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Secretary of State for Environment, Food & Rural Affairs
Water resources management plan consultation
Area 3D
Nobel House
17 Smith Square
London
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27 May 2018

Dear Secretary of State,

Northumbrian Water – draft water resources management plan 2019

Northumbrian Water published its draft water resources management plan 2019 on 5 March 2018 for consultation. This letter provides a summary of our assessment of the draft plan. It is our statutory consultation response, produced in accordance with our statutory duties and the Government’s strategic policies and objectives for Ofwat. These views are without prejudice to any subsequent decisions that we may make at the next price review (PR19) in connection with the business plan that the company is scheduled to provide to us in September. Our assessment has considered:

- how adequately the draft plan follows the requirements of the water resources planning guideline and Defra’s guiding principles for water resources planning; and
- how the draft plan helps achieve our vision of ensuring trust and confidence in the sector through the delivery of our key themes for PR19 of great customer service, affordable bills, resilience in the round and innovation.

Long term water resources planning is a key part of company business activities. We expect companies to integrate the development of their water resources management plans into their business plans which they submit to Ofwat. We also expect them to adopt the ‘twin track’ approach to improve water supply resilience through both increased supply and reduced demand. We will continue to work closely with Government and the other regulators in both England and Wales to ensure that a long term secure and sustainable supply of water is achieved.

Northumbrian Water supplies water to a population of 2.6 million customers in the north east of England. Its water resources are planned on the basis of two water

resource zones which are both forecast to maintain a surplus throughout the planning period. This means there would be sufficient water to maintain supply to customers during planned-for severe drought conditions.

We welcome Northumbrian Water's ambition to reduce leakage by over 15% by 2025 and also its decision to produce a longer 40 year plan. While the majority of Northumbrian Water's plan is in line with our expectations and good practice, there are areas of the plan where we are not convinced, on the basis of the evidence provided, that the plan delivers in the best interests of customers. In particular:

- There is limited evidence of customer participation in the development of the draft plan. For example the extent and range of customers engaged is unclear. It is also unclear if customers have been engaged on levels of service or option preferences and how customer preferences shaped the plan. Greater clarity is needed on these points to provide us with confidence that customers were able to participate effectively in the planning process.
- Currently the draft plan does not give Ofwat sufficient assurance that it will deliver good outcomes for customers and the environment. Board assurance was part of Defra's guiding principles for water resources planning. However, the draft plan provides limited evidence of Board assurance and the quality assurance of the plan and this raises concerns about the robustness of plan development. The plans are key publications provided to stakeholders and we would expect them to meet the same high assurance standards of other information and evidence of this should be provided in the final plan.

Further details on these points are outlined in the annex to this letter alongside more detailed comments on different areas of the draft plan.

I look forward to seeing these points addressed in Northumbrian Water's statement of response and final plan.

Yours sincerely



David Black

Senior Director, PR19

Annex

In this annex we outline further details on the points raised in our main letter alongside more detailed comments on different areas of the draft plan. Our points reflect our assessment approach and cover:

- 1. Plan building blocks:** The overall approach to the development of the draft plan in line with the technical guidance and broader resilience issues.
- 2. Customer participation:** The type and quality of interaction with customers and the impact this has had on the draft plan formulation and proposals.
- 3. Demand forecast:** How the company has considered the impacts of population growth, leakage and water efficiency in its demand forecast.
- 4. Supply forecast:** How the company has considered climate change, abstraction licences changes and transfers in its supply forecast.
- 5. Forecast uncertainty:** The robustness of the draft plan in accommodating uncertainties in the demand and supply forecasts.
- 6. Supply-demand balance:** The robustness of the overall need for water, if any, and the scenario testing applied to this assessment.
- 7. Options:** The approach taken to identifying and screening options for both supply and demand, including identification of trades and third party options.
- 8. Decision making:** The decision making tools, preferred programme development process and accompanying assurance processes.
- 9. National and regional considerations:** The interaction and consistency with national studies and regional groups (where relevant).

