

Response to Environment Agency consultation on Water Resources Planning Guideline

9 October 2020

Q1. Please tell us if you are responding as an individual or on behalf of an organisation or group.

Responding on behalf of an organisation – Energy UK.

Energy UK is the trade association for the energy industry with over 100 members spanning every aspect of the energy sector – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership. We represent the diverse nature of the UK's energy industry with our members delivering over 80% of both the UK's power generation and energy supply for the 28 million UK homes as well as businesses. The energy industry invests £13bn annually, delivers £31bn in gross value added on top of the £95bn in economic activity through its supply chain and interaction with other sectors, and supports 738,000 jobs in every corner of the country.

Q2. Keeping up to date

We would like to:

- Receive an email acknowledging our response
- Receive an email to let us know that the summary of responses has been published

Please email andy.limbrick@energy-uk.org.uk

Q3. Can we publish your response? We will not publish any personal information or parts of your response that will reveal your identity.

Yes.

Q4. Please tell us how you found out about this consultation?

From the Environment Agency.

Q6. Do you have any concerns, suggested improvements or comments regarding the guideline that you would like to highlight?

Yes.

We note that the guideline states that Regional Planning should use the Water Resources Planning Guideline (WRPG) 'where appropriate' without offering any discussion on the factors influencing whether an aspect is appropriate or not. Whilst it is proper that Regional Groups should have their own discussion on this and reach their own decision, it would be helpful if the Environment Agency (EA) were to set out some factors that Regional Groups may wish to consider and which the EA has already considered in developing the WRPG 2020 since, in contrast to the previous WRPG, it has been developed with a view to being applicable to regional planning.

We note the requirement within the guideline to implement National and Regional Planning in the Water Resource Management Plan (WRMP) and note the corresponding statement of an expectation (p9 of the National Framework for Water Resources, March 2020, Appendix 2 – Regional Planning) that "We expect the public water supply solutions identified in regional plans to be reflected in and implemented through individual water company WRMPs".

However, the draft WRPG 2020 offers an exception to this requirement (p26) through the provision that WRMPs must “reflect the regional plan unless there is clear justification for not doing so”. We consider that explicit guidance on what constitutes an acceptable justification is necessary.

We note that whilst the WRMPs are integral to Regional plans, the consideration of direct cost (p27) is limited to Water Company (WatCo) customers’ bills. There does not appear to be a requirement to consider the impact of WRMPs via Public Water Supply (PWS) abstraction and discharges on other parties such as agriculture and industry. This creates the potential for inconsistency in the assessment of options between the WRMP and Regional planning, with the latter’s requirement for multi-sector consideration.

We welcome the requirement to forecast future non household (NHH) demand when creating the plan. There are likely to be radical changes in the power generation sector taking place within the plan period, which will lead to a dramatic increase in water demand for the new water-dependent assets needed for meeting a Net Zero UK 2050 target.

The guideline sets up a possible tension in priority for WatCos between national/regional and local geographic scales since (p13) it requires delivery of local benefits but merely consideration of national/regional water resource needs. It is vital that the requirements in this regard are clear, since the Regional Plans will be finalised prior to finalisation of the WRMPs in 2024.

Section 9 (p70) provides guidance on selecting the best value plan. This guidance is vague and requires reference to the supplementary guidance documents. However, the supplementary guidance itself does not provide the necessary clarity. We will provide comments on the Best Value Plan supplementary guidance separately. The detail of how the net benefits to different parties (WatCo customers, environment and society) are to be weighted in relation to both WatCo direct and indirect costs and wider societal benefits and cost is important. Direct Watco costs are represented by customer billing, while lost opportunity costs for WatCo and wider society, including the interests of non-PWS sectors which must be considered in Regional Planning, are indirect. An important example is the potential abstraction opportunity denied to other users through the acceptance of WatCo abstraction permitted to support leakage losses. The setting of an appropriate PWS leakage rate has to date largely been established through consideration of economic efficiency within PWS alone. Given the increasing pressure on scarce water resources that has resulted in the new initiatives in Water Resource Planning, it is vital that the wider societal consequences of the PWS leakage provision is fully considered. For example, on the basis of current future scenario indications (Gasparino & Edwards, 2020¹) the current WatCo leakage of 3000 MI/d (Supplementary Guidance 18640) would support the entire freshwater needs of the power/energy sector in 2050. However, according to the National Framework for Water Resources (March 2020) abstractors cannot assume their current licensed quantities to be available in future. Provision for the current PWS leakage rate appears to be a major contributor to the pressure on abstraction for other sectors and the environment.

