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Dear Meyrick

Response to your WRMP pre-consultation request for information for Southern Water Services

Thank you for consulting us for information and advice in advance of your draft water resources management plan (WRMP). This letter is our formal response to your pre-consultation. We look forward to continued discussions on your draft WRMP.

As well as the issues that you should address that are specific to Southern Water there are also a number of wider issues that we are asking all water companies to consider.

Government expects you to follow the water company water resources planning guideline as you prepare your draft WRMP. This is available from <http://www.environment-agency.gov.uk/business/sectors/39687.aspx>. This revised guideline has been jointly produced by the Environment Agency, the Welsh Government, Defra and Ofwat and includes several documents:

- The guiding principles - providing an overview of UK Government and Welsh Government policy and advice to water companies in preparing a plan.
- The technical guideline – providing guidance and details on the technical methods of the water resources planning process.
- The supply-demand and water company level tables – blank tables to be used for capturing and presenting water resources planning data.

1. Specific issues to address in your 2013 draft WRMP

There are a number of issues that you should consider and resolve during the preparation of your draft water resources management plan (2013 draft plan).

Water Resources in the South East

Thank you for the effort you and Southern Water have made to contribute positively to the Water Resources in the South East (WRSE) Group work over the last eighteen months.

As you know, the memorandum of understanding for that work sets out its aim, 'to determine a water resources strategy, which will contain a range of strategic options to find the best solutions for customers and the environment in the South East of England'.

The final (pre-draft WRMP) results of the WRSE Group work are due to be discussed as we write and the agreed conclusions are expected to be reported by the Group by mid-January. We anticipate the solutions arising from the WRSE work being represented inclusively in your draft water resources management plan. Resource sharing

opportunities should be an important component. Positive use of the WRSE work should help the company address a number of the principles raised in the Water White Paper and water resources planning guideline.

Deployable Output

We note that you are proposing a new stochastic approach for assessing the Deployable Output (DO) of your sources. This involves building up a synthetic 2000 year rainfall time series to test a variety of droughts based on the UKWIR 27 'red route' approach.

You should include a clear methodology and audit trail in your draft WRMP so that both regulators and customers can follow the approach you have taken. We recommend that you should provide a comparison with the historic and new DO assessment. This will allow stakeholders to see what difference the new stochastic approach makes to the supply demand balance and associated options and costs.

Differences in DO calculations for the Medway scheme for SE Water and SWS

We are aware that Southern Water and South East Water currently use different drought events to calculate the Deployable Output (DO) of the shared River Medway scheme. We understand both companies are aware of these differences from previous planning rounds and through the drought planning process and have been discussing possible solutions.

We will work with both companies to seek a resolution to this issue. However, you should clearly explain any differences in the DO assessment of the River Medway scheme in the draft WRMP and the implications this has to water resource planning.

Resource zone integrity

Your draft WRMP should include results of your Resource Zone Integrity Assessment. You should ensure your draft plan clarifies the following points:

- In Sussex North, there appears to be a small number of customers reliant solely on Weir Wood reservoir. The draft WRMP should clarify and confirm how many customers solely rely on Weir Wood and demonstrate that they are not at more risk of supply issues than the rest of the Water Resource Zone.
- Further clarification and evidence that the Kent Medway WRZ should not be split into separate resource zones should be included in the draft WRMP, as the draft resource zone integrity assessment refers to an isolated area to the west of the Medway Scheme.

Climate Change

With respect to your climate change assessment, there are a number of points which should be clarified in your draft WRMP. The overall climate change vulnerability assessment for your resource zones appear to be taken mainly from the 'magnitude versus sensitivity' plot of deployable output change from previous climate change assessments' (section 3.3.3 Water Resource Planning Guideline). You should further explain whether any other factors would influence the final vulnerability conclusions.

The critical climate change variable for each water resource zone should be further explained. We recommend that you provide further detail on how the critical drought event for each zone was determined.

You have proposed a low vulnerability approach for your Kent Thanet water resource zone, despite the zone showing high vulnerability on the magnitude versus sensitivity plot. This requires further explanation to ensure a suitably robust approach. You are currently proposing to limit the number of groundwater runs for high vulnerability sites such as Kent Thanet to 3-5 projections, targeted through hydrological modelling. We recommend a

number of model runs that ensure a sufficient degree of confidence that the sampled projections are representative of future climate change impacts.

You will need to demonstrate in your draft WRMP that your chosen approach is robust. The hydrological modelling should fully represent the resource variability, be applied to sufficient number of projections to inform distribution of climate change uncertainty in headroom, and that the selection of the projections for distributed modelling are justified and appropriate.

Outage

You have recorded a high outage in your annual review compared to the published WRMP. We are aware that this is due to a number of pollution incidents. Your draft WRMP should clearly set out your reassessment of your outage calculation, which includes the impact of new schemes, process losses, pollution and turbidity incidents.

Sustainability reductions

We anticipate that all 'likely' and 'confirmed' sustainability changes will be included in your draft plan, with scenarios for those sites with considerable uncertainty. Section 3.2.1 of the technical guideline provides further detail on the incorporation of sustainability changes

We have provided you with 'confirmed', 'likely' and 'unknown' sustainability reductions. We held a productive meeting with you on 9 October 2012 where a pragmatic approach to planning for the sustainability reductions and modelling scenarios for the unknowns was discussed.

