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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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21 May 2018

Dear Secretary of State,

South East Water – draft water resources management plan 2019

South East Water published its draft water resources management plan 2019 on 23 February 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.

South East Water supplies water to a population of approximately 2.2 million people across parts of Kent, Sussex, Surrey, Berkshire and Hampshire. Its water resources are planned on the basis of eight water resources zones, across two separate regions, the western comprising of two zones and the eastern comprising of six zones.

South East Water forecast that many of its water resource zones will be in deficit in the future, some from 2020 onwards, without additional action to reduce demand or provide additional supplies. This means there would be insufficient water to maintain supply to customers in some severe drought conditions. The immediacy and scale of the challenge means that effective action is required to deliver for customers and the environment.

The South East Water plan sets out a range of demand-side and supply-side options to meet future demands for water and ensure that customers receive a sustainable and resilient service. The draft plan has demonstrated good practice in a number of areas, including the use of an Environmental Focus Group for stakeholder challenge, the development of joint options and the approach to obtaining views from vulnerable and seldom heard customers.

However, there are a number of important areas where the plan fails to provide convincing evidence that it delivers in the best interest of customers. In particular:

- Considering the challenge faced by South East Water, the draft plan has not demonstrated that there is an appropriate balance between supply and demand type options, consistent with a twin track approach. There is a focus upon demand reduction in the initial five year period but in the medium to long term the plan is reliant on supply option expenditure. South East Water should clarify why this blend of options represents the best outcome for customers and how the decision making process led to this outcome. Further considerations:
    - South East Water has a high per capita consumption (PCC) in comparison with other companies, 147 l/h/d, and the lack of ambition in proposed reductions leads to the company's relative performance deteriorating across the planning period.
    - South East Water has selected a significantly lower level of leakage reduction than other companies; 4% by 2025 rising to 8% by 2045. While it is noted this could be increased as part of the business plan, to 12% by 2025, greater clarity is required in the final plan on how this reduction was tested and selected.

  - The company has included the development of significant supply options prior to 2035 including two reservoirs, an effluent reuse scheme, a treatment works expansion, a new groundwater source and four internal company transfers. However, it is unclear from the draft plan if deliverability of the programme has been fully considered and greater clarity is required on this in the final plan.
  - New imports are only selected as options beyond 2036. South East Water should consider if larger trades, potentially earlier in the planning period, could resolve the supply-demand challenge faced without requiring the development of multiple new supply options.
- While we welcome South East Water's participation in regional planning, we are disappointed that the draft plans in the south east appear to miss a major opportunity to secure the long term resilience of the region. We appreciate that this is not an issue for the company alone but expect South East Water to urgently work with others to seize the opportunity of regional solutions to address challenges in the south east. These solutions could have the potential to reduce costs, reduce environmental impact and improve resilience.

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 South East 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

South East Water has used methods and data appropriate to the scale and complexity of the problem it needs to address across its water resource zones. It has also formalised stakeholder involvement in the plan through the Environmental Focus Group. While we welcome active consideration of greater drought resilience, we have concerns regarding the evidence provided for the adoption of a 1-in-200 year level of drought resilience for level 4 restrictions (such as standpipes) and the approach to non-drought resilience. Further specific comments:

- South East Water should provide greater clarity in the final plan for the decision to move to a 1-in-200 year level of drought resilience with respect to level 4 restrictions. This should include quantification of the impact in terms of the supply-demand balance and the scheduling of options and additional costs in comparison with retaining the current 1-in-100 year level of resilience.

- South East Water has not referred to non-drought resilience, such as freeze-thaw events, in detail within the draft plan, though it is noted this is being developed for the company business plan. The final plan should set out the interaction between the draft plan and the company's wider proposals to manage system resilience and supply system efficiency.
- The inclusion of the Environmental Focus Group as an additional formalised stakeholder in developing the draft plan is an example of good practice. The group includes representation from regulators, local councils, non-government organisations and local interest groups, and has contributed to draft plan development including the option appraisal process.

2. Customer participation

South East Water has carried out a wide-ranging approach to customer participation. This has included ensuring its full customer base is represented, including hard to reach customers. While this is positive, there are areas of the draft plan where greater clarity is needed, such as engagement on level of service, leakage and bill impacts. Further specific comments:

- The main plan does not summarise all of the key concepts relating to the plan and there is significant cross referencing to numerous technical appendices. This reduces the transparency and accessibility of the plan. The non-technical summary provides a useful context, though would benefit from a clearer justification of the selected plan with meaningful details of cost.
- While evidence is provided on engagement on level of service, it is unclear how the results of this engagement have shaped the plan. Further considerations:
    - It needs to be shown that customers are willing to pay for the increase to a 1-in-200 year level of resilience and it is unclear if customers were presented with the costs of achieving this.
    - The company states that willingness to pay outputs are statistically significant for temporary use bans. However, despite customers supporting an increased level of service, the level of service for these restrictions in the plan remains unchanged. Rationale for this should be provided in the final plan.
    - It is also unclear whether relative drought resilience levels, compared with other companies, were also discussed with customers. For example, the level of service for temporary use bans is among the worst (most frequent) in the industry.