We note and support that WatCos should engage with other sectors to develop options with ‘broader benefits’ to society (p27) and we believe that there is valuable scope in cross-sector water sharing which can lead to improved economic efficiency of water and water rights use. However, in the absence of guidance on ‘best value’ plans it is not clear that such options would be appropriately assessed. In particular, third party water sharing opportunities providing insurance options aimed at more efficient management of PWS resilience should be assessed on the basis of utilisation rather than the capacity approach, which tends to be used in WatCo economics modelling. In 8.1.1 (p64) WatCos are ‘encouraged to engage’ with third parties on lower cost or additional benefit solutions. The encouragement should be strengthened to being ‘expected to’ or being ‘required to’.

We note the use of the word ‘should’ to indicate actions which, the EA believes, would be needed for a plan to be adequate although there is no statutory requirement for them. The basis of this belief is not

¹ Gasparino, U. & Edwards, N.A. (2020). ‘Scenarios for the projection to 2050 of water use by power producers – with a focus on WRE’, Joint Environmental Programme, ENV/660/220.

stated. In line with the above comments, these beliefs should be considered through the new lens of multi-sector requirements introduced at Regional Level to ensure they are consistent with providing appropriate weight to these factors.

We are concerned regarding the interpretation of 'supply' on p13 and elsewhere. The power sector is dependent on water 'supplied' to it both directly from the environment through abstraction and through the PWS network. It is vital that water resource planning sufficiently considers both, since both are essential to provide the resilience of individual water-dependent power sector assets and both are affected by WatCo WRMPs. It would be helpful for the guidance to be clear on when 'supply' means both and when it just means PWS. For example, in Section 4 page 25 'supply' appears to be specifically PWS.

Given the timescales relevant to assets in the power sector, we feel that considering 50 years rather than 25 years is a better planning basis (p25).

We note that 4.1.1 (p26) presupposes WatCos have 'enhanced ambition' for improving the environment. Whilst recognising that all participants in the water resource arena will have ambition for their own activities and potentially the environment, it is vital that the consequences for other abstractors of enhanced environmental ambition should be fully taken into account in assessing whether or not that ambition could lead to an appropriate societal outcome. In particular, environmental ambition in the water resource arena, perhaps naturally, tends to be interpreted as increased river flows (which may be achieved through abstraction reductions). It should be recognised that such abstraction reductions leading to changes in water-dependent activity might have adverse consequences for non-aquatic environmental receptors as well as leading to the societal disbenefit arising from the loss of the activity resulting from the reduced abstraction. For example, in the power sector, water use for cooling improves thermal efficiency and some aspects of resilience (compared with air-cooling) thus providing benefit in reducing atmospheric emissions per unit of electricity produced.

Clearly, WatCos should operate in a way consistent with the requirements imposed on them by Water Framework Directive River Basin Management Plans (WFD RBMP) and applicable regulations. However, increased costs to WatCos resulting from measures that would be required to meet WFD RBMP status targets should feed into the establishment of such targets. Since RBMP3 is yet to be established (and is expected to be defined through consultation in 2021), it would be appropriate to include a requirement that WatCos should interact with the EA to ensure the economics used in RBMP3 fully reflect the potential costs and hence ensure that WFD target status is soundly based.

Q7. Do you believe that the guideline allows water companies to produce plans with secure and resilient water supplies?

Don't know.

The guideline probably allows water companies to produce plans with secure and resilient supplies but, as discussed in the answers to other questions, there are concerns around how these plans will impact on other water users, such as industry, and how the plans integrate into regional planning. We will respond separately to the consultation on the English and Welsh supplementary guidance on the inclusion of Environment and Society in decision-making.

Regarding Drainage & Wastewater Management Plans (DWWMP), it is stated that (p11) long-term plans for wastewater and water supply are to be aligned for growth, climate change and delivery timetables. Given the importance of the coupling between clean and waste water networks and the significance of waste water discharge during low flow and drought events in lowland river systems, we support the full alignment of water supply and wastewater system planning. We question whether aiming for alignment in the long-term is sufficient. Correctly joining up the planning of the Water Industry and wider society to allow full consideration of both the clean and wastewater networks is a vital element of efficient water resource planning from a multi-sector perspective. The resilience and operation of many other sectors (and the environment) is dependent on PWS wastewater flows. It may therefore be

appropriate to put greater emphasis on achieving integration of DWWMP within the water resource arena rather earlier than in the 'long-term'. Vital water-dependent nationally significant infrastructure assets which will be dependent on PWS wastewater flows for their resilience in low flow events will need to be developed in the next decade and potential investors will require sufficient confidence in the availability of water to support their operation in future periods of low flow.

