 2017).

The resilience metrics we propose relating to the environment are listed overleaf, together with our proposals for environmentally oriented resilience metrics pertinent to the other WWRAG group areas. The remainder of this paper sets out in more detail our rationale for proposing each of them.

The independent Resilience Task & Finish Group, set up by Ofwat and including Blueprint members, defined resilience as the *"the ability to cope with, and recover from, disruption, and anticipate trends and variability in order to maintain services for people and protect the natural environment now and in the future."* It is absolutely vital that water companies and Ofwat consider improvements in resilience with regards to meeting both these outcomes for customers and the environment.

Through the WWRAG process, we have been advocating adoption of overarching environment resilience metrics that reflect resilience of natural capital assets, as well as incorporating environmental indicators to ensure that all aspects of the wastewater and water supply services deliver upon that second resilience outcome – protecting the environment.

2. Summary of Our Proposed Resilience Metrics

2.1 Overarching metrics on ecosystem resilience

- Ecosystem Resilience - assessment, planning, action and reporting.
- WFD Good Ecological Status linked to Water Company Reasons for Not Achieving Good.

2.2 Metrics to understand whether water services are resilient to protect the environment

In addition, we feel that it is essential that environment is not looked at in isolation given protecting the environment is a key outcome to be achieved through resilience enhancements. We therefore advocate that the other WWRAG groups include the following metrics to complement those already developed with regards to meeting needs of customers. We welcome discussion and input from all the groups regarding development of the final set of metrics.

Water supply / drought

- Proportion of total abstraction in normal operations and in drought plan/conditions that is from sources that pose risk to the environment. For example, this could be calculated based on the percentage abstraction from groundwater sources that are in poor quantitative status, and surface water sources that are from catchments where recent actual flows are below the Environmental Flow Indicator at Q95.
- Per capita consumption plus a peak day multiple of the annual average daily value.

Social/Economic

- Support tariffs - percentage households served eligible actually receiving support tariff.
- Proportion of households who pay for water they use (on a water meter).
- Customer requests / uptake for water efficiency information, advice, and equipment (including a water meter) – normalised as a proportion of total customers.

Asset health

- % STW that have capacity at least three times dry weather flow.
- % overflows that have event duration monitoring, and (where monitored) % overflows that discharge for more than 48 hours in a single event (or an appropriate risk threshold).

Wastewater

- Publication of a long-term (at least 25 year) wastewater management plan, that considers future population growth, urbanization and climate change and sets out options to ensure the wastewater system can meet the needs of people and protect the environment.
- Proportion of total discharges into water bodies failing to meet good status.

3. Overarching metrics on ecosystem resilience

3.1 Ecosystem Resilience - assessment, planning, action and reporting

Background and rationale

As highlighted in the introduction, the water industry depends on the environment to source water and to receive wastewater. Ecosystems are much better at coping with, adapting to and recovering from gradual change and short-term extremes such as drought, pollution or flooding if they are healthy and diverse. It follows that a water company that invests in improving and maintaining the quality of the environment on which its operation depends is also investing in improving the resilience of its operations.

Defra, in their draft Statement of Strategic Priorities and Objectives for Ofwat (March, 2017), recognise this link, stating that "*we expect companies to further the resilience of ecosystems that underpin water and wastewater systems and services*" and that "*investing in the natural resilience of catchments can increase the availability and quality of water that can be taken, without posing unacceptable pressures on the environment - avoiding the need for more costly infrastructure solutions*".

In our response to Ofwat in the Outcomes consultation (Appendix 3) we called for an additional resilience planning principle on ecosystem resilience,

A naturally resilient water sector

Companies' resilience risk assessments should consider the resilience of the ecosystems and natural environment on which their operations depend (abstraction, treatment, discharges). Key vulnerabilities should be identified in their plans and measures identified and implemented to improve ecosystem resilience. Ecosystem resilience should be part of the decision making process (Principle 3) with progress regularly reported and reviewed.

The Environment Act (Wales) 2016 already places a legal duty on public bodies operating in Wales (including statutory undertakers such as DCWW, DVW/STW and OFWAT) to consider and promote the resilience of ecosystems under Article 6, including diversity, connections, and scale of ecosystems. Chapter 4 of The State of Natural Resources Report (SoNaRR) sets out a framework for assessing the resilience of ecosystems. Public bodies have to prepare and publish a biodiversity and ecosystem resilience plan, reporting on progress every 3 years.