- Customer engagement regarding option selection indicated a strong preference for demand management activities including further leakage reduction. However, this does not appear to be reflected in the plan, with relatively unambitious targets set in comparison to other companies.
- In its research South East Water has ensured an effective representation of its wider customer base through a comparison with Office for National Statistics data. As an example of good practice South East Water also utilised in-home interviews to ensure it could include the views of vulnerable and seldom heard customers.
- There is no indication of the bill impact of the options presented in the draft plan or evidence that they have been discussed as part of customer engagement.
- South East Water has engaged the Customer Challenge Group (CCG) at key stages of the draft plan including prior to undertaking each stage of customer research and we expect this engagement to continue for the final plan.

3. Demand forecast

South East Water's approach to demand forecast development appears to be reasonable and to have followed the appropriate industry guidance. There has also been good engagement with retailers to shape the non-household forecast which is an example of good practice. However, we have concerns around the justification for the trends in baseline PCC. Further specific comments:

- The use of a population forecast based on the local authority plans is in line with relevant guidelines.
- South East Water's average company baseline PCC is 147 l/h/d which is one of the highest across all companies. The company appears to indicate the high level of PCC is driven by affluence and geography but greater clarity is required on the rationale for the underlying baseline trend in the final plan.
- South East Water demonstrated good practice in sharing its non-household demand forecast with retailers in the pre-consultation phase to obtain their views and feedback. The company indicated that it has not received any responses that affect its draft plan and intends to ensure it develops and builds on dialogue during the public consultation which we welcome.

4. Supply forecast

South East Water has calculated available supply in line with guidance and statistical approaches have been used to help determine low frequency drought yields with higher levels of confidence, which is an example of good practice. However, further

work is required in a number of areas including the quantification of sustainability reductions and the link between level of service and supply. In particular:

- The Water Industry National Environmental Programme (WINEP) abstraction licence changes have a significant impact upon the available supply. The discussion of these reductions, and their impact on the programme, will need to be clearly presented in the final plan. Further considerations:
    - In the draft plan the reductions from 2025 onwards have been included as 50% of the potential total reductions. The company refer to investigations during the period 2020-25 to confirm these reductions and should consider whether it can accelerate this work to improve clarity on its proposed programme.
    - The company should additionally revise its forecasts with reference to the latest WINEP outputs (WINEP3) and explain any variations between these two releases and how the programme has changed as a consequence.
- As noted in section 1 the company plans to move from a 1-in-100 to a 1-in-200 year level of drought resilience. However, the draft plan includes insufficient explanation on the impact this has on supply and greater clarity is required in the final plan. For example the planning tables indicate this appears to result in an increase in baseline supply (deployable output) for Eastbourne zone, which would not be expected.

5. Forecast uncertainty

South East Water has updated its approach to target headroom from the previous plan. The scale of the allowance has also increased raising concerns that uncertainty may have been double counted and the company position on risk has not been clearly articulated. We expect the final plan to ensure there is no double counting and that the levels of target headroom and surplus maintained above this are fully justified. In particular:

- The target headroom for South East Water as a percentage of demand at 2045 is 11% and is significantly higher than the industry average of 8%.
- The draft plan notes that some of the changes are due to pre-consultation feedback from the Environment Agency that the previous plan levels were too low. However, this is not the only element that has changed and the corresponding change in decision making could result in double counting uncertainty. The company should therefore clarify how the duplication of potential uncertainties is avoided.

- South East Water indicate the climate change component of headroom is negative, however, reasons for this are not clearly articulated within the draft plan.

6. Supply-demand balance

The supply-demand balance profile presented is in line with the assumptions of the individual supply and demand components and it appears to be consistent with the guidance subject to the concerns noted above. As an example of good practice South East Water has provided a clear explanation of why its baseline position has changed since the previous plan and considered multiple scenarios.

7. Options

Reflecting the scale of the challenge, South East Water has considered a range of supply and demand options. However, further work is required around a number of options, including the potential for earlier trading and the deliverability of the supply programme. There also appears to be a lack of ambition in demand management in both the short and long term around leakage and PCC. Further specific comments:

- South East Water has demonstrated good practice in clearly identifying the screening criteria used, describing both why they are appropriate and how they were applied in order to derive the feasible list of options. The company also included a rejection log to provide further clarity regarding the options selection process.
- South East Water has provided a clear summary of its third party engagement process and the methods adopted to seek new third party options. Further observations:
    - It made the use of an Official Journal or OJEU to promote the need and generate third party interest.
    - The company states that 99 unconstrained third party options were filtered to become 74 constrained options, and then down to 25 feasible options.
    - The preferred plan includes both a supply option involving a third party licence trade and a demand option delivered in partnership with a third party.
- We welcome that South East Water has included water trading options in its preferred plan and used the Water Resources South East (WRSE) regional group scenarios to identify opportunities for regional transfers though there is the question of whether more can be done in the near term. Further considerations:

  - New imports are only selected as options beyond 2036, are all under 10 Ml/d and supplied by: Portsmouth Water, Thames Water, and SES Water.
  - The company should consider if larger trades, potentially earlier in the planning period, could resolve the supply-demand challenge faced reducing the need to develop multiple new supply options. The outcome of these considerations should be explained in the final plan. Earlier trading options could have the potential to reduce costs, reduce environmental impact and improve resilience.
  - In finalising its plan the company should consult further with the other water companies involved in the proposed trades in order to ensure consistency regarding volume and dates of trades.

