

Response to Environment Agency consultation on Water Resources Planning Guideline – supplementary guidance documents

14 October 2020

Introduction

This consultation response is submitted on behalf of 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.

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

The response is not confidential and can be published.

Comments are provided on the following supplementary guidance documents for the Water Resources Planning Guideline (comments on the main Guideline were submitted on 9 October 2020 in paper EnvC 77/20):

- 18640 Leakage
- 18641 Outage
- 18642 Resource Zone integrity
- 18644 Stochastics
- 18645 Adaptive planning
- 18646 Planning to be resilient to a 1:500 drought
- 18647 Climate change
- 18648 Best value planning

Comments on 18643 Environment and society in decision-making (separate documents for England and for Wales) will be made separately, by 18 November 2020.

18640 Leakage

The continued provision of abstraction to support water company (WatCo) planned leakage rates denies the potential abstraction opportunity to other users. The setting of an appropriate Public Water Supply (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 Ml/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.

Tolerated leakage supported by abstraction contributes to pressure on other abstractors and the aquatic environment when water resource is scarce. This societal effect should be factored into the setting of targets for leakage reduction. Regional Water Resource Planning may offer a good framework within which to explore this possibility in a quantified way. The interaction within Regional Planning should be about leakage target setting rather than leakage 'forecasting'.

18641 Outage

We recognise the inevitability of 'outage' in any complex system such as PWS and that planning to achieve a given performance target should make reasonable provision for outage. We also note that the occurrence of outage is likely to be related, at least in part, to resource devoted to maintenance and inspection, etc. and this requires optimisation. In determining that optimisation in conjunction with other approaches to management of outage, where management of outage could be in part through the holding of 'spare' licence capacity, the wider societal consequences of holding 'spare' capacity for this purpose should be assessed since, depending on circumstances, that provision could increase pressure on non-PWS licences.

18642 Resource Zone integrity

Water Resource Zone (WRZ) definition is linked to within-WatCo network topology. Increasing the interconnectivity of existing WRZs should be considered as a measure in a Water Resource Management Plan (WRMP) as this may allow the potential benefit of a third party supply option which is geographically limited to a particular WRZ to be realised in another existing WRZ.

18644 Stochastics

We strongly agree that the historical record provides only one instance of a time series. If all relevant factors are stationary, a sufficiently long time series could provide all the necessary statistics. However, when the factors are far from stationary, the historic record is by no means a reasonable characterisation of potential outcomes.

The thrust of the stochastic supplementary guidance is in relation to weather and river flows but the key point is equally applicable to other aspects of water resource and wider aquatic environment planning. For example, the Environment Agency (EA) makes use of Recent Actuals scenarios (typically a 6 year period preceding the most recent Abstraction Licensing Strategy update). Since the factors influencing a given abstractor's use of its abstraction are manifold and far from stationary, a single 6 year historic time series may well not be a true reflection of the way that licence could have been used (i.e. its true worth to the abstractor and society in relation to the product or service provided through that abstraction) had the market circumstances for that abstractor been different. Some abstractors participate in activity with long-term 'natural' planning cycles (such as the power sector) where the abstraction at a given site would be expected to evolve (with short-term fluctuation) over periods commensurate with asset life and asset renewal periods (say 20-30 years).

In particular, although other abstractors and the aquatic environment respond to the river flows they experience, we question the way that data are used to drive planning and wider management. For example, if a given year is particularly wet and the environment responds to high flow conditions resulting in improved ecological quality, is it reasonable to take that quality as the basis of classification

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/660/2020.

for Water Framework Directive (WFD) purposes and in particular to regard any reduction in quality resulting from a return to normal flow conditions as a deterioration? Is this any different from an improvement in quality resulting from net abstraction in a given year being atypically low (as a result of particular market conditions occurring in that year)?

We would welcome the thinking which has led to the introduction of approaches other than use of historic time series for weather and river flows also to be extended to other aspects of water resource planning. Its use in PWS demand planning is noted (p7). The thinking should also be extended to abstractor use scenarios. Some of the factors influencing use of a licence are correlated with weather-related factors (e.g. p7) but others are not.

18645 Adaptive planning

The WRMP cycle allows PWS to use adaptive planning in this sense. However, the flexibility retained in adaptive planning by PWS may create uncertainty for those outside PWS who rely on water resource supplies and PWS water discharges for their resilient operation and to underpin the case for investment in long-life, water-dependent, strategic infrastructure assets such as power and energy plant, there being no such adaptive statutory planning in other sectors. This aspect of adaptive WatCo planning should be considered in regional planning and the consequences for other sectors of committing to a specific adaptive planning approach should be fully explored. Some forms of adaptive planning, whilst providing some useful benefit in the limited PWS arena, might lead to significantly suboptimal outcomes from a societal perspective when the consequences for other major water resource users such as power/energy and agriculture are considered. However, other forms of adaptive planning may promote clarity in the light of uncertain future circumstances, which would benefit all participants.

