

## Written evidence submitted by the Chartered Institution of Water and Environmental Management (CIWEM) (NPS0021)

1. CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent commentary on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.
2. We welcome the opportunity to respond to the EFRA Committee on its inquiry on the Draft National Policy Statement for Water Resources Infrastructure. This response has been compiled with the assistance of members of our Water Resources Specialist Panel, who are expert practitioners in the field.

### Summary

3. We agree with the need for an NPS for water resources infrastructure. The Water UK Water Resources Long-term Planning Framework<sup>i</sup> notes that *"There is a significant existing level of drought risk that is present across many regions in the east and south of England"* and that droughts are likely to become 20-30% worse in terms of aridity under median climate change futures by 2040 and 50% worse by 2065.
4. It goes on to state that *"reductions in abstraction licences to protect the aquatic environment have the potential to have a substantial impact on the supply/demand balance across England and Wales"*; there is considerable uncertainty in relation to population growth between now and 2065, with projections of between 6 and 16 million by 2040 and 12 and 32 million by 2065; and considers that *"a 'twin track' approach of demand management coupled with appropriate development of new resources and potential transfers is the most suitable strategy for providing drought resilience in the future."*
5. The National Infrastructure Commission<sup>ii</sup> recommends at least 3,300 Ml/day additional capacity by 2050. It points to the range of available options as including transfers, reservoirs, re-use and desalination.
6. These, and other assessments indicate that whilst considerable gains in water resources resilience can be achieved through demand management measures, there is a need to develop significant new resources over the coming years in order to maintain drought resilience and ensure reliable water supplies for the public and for business. At the same time, demand management measures should be promoted strongly through other government policy and cross-referenced in this NPS.
7. Historically, the development planning process for major new resources has often been lengthy and has resulted in some not proceeding. Whilst this may have been an appropriate outcome in the past, climate change and demographic projections point towards greater need for supply side measures and greater social (and environmental) impacts of delays or refusals of their delivery.

8. At the same time, there have been schemes constructed in the past which were effectively not needed for decades. Given the levels of investment involved with such schemes, a robust planning and assessment approach is required, including more detailed support for NSIP schemes within Water Resources Management Plans (WRMPs).
9. The Appraisal of Sustainability (AoS) report<sup>iii</sup> states that *“setting out the need for infrastructure in the National Policy Statement will provide improved clarity and confidence to the delivery phase of any preferred large water resources schemes”*. We agree with this statement.
10. The AoS also states that *“the draft NPS will support the Government’s ‘twin track’ approach to managing water resources and also...other government policies such as the 25 Year Environmental (sic) Plan by providing a clear framework for decisions”* and notes its assistance in meeting water resources needs in a changing climate. It concludes that overall the NPS will have long-term, permanent positive effects across all AoS objectives, with no significant or minor negative effects observed. We are broadly supportive of this position but consider that there is a need for more assessment and evidence of need to be produced in support of Development Consent Order applications.

#### **Will the draft NPS encourage the sustainable, resilient and safe infrastructure projects required to meet future challenges?**

11. We consider that section 2 of the NPS (Government policy and the need for water resources infrastructure), in itself and in cross-referencing the high level policies such as the 25 Year Environment Plan, the Government’s Strategic Policy Statement to Ofwat, a wide range of other studies and assessments as well as ongoing work (particularly relating to setting an “ambitious target for personal water consumption”) presents a comprehensive picture of the pressures of current and future water availability and the options for addressing needs.
12. It is important to note that WRMPs will often only reflect the balance and strength of policy guidance in place at the time. Thus, in order to balance any increased enabling by the NPS of large supply-side schemes with an appropriate focus on demand management, there must be strong and clear policy from Defra and OFWAT to this end. Significant reductions in leakage were only consistently proposed by water companies following the increased demands communicated by OFWAT last year. Whilst it is not for the NPS itself to set this policy, it should form part of a policy suite which is complimentary and coordinated.
13. Section 2 also clearly describes the role of WRMPs, and the WRMP guidance in identifying need and appropriate options.
14. However, we have some concerns relating to the proposal in the NPS section 2.5 that WRMPs are in themselves and in their current form, sufficient to identify and justify need for the purposes of the NPS and to satisfy that: *“If an NSIP is included in a published final WRMP, the need for that scheme will have been demonstrated in line*