- South East Water has selected a significantly lower level of leakage reduction than other companies; 4% by 2025 rising to 8% by 2045. Further considerations:
  - The narrative indicates that a 15% leakage reduction could not be realistically achieved by 2025. Greater evidence is required for this, for example through testing a 15% reduction scenario.
  - As stated in section 2 customers have expressed a preference for demand management options including further leakage reduction.
  - South East Water have identified a leakage reduction of 12% as the maximum it could achieve by 2025. It intends to propose a performance commitment relating to this in its business plan and greater clarity is required in the final plan on how this interacts with the preferred scenario.
- South East Water has a compulsory metering programme and, except for new builds and a small percentage of optants, no further metering is included in the draft plan. The level of metering penetration rises from 86% to 89% across the planning period.
- Demand management options are the focus for the first five years of its draft plan but in the medium to long term the plan appears to be reliant on supply expenditure. However, the company's comparatively high PCC indicates there is the potential for further demand reductions over the longer term. Further considerations:
  - The company has forecast a high baseline average PCC of 147 l/h/d at 2020 in comparison to the industry average (136 l/h/d). Further, the lack of ambition in proposed reductions leads to the company’s relative performance deteriorating across the planning period.

  - The proposed use of behavioural techniques working in partnership with an external organisation to encourage household customers to reduce demand, following comparisons with neighbours, is a good example of innovation. However, despite this, the preferred plan reductions in measured PCC are not significantly greater than observed in the baseline and other companies have proposed more ambitious reductions in measured PCC.
  - The company should consider what steps it could take to further understand its operating area and customer base in order to identify how to effectively promote demand reduction.
- A large number of supply options are presented and selected in the preferred plan. However, the draft plan does not provide sufficient evidence that the proposed supply-side options are appropriate. Further considerations:
  - The company has included development of significant supply options prior to 2035 including two reservoirs, an effluent reuse scheme, a treatment works expansion, a new groundwater source and four internal company transfers. However, it is unclear from the draft plan if deliverability of the individual options and combined programme has been fully considered.
  - The company has included six interconnections between its zones in the preferred plan. However, the draft plan only includes limited information on the schemes due for delivery in the short term. The final plan should clarify how issues such as route planning and environmental concerns are being addressed.
  - We welcome that South East Water has discussed joint development of effluent reuse schemes with Southern Water and it should continue to explore such options. The companies should ensure these schemes are represented consistently within the plans and that the delivery timescales accurately reflect the constraints of both parties.

8. Decision making

South East Water has adopted a decision making approach consistent with the problem characterisation. The economics of balancing supply and demand (EBSD) approach has been used with the addition of an advanced decision making method (Info Gap analysis). However, we have concerns around the transparency of the decision making approach and the drivers behind the preferred programme. Further specific comments:

- The draft plan appears to be reliant on supply-side options despite the company stating that it has adopted a twin track approach. South East Water

should clarify why this mix of options represents the best outcome for customers and how the decision making process led to this outcome.

- It is stated that a best value plan has been developed alongside a least cost plan for its base scenario. However, greater clarity is required for the drivers behind the best value plan and how they influence the options selection.
    - The plan proposes a move to resilience to a 1-in-200 year drought event. The narrative suggests this means the required new schemes will be implemented two to five years earlier. However, the draft plan does not quantify the specific cost of this change or, as noted in section 2, refer to customer discussions about this aspect of the plan.
    - While the plan does include a description of the decision making process we consider further detail could be provided regarding the determination of the preferred plan. This would lead to improved transparency. In the final plan, for clarity, we would expect to see a summary that concisely explains how and by whom the preferred portfolio was decided.
- There is evidence of independent assurance of the draft plan and engagement with the South East Water executive team and the Board during the plan development and its approval. The company has highlighted the in-depth review sessions held with an independent non-executive director which is an example of good practice.

9. National and regional considerations

South East Water has worked closely with WRSE and used outputs from the Water UK national project to develop its draft plan within a regional and national supply context. However, water imports are only included after 2036 and the company is developing significant supply-side options internally prior to this point and there is an open question whether more can be done in the near term. Further specific comments:

- The draft plan makes reference to the Water UK national project and the final plan should provide specific examples of where the outputs have shaped the plan.
- The company has selected a 60 year planning period to align with the scenarios considered in WRSE. This increases the transparency of the plan.
- The large import options are only included after 2036 and the company is developing significant supply-side options internally prior to this point. South East Water should continue to work with neighbouring companies to consider feasible trading options, and the regional and national scaling of options that could have the potential to reduce costs and improve resilience.