How this might work for all companies in England and Wales for PR19

Our proposal is for a high level metric that ensures all water companies across England and Wales are taking into account the resilience of the ecosystems that they depend on within their forward planning and decision making. In PR19, the metric would be based on the companies going through a cycle of *assess, plan, do* - with milestones set for companies to report on each element, along similar lines to the new duties in Wales.

Reporting could be standalone and/or integrated into a wider requirement for companies to report on their resilience status and plans to increase resilience. Resilience reports should be considered by the Board and Customer Challenge Groups and made available to stakeholders and customers.

Ideally, the first resilience assessment and plan would have been completed in time to inform the PR19 plans. However, this is unlikely to be possible in the first cycle. Consequently, a potential timeline for PR19 could be

- i) 2020 - risk assessment completed.
- ii) 2021 - forward action plan prepared.
- iii) 2024 - first plan actions implemented, assessment revisited and new costed forward plan developed for inclusion in forward business planning.

Prior to the initial resilience risk assessment, a **new UKWIR project**, or a follow on from the existing one (RG06), could be undertaken to develop a common assessment and reporting framework learning from experience to date in Wales.

Our initial thoughts are that the **assessment** of ecosystem resilience (either standalone or integrated into a wider resilience assessment) should consider both the resilience of the biodiversity assets the companies are directly responsible for (for example on land they own or manage), as well as the resilience of the wider ecosystems that the company depends on to operate (for example; water bodies and aquifers supporting abstractions, draining into the sewage network or receiving wastewater discharges). The resilience assessment could make use of any natural capital assessments undertaken by the companies. It would also be informed by the wider set of metrics being developed under the water supply, wastewater and asset health working groups (see below) and by projects such as Water Resource East, that are considering long-term resilience issues.

Having undertaken this assessment, companies would use the information to develop and publish a plan, setting out their proposed investments and actions to improve both the resilience of the ecosystems they are directly responsible for and also the resilience of the ecosystems they rely on. For example, the plan could include actions to:

- Improve the resilience of species and habitats on their own or nearby land;
- Support river enhancement in water bodies with abstractions that are at increasing risk from future low flows (for example by increasing connectivity of habitat);
- Undertake natural flood management measures such as SUDS to address increasing pressure on drainage network capacity; or
- Make land and catchment management interventions to increase recharge of aquifers and/or to address emerging pollution threats before they impact on operations.

Companies would then undertake these actions during an investment period.

A key premise is that the company is taking proactive steps to improve the longer-term resilience of their operations. Much of the work in the plan could be cost effectively delivered through partnership working and will deliver multiple benefits.

Towards the end of each investment period the company would report on progress and produce an updated resilience assessment and forward plan. This could be produced in sufficient time to ensure that it informs customer engagement and planning for the next investment cycle.

Ultimately, we would like to see all companies undertake a natural capital valuation of the natural assets upon which the company depends, including in their Annual Report information about whether the condition of those natural assets are improving or deteriorating, future risks and resilience. An assessment of the resilience of all the ecosystems and natural assets on which a company depends is an important first step.

3.2 The overarching environmental outcome and metric - Good Ecological Status

More connected habitats, more natural habitats and above all healthier ecosystems are more likely to be more resilient to pressures from water companies' abstraction and discharge in times of climatic variability and extreme events. The following factors are particularly important:

- **Geomorphology** – the shape and naturalness of a river - access to natural refuge sites in flood and drought and ability of river to repair itself. For example, Mike Acreman at CEH has shown that more natural river systems are able to cope and recover better after drought.
- **Connectivity** of habitat i.e. the ability of aquatic species to move up and down a river is incredibly important to enable recovery from events. For example, unconnected or fragmented habitats can:
 - Result in lower genetic diversity (as a particular population is isolated). The more genetic diversity within a population, the more flexibility there is within the gene pool to adapt to changes and stressors.
 - Mean that a species does not have access to habitat to fulfil all life stages.
 - Reduce access to source populations, meaning a species cannot reintroduce itself if the 'sink' population is wiped out. For example on the River Cray, in Kent, historic low flow events have resulted in local extinction of wild trout populations – and a significant factor preventing recovery is a series of barriers preventing fish migration.
- **The most significant factor is the current health of the ecosystem.** The World Bank and WWF completed an international review of the water sector to develop climate adaptation guidelines¹. It concluded that, in terms of ecosystem resilience, the most significant action that could be done to increase a system's ability to adapt to climate change was to reduce current pressures and improve their current state of health to ensure healthy populations of species, good water quality and quantity.

WFD Good Ecological Status (GES) is the best overall single environmental measure of ecosystem health (incorporating all of the above) and therefore the best metric for resilience of the water environment that supports water company operations.