*with government policy, and the applicable statutory requirements, and does not need to be revisited as part of the application for development consent.”*

15. WRMPs are valuable planning tools which undergo a range of scrutiny including public consultation and engagement, as well as the potential for public hearing or inquiry where there is a challenge on need. Nevertheless, WRMPs deal with risk and it is difficult if not impossible to be conclusive in their proposals. They are based on a range of forecasts and projections which are subject to some uncertainty. These include population projections, climate change projections, stochastic river flow data and drought modelling, and the future impact of demand management measures such as metering.
16. In principle, WRMPs should be an appropriate vehicle for identifying the need for NSIP schemes, and in practice there is little better to do so. However, we consider that at the present time they often aren't sufficiently detailed to be relied on in this way.
17. The NPS proposals for WRMP-informed NSIPs will undoubtedly bring a closer focus onto the detail around optioneering in WRMPs and the need for greater clarity and consistency in the methods used when identifying the need for schemes that qualify. The emergence of risk-based methods such as robust decision making and info-gap theory, means that there is greater understanding around whether a NSIP is the 'best' solution, both at a company, regional and national level.
18. Given this, we suggest that if WRMPs are to support NSIPs under DCO then qualifying schemes should require demonstration of a higher level of certainty than is required for other schemes. Therefore, only WRMPs of a certain standard, which meet set criteria should be able to support an NSIP. Criteria should include:
  - A clear twin track approach.
  - Evidence of clear customer and stakeholder support.
  - Delivery of Environmental Net Gain.
  - A higher level of technical analysis.
19. The suitability of NSIP schemes contained in WRMPs should be subject to interim assessments to include at least preliminary environmental information and feasibility stage level of engineering design.
20. The risks of not employing this approach may be identified by reference to the construction of certain large schemes in the past, the need for which was then not borne out, at least for a considerable period of time. An example is Kielder Reservoir, which was superfluous to requirements for many years after it was completed, though it now forms part of the Tyne transfer scheme.
21. Proposals for regional water resources planning are currently being consulted on by Defra<sup>iv</sup> *“to amend the existing provisions for WRMPs to require companies to plan at a regional level”*. We do not consider that the ongoing nature of these proposals should

compromise progress in finalising this NPS because if regional planning is implemented through WRMP, the NPS wording is appropriate.

22. We consider incorporation of regional planning into the WRMP process should improve robustness of any NSIP proposal put forward, but we would emphasise that given the likely inclusion of regional planning into WRMP in the near term, no NSIP proposals should be approved under DCO until such integrated plans are produced.

**Are the assessment criteria that must be considered in development consent applications adequately set out?**

23. We welcome the assessment principles which have been set out, including that relating to Environmental Net Gain (ENG). We have expressed in our response<sup>v</sup> to Defra's recent consultation on Net Gain that we consider that Biodiversity Net Gain should be a sacrosanct component of any wider ENG, to prevent against 'trading' biodiversity losses for potentially easier gains on other environmental components within an overall agreed ENG.
24. We note the references in Section 2 to the twin track approach and the importance of demand management measures including improved water efficiency. There is a benefit in making strong government policy clear and visible at all opportunities and whilst we note that work on a personal water consumption target is ongoing, it would be beneficial to ensure that this work has been completed and is clearly reflected in the final NPS.
25. Moreover, and in line with our paragraph 19 above, we would suggest that under Section 3.5 "Assessing alternatives", there should be an additional bullet point to the effect that the proposer should be able to demonstrate an ambitious commitment to demand management measures within its published WRMP before an NSIP will be considered. This would need to be mirrored in WRMP guidelines issued to water companies.