1. Plan building blocks

Northumbrian Water has generally used methods and data appropriate to the scale and complexity of the problem that it needs to address. However, we have concerns around the transparency of the approach to water resource zones, the level of service calculation and non-drought resilience. In particular:

- The plan narrative identifies that Northumbrian Water has two water resource zones (Kielder, and Berwick and Fowberry), however, the draft plan also references a third, the Industrial zone, and planning tables have been produced for all three zones. The Industrial zone is a significant zone, with a demand of 100 MI/d, but is presented inconsistently throughout the plan and greater clarity on this zone needs to be provided in the final plan. Further observations:

- The Industrial zone is noted as including a small group of large industrial customers located on Teesside. However, the industrial zone is not highlighted in Figure 2.1, no supply-demand balance graphs or tables are presented for it and the supply forecast is presented inconsistently in the narrative and planning tables. It is important that there is sufficient transparency about each zone identified.
- The planning tables indicate that some abstraction licences are shared between the Kielder and Industrial zones. The final plan should provide clarity on the relationship between these two zones. It is not clear whether the Industrial zone impacts on the supply availability for the Kielder zone in any way.
- While the draft plan proposes a 1-in-250 year return period for level 4 restrictions, for example standpipes, it appears that performance has only been tested against a 1-in-200 year drought event. The evidence used to support the higher level of service should be provided in the final plan.
- There is limited evidence of non-drought resilience to the full range of potential hazards and threats being assessed in the draft plan. For example the plan makes no reference to flood risk or freeze-thaw events. Greater clarity on this should be provided in the final plan.

2. Customer participation

There is limited evidence of customer participation in the development of the draft plan, however, it does reference qualitative research through workshops about metering, supply and demand with customers. While this is positive, there are areas of the draft plan where greater clarity is needed to provide us with confidence that customers were able to participate effectively in the planning process. Further specific comments:

- The draft plan is generally well structured and easy to navigate, with clear headings, sub-headings and appendices. The inclusion of a non-technical summary at the front of the plan makes it more accessible though greater use of summary tables for each section would further aid the reader. The inconsistency in the presentation of the Industrial zone also reduces the clarity of the plan.
- The draft plan makes reference to outputs of customer participation, but the supporting evidence presented is relatively limited and this is an area of concern. Specifically:
 - There are limited details on the extent and range of customers consulted in the development of the draft plan. Also in a number of areas, such as metering, the plan appears to rely on research

completed in 2011, and does not explain how more recent research has validated the previous results. This needs to be clarified in the final plan.

- It is unclear if customers have been engaged on levels of service. Here we would expect the relative drought resilience levels with other companies to be discussed and explored.
- It is also unclear whether feedback from customer research has influenced the selection of the preferred options, such as leakage, and whether any research was undertaken on the package of options or on each attribute independently. Greater clarity is required on this area and this should include whether willingness to pay values have been determined and how they have influenced option selection.
- The draft plan suggests that Northumbrian Water has engaged with its Customer Challenge Group (CCG) although it is not clear how this engagement has shaped the draft plan and this should be clarified in the final plan.

3. Demand forecast

The draft plan appears to have followed the relevant guidance and assessed demand through consideration of appropriate components, including the use of local authority plan-based projections. We are concerned around the clarity of non-household demand forecasts. In particular:

- There is a lack of clarity relating to the allocation of non-household demand between the Industrial and Kielder zones which needs to be addressed in the final plan. Specifically:
 - The levels of non-potable demand and its allocation between the Kielder and Industrial zones is not clearly identified in the draft plan.
 - The submitted planning tables for the Industrial zone are incomplete and include no demand data which undermines the credibility of the plan. Full complete tables should be provided as part of the final plan.
- Northumbrian Water has developed a methodology that uses trend data based on historical usage to forecast non-household demand. However, it does not appear the company has engaged with large users or retailers to enhance and validate this forecast and should consider the steps it could take to achieve this.

4. Supply forecast

The overall approach to the supply forecast appears satisfactory and appears to be calculated in line with guidance. However, greater clarity is required on the changes to available supply in the Kielder zone and levels of service. In particular:

- Compared to the previous plan there is a reduction in supply availability for the Kielder zone of more than 100 Ml/d. This is a material change and while Northumbrian Water attributes the reduction to a change in methodology, limited information is provided to assure us that the change is appropriate. We would expect the company to provide a full justification for such a material change in the final plan.
- As noted in section 1, supply has only been assessed for a 1-in-200 year drought event and not for the adopted 1-in-250 year return period level of service. The impact on supply of the more severe drought event should be clarified in the final plan.