GES combines flow, water chemistry, ecological and morphological indicators into a single environmental measure/indicator of health. Healthy water bodies with conditions that support GES will be more resilient and their ecology better able to resist, recover or adapt to future stress due to drought, pollution or flooding and to water company operations. As an environmental resilience metric, GES has the advantage that it reflects the outcome of all company activities and impacts on the environment (wastewater, water resources, etc.).

Given GES depends upon multiple pressures and stressors being tackled, from a number of sectors and sources including the water sector. In order to link it more specifically to water company operations, we propose that the metric would report on the status of those water bodies that are directly linked to water company operations. The simplest way to do this is reflecting the proportion of water bodies where water company operations are identified as a reason for not achieving good status (RNAG).

The WFD status and Reasons for Not Achieving Good (RNAG) data is already collected by the Environment Agency as part of the WFD cycle. It is available on Data.Gov.Uk

¹ www.floatingforward.org

<https://data.gov.uk/dataset/wfd-rbmp2-reasons-for-not-achieving-good-status>. WFD status and RNAG data should be easily separated out by company and by water body, so lends itself to spatial and temporal presentation/comparison. WWF have attempted to calculate this for all water companies in preparation of this paper but, while we have all the RNAG data for the water sector, we do not have access to a GIS layer of water company boundaries. We recommend that as a result of this project, this layer is made available to enable an initial analysis to be completed and to understand the various ways the data could be normalized to allow comparison between companies.

The Blueprint has advocated that Ofwat include this measure as a Common Performance Commitment for all companies (our response to the outcome consultation on this copied below):

Company impact on the environment can be wide ranging – from pollution from sewage; impact on biodiversity related to intakes and need for screening, to over abstraction. Ofwat must develop an overarching environmental indicator that takes account of all these impacts. Such an indicator could be relatively straight forward and simple to design using existing Environment Agency data.

The Environment Agency currently collects data about the ecological status of water bodies for the purposes of Water Framework Directive. For all those water bodies not achieving good or high ecological status, the Environment Agency publishes a 'Reason for Not Achieving Good' (RNAG) data base. In this, the Environment Agency list all the reasons why different elements are failing to meet the required standard and apportion to a sector. It would therefore be relatively straight forward to overlay water company boundaries over this database and come up with a list of all the Reasons for Not Achieving Good associated with every single water company. This could be used to create an overarching environmental comparable performance indicator, which would take account of all the impacts the companies are having on the environment (not just abstraction).
Examples of the metric:

- **Total number of Reasons for Not Achieving Good (ecological status in relation to the Water Framework Directive)** - Transposing the data directly could be the simplest approach. It may be the case that some companies have more water bodies in their area (due to geography) but the total number is important as this is actual impact that a particular company needs to address.
- **Proportion of total number of Reasons for Not Achieving Good** - The data could potentially be normalised by dividing the water company total RNAG by the total RNAG in the water company area. This would reflect a sector apportionment of failures. While this is preferable from a 'normalisation' perspective, we would be concerned that this could potentially down play the need for a particular water company to take action – as a lower proportion could simply reflect the poor state of water bodies in a catchment, rather than reflect the action the company has taken to address its impact.
- **Total number of Reasons for Not Achieving Good per km water body** - This could be a way to potentially normalise the data in a way that would better reflect water company impact.

We recognise that the RNAG data has different levels of certainty associated with each failure (probable/suspected/confirmed) and that ultimately, action to address these failures under the WFD depends on solutions not being disproportionately expensive. Rather than undermine such a

measure, the measure should be therefore framed as a simple, comparable (and relatively crude) way of understanding the risk of water company impact on the environment.

Finally, we recognise that this metric would not capture investment in catchment management, where a programme of work is not addressing water company impact on the environment per se (e.g. those schemes where water companies work with farmers to address agricultural water pollution to enhance the quality of drinking water or off-set impacts). However, we believe that it is vital that each water company understand and address their own impact on the environment as part of PR19. We have a proposal for a composite measure (see below) that would enable inclusion of catchment management activities that could be used in addition to the RNAG metric.

We advocate that Ofwat work with the Environment Agency to develop this indicator for inclusion in the mandatory comparable data set (in addition to – or even as a replacement for – AIM). Blueprint would be keen to support this work.

4. Metrics to understand whether water services are resilient to protect the environment

In addition to the above, we feel that it is essential that environment is not looked at in isolation given protecting the environment is a key outcome to be achieved through resilience enhancements. We therefore advocate that the other WWRAG groups include the following metrics to complement those already developed with regards to meeting needs of customers. We welcome discussion and input from all the groups regarding development of the final set of metrics.