**What are the implications of streamlining the planning process, whereby a NSIP already included in a Water Resource Management Plan (WRMP) does not need to be revisited as part of a development consent?**

26. We consider that the burden of proof should always be on the scheme proposer to fully justify the need for a NSIP. They should not put a scheme into a WRMP unless they have satisfied themselves that they could meet the assessment principles set out in Section 3 and have also set out the additional information we propose in paragraphs 18 and 19 above.
27. There are likely to be local pockets of objection to any large new infrastructure scheme. Whilst a streamlined planning process is, in our consideration, an appropriate response to a particularly important area of national need (secure and reliable water supplies), it will be incumbent on the scheme proposer to undertake proactive and high-quality engagement to raise local awareness of the criticality of the need for the scheme in question. This should include detail on the process which was undertaken to rule out other options on sustainability (including affordability) grounds.

### **How effectively has DEFRA consulted with relevant stakeholders, such as industry and other parts of Government, in the development of the draft NPS?**

28. We consider that Defra has consulted extensively with a wide range of stakeholders and has done so well. We consider that this is reflected in the high quality of the draft NPS overall.
29. There have been a good range of stakeholder meetings and three separate consultations on different components of the NPS. Not only this, but Government has provided a summary of consultation responses and a reasoned position for its response to the consultation.
30. Combined, this is significantly over and above the level of consultation that we have experienced in relation to many other areas of policy development and we cannot fault the approach thus far (notwithstanding that we have not agreed with some of the decisions taken by Government as detailed in response to the question below).

### **Are there any other issues that the Committee should consider when scrutinising the draft NPS?**

31. Government has made decisions relating to the metrics used in the NPS for defining the size of infrastructure within the Planning Act 2008. It proposed to use 'deployable output' (DO) on the basis of consistency with water resources planning and terminology commonly used.
32. We advised that we could understand why deployable DO had been proposed; it being aligned to the planning approaches from a 'pure' water resources perspective. However, whilst DO has been used for many years to define outputs from a supply system (e.g. reservoir, river abstraction or borehole), it is usually related to a level of service and/or resilience of an asset to changes in water available (e.g. due to year-to-year weather variations or over longer periods due to climate change), and the demand placed on the asset (which is a function of several factors including population served, network and infrastructure constraints, and the conjunctiveness of the supply system).
33. Therefore, DO is dependent on factors beyond the scope of the infrastructure being proposed, can mean different things to different people and can be derived in a number of different ways. We consider that there could be more risk in using this term from a legal perspective given the role of the NPS in the context of land use planning (i.e. if DO makes schemes more contestable). On this basis, we continue to be of the view that DO may not be the best metric to define the size of infrastructure and capacity may be more appropriate for some schemes due to simplicity.
34. We also did not agree on Government's position to exclude effluent reuse schemes from the NPS. Government argued that that it didn't propose to include a separate definition of effluent reuse in the Planning Act 2008 partly on the grounds of complexity of such schemes, and that the individual components of a reuse scheme such as treatment works, and transfers would be picked up by other elements of the NPS.

35. The scheme complexity argument could be applied equally to the other resource types covered under the draft NPS, e.g. reservoirs will require raw water distribution, treatment works, treated water distribution, connection to existing networks with potentially additional pumping and treated water storage. Similar circumstances exist in relation to transfers and desalination (which will be even more complex, with requirements for effluent treatment, long sea outfalls, etc).
36. Excluding effluent reuse from the scope of the NPS is likely to make it harder to promote such schemes, compared to those that are within scope, disadvantaging effluent reuse as a future source of potable water, compared to alternatives. We remain of the view that such schemes should have remained within the scope of the NPS.

**March 2019**

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<sup>i</sup> Water UK, 2015. [Water Resources Long Term Planning Framework](#).

<sup>ii</sup> National infrastructure Commission, 2018. [Preparing for a drier future](#).

<sup>iii</sup> Wood for Defra, 2018. [Appraisal of Sustainability of the National Policy Statement for Water Resources Infrastructure](#).

<sup>iv</sup> Defra, 2019. [Improving our management of water in the environment: Consultation proposals](#).

<sup>v</sup> CIWEM, 2019. [Net gain: Consultation proposals – response by CIWEM](#).