National Policy Statement for Water Resources

Background to CIWEM

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent comment on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.

CIWEM welcomes the opportunity to respond to the Defra consultation on a new national policy statement for water resources. This response has been formulated with the support of our water resources management technical panel. It does not represent the individual views of CIWEM members.

Response to consultation questions

Part 1

1. Do you have any views or further evidence that could inform the need for resilience in the water sector?

The need for increased resilience to the effects of drought on water supply is urgent. CIWEM supports the use of evidence from the Committee on Climate Change, Water UK and the Environment Agency. Further evidence that could inform the need for resilience could include water quality risk from increasing challenges from issues such as metaldehyde which has significant impacts on surface water and is very difficult to treat. A further pressure is the requirement for sustainability reductions which links to the need for options that enhance the environment.

Part 2

2. Do you have any views or comments on these principles for developing the NPS?

CIWEM supports principle 1 that the NPS sets out the need for water infrastructure as part of a ‘twin track’ approach to managing water resources.

However, we consider that principle 2 (The NPS will reinforce and make clear the role of water companies’ water resource management plans in identifying the most appropriate water resources schemes, including new water resources infrastructure) is scale constrained and potentially flawed. Upscaling company plans to regional or national plans is problematic as solutions at the smaller scale do not necessarily sum to solutions at larger scale.
The proposed criteria for defining a Nationally Significant Infrastructure Project (NSIP) do not consider any regional or supra-regional water resources issues, such as those identified in individual water company WRMPs or in collaborative programmes such as Water Resources in the South East (WRSE). Nationally important solutions may be part of the solutions in either of these plans, for example where new resource schemes are shown to be important in maintaining supplies to large populations, either directly or indirectly. There are likely to be supply schemes below this proposed threshold that are shown in WRMPs or supra-regional plans to be nationally important, based on other metrics, such as population or economic value.

An integrated, tiered perspective, and supra-company level governance is needed. In response to paragraph 39, the potential benefits from joined up strategies and schemes will need to be directed rather than expected to emerge organically.

Defra should provide a clearer, stronger steer to EA and Ofwat (and the water companies) in support of regional, multisector water resources planning together with greater national tier co-ordination to help ensure that nationally significant solutions progressed are the right ones and that they deliver multiple benefits.

CIWEM particularly welcomes the inclusion of principle 3 to meet the government’s stated objective to enhance the environment. Nationally significant supply side schemes must demonstrate they will realise a “net environmental benefit” with this forming part of the assessment criteria where an application for a consent order is examined. This needs government support to ensure this is not devalued against other drivers.

3. Do you consider there to be any further principles for developing the NPS? Please explain your reasoning.

The NPS should consider the need for national-scale planning for drought event resilience.

The role of AoS and HRA

CIWEM welcomes the use of an appraisal of sustainability (AoS). This will allow communities to comment on the ability of the NPS to drive multiple benefits.

CIWEM welcomes the use of an HRA which will assess whether the NPS is likely to impact on any designated sites.

Part 3

11. What are your views on the factors we have set out here for considering if schemes are nationally significant?

CIWEM considers these are sensible and appropriate. The lower of the suggested sizes would reduce the risk of scale-limitation of best solution selection (albeit at the risk of governance up-scaling/migration).
13. Which of the two options is your preferred threshold for new nationally significant reservoir schemes? Please explain your reasoning, where possible using examples of previous reservoir schemes and schemes that are likely to be brought forward in future WRMPs.

Our preferred threshold is (ii, yield) rather than (i, capacity) as yield is a more reliable and useful metric.

Regarding reservoir size, the merits of selecting schemes that provide opportunities for staged increase in capacity/ yield, to provide flexibility in response to the uncertainty of the need for more resources should be considered.

14. Which of the two options is your preferred threshold for new nationally significant water transfer schemes? Please explain your reasoning, where possible using examples of previous transfer schemes and schemes that are likely to be brought forward in WRMPs.

Inter-regional water transfers of water from area A that can make a valuable contribution to drought in area B should be encouraged. We support the points made on the qualifying size in paragraphs 81 and 82; the qualifying transfer rate needs to be much less than 100 Mm$^3$. For transfers, a single short link can make a world of difference on a bigger scale. Systems of short links should be seen as an entity (aggregated length is key, not component length). The need for transfer links to be considered on merit not on length, so the threshold should be as low as it can be, if length must be considered at all.

15. Do you have any views on whether there would be benefit in including groups of smaller transfer schemes within the threshold? Please explain your reasoning.

An unconnected network of smaller transfers can reduce adverse environmental impacts whilst supporting drought mitigation across a wide area, and even nationally, including in knock-on ways (e.g. adjacent transfer from A to B enables use of less water elsewhere in B, which in turn enables water to be transferred locally to C, using short distance transfers that deliver yield benefits across wide areas). This needs to be considered regarding the argument on length in paragraph 85. Short length transfer solutions could deliver benefits to wide and distant regions. The length of the link should not be a criterion, the yield benefit to places further afield, not just nearby needs to be taken into account.

16. What are the main benefits and risks of setting the same threshold for all infrastructure types? For example, do you see any reasons that the thresholds for reservoirs and transfers should be/ not be the same?

Whilst it would be a straight-forward approach to set the same threshold for all infrastructure types, it would be overly-simplistic and would result in the bar being set at an inappropriate level for some types of infrastructure, i.e. either too low or too high depending upon the type of infrastructure under consideration. Taking the example of reservoirs and transfers, there is a substantive difference between reservoirs and transfers that justifies why these different types of infrastructure should have different thresholds to order to be classed as nationally significant schemes. Specifically, the impact of reservoirs is closely related into their size, whilst the nature of transfer schemes (which are ultimately about moving water around) means that their main impact is during their construction.
Water transfers have been identified in Water UK’s long term water resources planning framework as being potentially resilient and cost effective options. However, having a higher threshold for transfers compared to reservoirs could be perceived by some as a disincentive to select transfer options, because of a preference for a NSIP designation.

17. What are your views on the inclusion of desalination schemes in the definition of nationally significant infrastructure?

The general opinion seems to be that the one desalination plant referred to has proved to be a less beneficial solution than was expected. Thames Water’s reflections on the benefits of it and other types of desalination plants should be taken into account.

19. What are your views on whether effluent reuse schemes should be considered nationally significant? Please explain your reasoning, where possible providing examples of previous effluent reuse schemes or those likely to be brought forward in WRMPs.

Effluent reuse is not technically a distinct infrastructure type, being composed of a combination of water treatment works, transfer and wastewater treatment works. However the ‘resilient to drought’ aspect of reuse needs to be taken into account.