4.1 Water supply / drought

- Proportion of total abstraction in normal operations and in drought plan/conditions that is from sources that pose risk to the environment.

For example, this could be calculated based on the percentage abstraction from groundwater sources that are in poor quantitative status, and surface water sources that are from catchments where recent actual flows are below the Environmental Flow Indicator at Q95.

This metric provides an indication of how reliant a water company is on abstracting from water bodies where abstraction is a known pressure on WFD status. The rationale being that the more reliant a company is on water stressed, and ecologically stressed, water bodies, the less resilient it is into the future. The metric could consider recent actual, future predicted, fully licensed and drought plan usage scenarios. We believe the data already exists and that it may be amenable to being broken down spatially (using WRGIS).

- Per capita consumption – and a peak day multiple of the annual average daily value.

Per capita consumption (PCC) is a useful measure for water supply and urge companies to publish information on both dry year and normal year annual average for all customers. However, PCC tends to be reported publically in terms of normal year annual average. At peak times and in a dry year in particular PCC can be significantly higher than the normal year annual average – and it is usually this

higher demand which is driving abstraction pressure on the environment and options in Water Resource Management Plans. It therefore underpins one of the main drivers of pressure on costs to customers and the environment.

By reporting both PCC and the ratio between peak/dry period use and normal use, we can have a better understanding of demand in the key periods in dry periods / drought events. Demand management interventions that target peak/dry year use (which is by its nature a completely different use profile to a normal year, including for example, much more outdoor water use) are the most crucial to securing resilience and reducing pressure on water resources.

4.2 Social/Economic

- **Support tariffs - percentage households served eligible actually receiving support tariff**

This Blueprint proposed metric was picked up in the draft Defra SPS. Rather than focusing on the availability of support, it measures the uptake of support by those that are eligible. The rationale is that increasing levels of bad debt are not sustainable.

- **Proportion of households who pay for water they use (on a water meter).**

The evidence shows that the single most effective way to cut water demand is to install a water meter and that metering is also a more socially progressive charging mechanism (e.g. Walker Review). Information about demand is absolutely crucial to ensuring long term resilience.

- **Customer requests / uptake for water efficiency information, advice, and equipment (including a water meter) – normalised as a proportion of total customers.**

Demand side response is an important aspect of resilience to drought. Engagement and awareness in water saving is a vital prerequisite.

4.3 Asset health

- % STW that have capacity at least three times dry weather flow.
- % overflows that have event duration monitoring, and (where monitored) % overflows that discharge for more than 48 hours in a single event (or an appropriate risk threshold).

These metrics is a measure of the ability of a water company's wastewater assets to understand and cope under both normal 'wet weather' operations and flood events without discharging untreated wastewater into the environment (which then links to the WFD GES metric proposed earlier). A more resilient system will be able to operate across a broader range of scenarios/conditions without polluting the environment.

4.4 Wastewater

- Publication of a long-term (at least 25 year) wastewater management plan, that considers future population growth, urbanization and climate change and sets out options to ensure the wastewater system can meet the needs of people and protect the environment.

Our preferred resilience metric on wastewater and asset health is that companies prepare long term, strategic wastewater (drainage) plans that look more strategically at issues such as future capacity, emerging chemicals, climate, development, SuDS etc. in deciding on forward investment needs.

The need for more transparent, integrated long-term wastewater plans was highlighted in the draft Defra SPS as a key element in realising a more resilient water sector. In discussing wastewater priorities, Defra stated *“we do not have confidence that companies are planning and investing strategically in a way that will manage pressures from climate change, population growth, changes in customer behaviour and aging infrastructure”*.

The plans could be prepared in a similar way and timeline to water resource plans. Thames, United Utilities and Anglian Water are starting to seriously look at this. Ultimately, the WRMP and WWMP could merge to form a Resource Management Plan. The concept has some linkage to Water Cycle Strategies, which were prepared in the 2000’s for urban growth areas.

In PR19, the metric could be around developing the draft plans, engaging stakeholders and customers on those plans and then finalising and publishing them.

- Proportion of total discharges into water bodies failing to meet good status.

This metric is similar to the earlier one on abstraction from sensitive sources, with a similar rationale. A company whose operations rely on discharging wastewater into water bodies that fail to meet environmental quality standards is less resilient. Both the company’s wastewater operations and the receiving water bodies are less resilient to any future increase in wastewater inputs due to growth: any further deterioration in effluent quality or any reduction in dilution capacity due to climate change.