5. Forecast uncertainty

Northumbrian Water appears to have adopted an appropriate approach to determining target headroom which is around the industry average and not a significant driver of the plan.

6. Supply-demand balance

The supply-demand balance profile presented is in line with the assumptions of individual supply and demand components and appears to be consistent with guidance across the scenarios modelled.

7. Options

Northumbrian Water has presented a sub-set of options focused on demand that include an ambition to reduce leakage by over 15% by 2025 which we welcome. However, we have concerns around the approach taken to options, including the development of options screening criteria and third party options. There are also issues with the planning tables which reduce the transparency of the draft plan. Further specific comments:

- Only preferred options are included in the draft plan and it is unclear if there was an unconstrained list of options to which screening criteria were applied. This should be clarified in the final plan. Information should also be provided

on the screening criteria used to demonstrate that the options appraisal process is robust and has identified the best options for customers.

- The draft plan does not include any third party provision of supply or demand options. No information is provided on the approach to third party engagement and the company should provide clarity on its approach in its final plan.
- Northumbrian Water has a significant supply surplus and has the potential to be a significant exporter of water in the future. Further considerations:
 - The draft plan sets out a number of potential trades with neighbouring companies, including with Yorkshire Water and United Utilities. It notes that these have not been selected as preferred options by these companies and are therefore not included in the plan.
 - Given the scale of the surplus we expect Northumbrian Water to continue to actively engage on the potential for water trades prior to the final plans being published.
- The company proposes to reduce leakage by 15% by 2025 which shows a good level of ambition. After 2025 it proposes further reductions to leakage of 34% of 2020 levels by 2045. However, only a single leakage option is presented and cost information on this has been omitted from the draft plan. Greater clarity on the approach to leakage should be provided in the final plan and clear costings should be provided to assure us that the proposed leakage reductions have been assessed appropriately.
- The company has low levels of metering; this is forecast to be 41% in 2020 and is forecast to increase by 7% by 2025 as a result of maintaining current optant strategies. It is unclear if the company has considered alternative approaches to metering and this should be clarified in the final plan.
- Northumbrian Water has demonstrated effective water efficiency engagement with customers through the Every Drop Counts programme. This includes an area by area approach to maximise its impact, customer incentives, promoting behavioural change and retrofit programmes. However, in the final plan greater clarity on the costs and benefits of the various strands will help show that an optimal level of each activity is proposed.
- Linked to this, per capita consumption (PCC) is slightly above the national average and with only modest reductions in PCC over the plan period the company forecasts an average PCC of 129 l/h/d by 2045. The company should consider if further ambition to reduce the PCC across the planning period could further help provide more water for trading and increase resilience.
- The planning tables are not fully completed and need to be updated for the final plan. For example:

- Only preferred options have been added to the table of feasible options. All feasible options should be included in this table.
- Cost information has been omitted from leakage options which reduces the transparency of the draft plan.

8. Decision making

As the only options presented are preferred there is no transparency on how the final programme was selected. This means it is not possible to assess whether scenarios and deliverability considerations have influenced the preferred programme. We also have concerns around the robustness of the assurance of the plan. In particular:

- As no evidence of non-preferred options has been found there is a lack of transparency regarding option appraisal and the decision making process. In the final plan for clarity we would expect to see a clear summary that concisely explains how and by whom the preferred portfolio was decided on.
- Board assurance was part of Defra's guiding principles for water resources planning. Evidence of Board assurance is limited to approval of the plan noted on the document control sheet and this raises a concern about the robustness of plan development. This concern is compounded as there is limited description of the quality assurance of the plan. For the final plan we expect to see assurance that the company Board are satisfied that the plan represents the most cost effective and sustainable long term solution.

9. National and regional considerations

With a significant surplus Northumbrian Water has the potential to play a significant national and regional role in the future. Further specific comments:

- While the draft plan includes a discussion of opportunities to trade water it is unclear how the Water UK national project has informed their plan and consideration of these options. This should be clarified in the final plan.
- The company is part of the recently formed 'Water Resources North' regional group which aims to further promote collaborative working on water resources in the north of England. We welcome this and expect the group to help shape future water resources management plans.