We are aware of the recent discussions between the water companies involved in the Wingham and Little Stour investigation. We would encourage agreement between all three relevant water companies on Wingham and Little Stour National Environment Program project steering group as to the agreed percentage reduction in DO to be included in the draft plan.

It is not appropriate to include a potential reduction of 40Ml/d to the Testwood Source as a 'likely' sustainability reduction in the draft plan. The baseline deployable output for Testwood should remain as 105Ml/d in the draft WRMP unless you have evidence to reassess the deployment output for this source.

Water Framework Directive

Your draft WRMP should clearly demonstrate the company has reviewed existing operations and use of existing surplus within current licensed headroom with respect to the requirement for 'no deterioration' in terms of the Water Framework Directive (WFD).

Population

We understand that you will be adopting Experian's 'Most Likely Forecast' (MLF) for projected population and household growth, but for AMP6 the company will be using Local Authority housing assumptions. You should provide justification for your population property forecast in your dWRMP. We have not received a copy of your '*Population, Household and Dwelling Forecasts for WRMP14: Phase 1 Draft Final Report*' produced by Experian. We would like to see this as soon as it is available.

Per capita consumption

We are aware that you plan to use CCDeW factors from the Climate Change and Demand for Water 2003 report, to assess the impacts of climate change on demand. Your draft plan should explain how national factors relate to your own customers and their behaviours.

Non-Household

You have stated that you plan to make the assumption that any customer billing over 1000l/h/d is non-household, and therefore removed from the household proportion of demand. We would recommend that evidence be provided in your dWRMP to demonstrate

the basis of the 1000l/h/d threshold.

Levels of Service

We are aware that you have asked your customers views on differing levels of service. The findings should be clearly explained in the draft plan. You should also ensure that you include a 'no restrictions' scenario in your draft WRMP as per section 2.9.1 of the water resources planning guidelines.

Options appraisal

You should ensure regulators and customers can clearly follow the screening process you have applied and explanations have been given for options being screened out on the unconstrained options list.

We are aware that you are currently finalising your feasible options list and are planning on including the results from the Water Resources South East (WRSE) project. Specifically, hardwiring bulk supplies into your baseline as well as carrying out company only scenarios. You should fully justify your preferred programme and how it takes on board recommendations from WRSE.

Your draft WRMP must include evidence that you have screened the options against WFD criteria to ensure that an option would not cause deterioration in a water body's status and consider the impact of climate change on the feasible options.

2. Recent changes in Government policy or approach

This section summarises some important aspects of Government policy, technical methods and good practice approaches that you should consider when preparing your 2013 draft plan. Further detail can be found in the 'Government policy' section of the [guiding principles document](#).

WRMP Directions

The WRMP Directions 2012 have recently been revised. The appendix of the guiding principles sets out the Directions and the evidence a company is expected to present to comply with them. Government expects you to meet these Directions.

Scope and flexibility of the WRMP

The bigger the problem or risk faced in a WRMP, the more evidence you will be expected to provide to show that you are planning a secure supply of water, and the more scrutiny it will receive from the regulators. We expect companies to prepare their draft plans in a risk based way to support their water resources position and potential options. Tables 1.2 and 1.3 of the technical guideline sets out further details on this.

Reducing the demand for water

The pressures of future climate change, growing population and future development mean it is essential that you fully consider the costs and benefits of demand side measures to provide a secure public water supply. Government expects water companies to demonstrate how they will promote efficient water use in their WRMPs.

Government has recently consulted on the draft revised methodology and proposed classifications of water stress in England and Wales. Any representations made are currently being reviewed. We anticipate that final classifications will be available shortly. Companies should incorporate the revised water stress classifications in their draft WRMPs and should

consider how their classification might affect any proposed metering programmes and options appraisal.

Where demand is above the national average, Government expects the demand trend to be significantly downwards. Where an increase in population or commercial use leads to an increase in total demand, you must ensure that your plan demonstrates a decrease in per capita consumption. To achieve this direction of travel, you must consider all technically feasible demand side options together with other options to balance supply and demand through the options appraisal process.

Government want to see the downward trend for leakage continue and companies should take action to ensure that the total leakage (Ml/d) does not rise at any point during the planning period. You must ensure managing leakage as an efficient way to balance supply and demand is fully considered. Companies should continue to innovate and develop expertise in preventing, identifying and repairing leakage more effectively during the water resources management plan period.

Water trading and cross boundary solutions

Companies should consider all options to balance their supply and demand including the consideration of water trading and cross boundary solutions. Within the draft WRMP the company should include:

- water trading through bulk supplies with other companies;
- interconnections between its own resource zones;
- abstraction licence trading within catchments;
- supply/demand options provided by other water companies or by third parties.

The technical guideline sets out the minimum a company should do in order to demonstrate it has investigated such options.

Any proposals for water trading or cross boundary solutions should be explored during the pre-consultation phase of developing a plan. If such options are likely to be considered as part of the preferred solution, you are expected to consult Government on these options as early as possible in the process.

Customer and third party involvement

The forthcoming WRMP process has an increased focus on customer and third party involvement. We recommend you continue to consult with a range of statutory and non-statutory stakeholders, including your customers and neighbouring water companies with respect to your joint operations and your 2013 draft plan.

3. Next steps

For further discussion on any of the information in this letter, please get in touch on the contact details below. I look forward to being your lead contact for discussions throughout the rest of this process.

Yours sincerely

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