18646 Planning to be resilient to a 1:500 drought

Third party supply options should be evaluated in the context of the system resilience rather than be associated with any particular unreliable PWS source of supply.

We support the requirement to achieve resilience without use of drought order and permits as early as possible. There may well be innovative third party supply options that would be easily implementable (with no or minor infrastructure need) and early engagement of WatCos with these innovative options should be required. It should also be required that appropriate assessment frameworks (rather than continuing to use traditional WatCo capacity-based approaches) are considered. For example, it would be appropriate to consider utilisation rather than to solely consider capacity when assessing low utilisation supply options.

We strongly support exclusion of drought orders and permits from baseline deployable output assumptions. This will increase the engagement of WatCos with innovative third party supply options, promoting multi-sector approaches.

18647 Climate change

No comments.

18648 Best value planning

Overall, the guidance does not address with clarity how value in a best value WRMP and/or a Regional Plan is to be defined. In particular, to whom does it maximise value? Is it the WatCo, WatCo customers, society within the WatCo area or the whole of society? The statement follows that ...

A best value plan ... seeks to achieve an outcome that increases the overall net benefit to customers, the wider environment and overall society.

Since the benefit to customers and the wider environment would seem likely to be subsets of the overall society benefit, the purpose of their being singled out here is unclear.

The relationship between best value planning for regional planning and WRMPs could be usefully discussed in regard to several aspects of planning.

The section on establishment of objectives for the WRMP (Section 2.1) could usefully include some guidance on how these objectives are to be established and be consistent with the objectives of Regional Water Resource Planning and in particular the resilience and reasonable future needs of non-PWS abstractors. Establishing an appropriate set of objectives for the WRMP is vital since 'best value' will be obtained through the option set which delivers the objectives in a best value way.

In 2.2 the 'social benefits' illustrated are a limited subset of benefits to wider society (which would include interests of other abstractors such as power/energy, agriculture) whose interests could be adversely affected by the WRMP (e.g. in relation to WatCo abstraction licences). In 2.2 the scope intended for the set of economic factors could be usefully discussed in the guidance e.g. do the factors relate only to customers of PWS (e.g. in relation to non-household demand), or do they cover the interests of non-PWS abstractors?

In 2.2 clarity on the Regional Plan and WRMP is provided on metrics, but the key aspect is objectives, which remains far from clear.

2.3 suggests the WatCo is the sole determiner of objectives for a given WRMP. How is this setting informed/constrained by objectives set at Regional Planning level?

In 2.3, depending on interpretation, the suggestion of WatCos going beyond 'policy aims' might lead to adverse consequences for some stakeholders or wider society. The best value plan represents an appropriate balance between multiple interests and 'going beyond' the plan in certain policy areas may therefore not be consistent with that balance.

Linked to this, in 2.4, whilst it is reasonable that Government policy should guide options to be considered, the extent to which these options should be taken up within the best value plan is a matter for the planning process and should not be 'baked in' to the best value plan as a constraint. If Government had intended the policy to be treated as a constraint it could have so regulated/directed.

In 2.6, effective engagement with stakeholders is one important aspect of planning, but a key issue to be addressed is the extent to which the best value WRMP (or Regional Plan) should deliver the benefits those stakeholders are themselves seeking through their participation in water resource planning (e.g. where those stakeholders are not PWS WatCo customers). For example, the societal opportunity cost represented by permitting WatCo abstraction to cover WatCo target leakage rates, with potential adverse effects on the interests of non-PWS abstractors and the aquatic environment, is identified in our consultation response on the leakage supplementary guidance and on the overall Water Resources Planning Guideline.

It is not clear what guidance the discussion in Section 2.7 on the geographic scale of the best value 'lens' is intended to give. It is evident that best value could be determined differently from different perspectives, but the key issue on which to provide clarity is the definition of best value WRMP and best value Regional Plan.

Whilst alignment is clearly encouraged in the guidance, and this is welcome, the final section on regional and WRMP in Section 2.7 would seem to suggest that stakeholders such as non-PWS abstractors cannot assume that a WatCo will act in accordance with any balance of interests and principles agreed with the Regional Planning framework. This will undermine the outcome, and indeed meaningful participation in regional planning, since the Regional Plan itself is not statutory and, for the regional process to have value, all participants must participate in good faith.

There is no mention of the interests of non-PWS abstractors in the programme appraisal and comparison Section 2.8. The abstraction requirements in a best value WRMP could be a key consideration for non-PWS direct abstractors in areas where there is water resource scarcity, with the potential for influence on constraints and societal costs in relation to the associated activities.

For further information, please contact:

India Redrup

Policy Manager, Power
Energy UK
26 Finsbury Square
London EC2A 1DS

Tel: +44 20 7024 7635

india.redrup@energy-uk.org.uk

Andy Limbrick

Environment Consultant
Energy UK
26 Finsbury Square
London EC2A 1DS

Tel: +44 20 7747 2924

andy.limbrick@energy-uk.org.uk