We support the presumption that the EA should seek to avoid (or at least minimise) the use of drought order/permits (Sections 4.7 and 8.2). This may help to create a planning framework in which water sharing between PWS and other sectors can be developed leading to improved economic efficiency in water and water rights use. It may be helpful to develop the meaning of 'less frequently' in a more quantitative sense, including in relation to the 1:200 and 1:500 year resilience, in order to provide a more concrete basis for assessing whether or not the degree of consideration of avoiding drought order and permit use is appropriate.

Q8. The 25 Year Environment plan states that it is the Government's ambition to leave our environment in a better state that we found it. Do you think the guideline sufficiently contributes to this aim?

There is inclusion of the need to consider the environment within the guideline but it is not always clear how the effects on customer bills, other water users in the WRMP area and the wider region are balanced. As an example, we note that in Section 3.2.3 (Consultation with regulators p18) whilst the wider benefits and outcomes beyond a least-cost plan are to be discussed with the regulator, the basis on which these benefits are to be identified and assessed is not explicitly defined.

Whilst considerations in the water resource arena naturally tend to focus on the aquatic environment and in particular river flows, it is important to recognise that there are consequences for other environmental receptors arising from changes in activity resulting from measures taken in the water resource arena. Thus an apparent net gain in the aquatic environment may force a loss in other environmental media. Considering the consequences beyond the aquatic environment is necessary in determining appropriate WatCo options.

In Section 9.2.1, it is important that the water resource assessment frameworks being used in WRMP and Regional Planning recognise the provisioning services to non-PWS sectors provided by freshwater resource and thus take account of the extent to which PWS use of such provisioning services may deny such services to other sectors and hence have consequences for wider society.

Q9. The guideline incorporates a natural capital approach into decision-making. Do you agree with the approach set out in the guideline and supplementary guidance which combines the natural capital approach, biodiversity net gain and the Strategic Environmental Assessment into decision-making?

No.

We are concerned that the draft WRPG 2020 guidance, taken as a whole, including the supplementary guidance on Environment & Society in decision-making (18643 in England, separate guidance in Wales), does not recognise adequately the importance of the provisioning service to non-PWS sectors provided by abstraction (i.e. from the natural capital of surface and groundwaters) and does not require it to play within WRMP (and Regional Planning) decision-making sufficiently strongly. The proposed supplementary guidance documents are materially different for England and Wales and generally the Welsh guidance recognises this importance more strongly than the English, but could still be usefully strengthened.

We are still developing the detail of our thinking on this important topic and we will include it in our response to the 'Environment & Society in decision-making' supplementary guidance.

Q10. We are facing a climate emergency. Do you think our guideline adequately addresses this challenge?

The guideline includes a section on carbon. In many cases it may be preferable to quantify energy use and make an assumption about the carbon embedded in the energy (thus allowing the power/energy sector to manage the decarbonisation position) rather than to seek to decarbonise at individual option, Water Resources Zone (WRZ), water company or regional level, which could lead to sub-optimal overall decarbonisation strategies.

As an example of the need to consider carbon and decarbonisation holistically, it can be noted that water use by the power sector, either abstracted from rivers or as non-household demand, may increase in the future as the sector develops to achieve the Net Zero 2050 target. Plan actions that might reduce energy consumption by the water company but reduce the availability of water to the power sector could, in some circumstances, result in lost decarbonisation opportunities.

Q12. (England only) Our guidance asks companies to plan on the basis that the:
-water available is that they would have in a severe drought (with a probability of 0.2% occurrence each year or known as 1 in 500 drought)
-demand is a hot dry year before temporary use bans are in place, (known as dry year annual average)

This is considered to be a worst case scenario. Do you think this approach is appropriate? Or should water companies plan for a demand for water under the same severe drought scenario as their water supply assumptions?

(Please refer to the guideline and the supplementary guidance for this topic) Please tick relevant box

- Use dry year annual average
- Use a '1 in 500 drought event' demand
- I don't know

Don't know.

Planning needs to be internally consistent. It is important that the drivers for demand on PWS and PWS demand management in drought events be fully and consistently factored into overall decision-making to ensure that PWS makes no further demand on scarce water resource available to society for abstraction than is appropriate, given the implications of meeting that demand for other sectors and for the environment.

Q11. – Do you think it is clear what companies wholly or mainly in Wales need to do? (Separate from the English companies)

The guidance distinguishes between England and Wales but the comments made previously would apply to both countries.

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