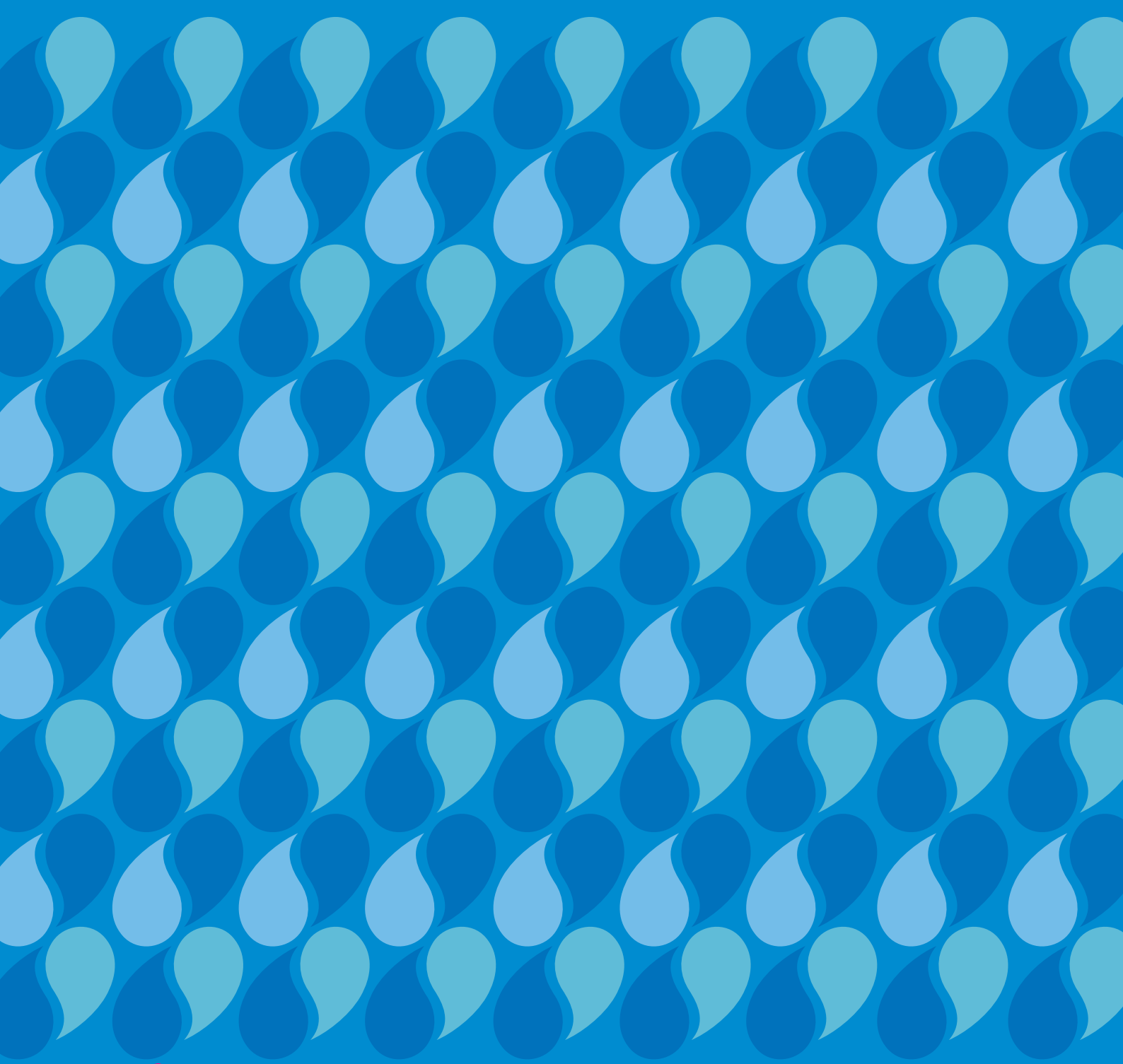


Anglian Water revised dWRMP 2019



# STATEMENT OF RESPONSE



# ANGLIAN WATER REVISED DWRMP 2019 - STATEMENT OF RESPONSE

We sought the views of our customers and stakeholders on our draft Water Resources Management Plan (WRMP) between March and June 2018. In this Statement of Response, we explain how we have revised our WRMP in response to customer and stakeholder views, including feedback on our technical analysis from the Environment Agency, Ofwat and the Consumer Council for Water.

We received responses from:

- Affinity Water
- Bedford Borough Council
- Buckinghamshire County Council
- Central Bedfordshire Council
- Campaign to Protect Rural England (Norfolk)
- Canal & River Trust
- Environment Agency
- East Suffolk Growth Programme Board
- Greater Lincolnshire Local Enterprise Partnership
- Huntingdonshire District Council
- Lincolnshire County Council
- Natural England
- NFU
- Ofwat
- Philips 66
- RSPB
- RWE Generation
- South Holland District Council
- Tendring District Council
- The Water Retail Company
- Waterlevel Limited

This document has been published in two formats:

- A spreadsheet, where responses can be filtered by topic and respondent
- A PDF version for printing

This document should be read in conjunction with our revised dWRMP.

## Anglian Water dWRMP Statement of Response

Ref No.	Organisation	Respondent Comment	Anglian Water Response/ Action	For more detail
1	Affinity Water	Affinity Water has requested at both pre-consultation and now during consultation the confirmed DO reductions for Grafham, Affinity Water require these profiles and the basis for them in order that the EBSD modelling is consistent. At dWRMP19 Affinity Water assumed the worst case, but in order that consistency can be confirmed that both parties are applying the same reductions the supporting rationale and climate change work will need to be reviewed by Affinity Water.	We have held a number of meetings and telephone discussions with Affinity Water in preparing our revised dWRMP. We provided an updated profile of climate change impacts along with a written explanation on 26th June 2018.	n/a
2	Affinity Water	We can confirm, that at this time aside from modified terms with existing Ardleigh and Grafham agreements, there is only one additional option for consideration between Anglian Water and Affinity Water. This is for a new import of 50MI/d from Anglian Water to Affinity Water. We will maintain communications throughout the on-going modelling phase and share the status of this scheme, and if required at what date. It is possible that this scheme could be included within the revised plans as an 'adaptive option', which could be developed further should alternative more feasible options not progress over time.	We have held a number of meetings and telephone discussions with Affinity Water in preparing our revised dWRMP. We have included the 50 MI/d export to Affinity Water as a scenario in our stress-testing and long-term EBSD runs. In addition, we will include it in our adaptive planning.	Revised dWRMP - Chapter 6 and 7
3	Affinity Water	It is important that Anglian Water provide Affinity Water with the associated 'upstream' costs for supplying this additional [50MI/d] import. At pre-consultation, the options meetings included this request and at the recent meeting (22nd May 2018) the request was made again. Currently, the Affinity Water EBSD modelling is using a surrogate cost, in the absence of an Anglian Water cost. For some degree of confidence to be attained in the costs for this particular option, Anglian Water will need to provide improved cost estimates for the Affinity Water EBSD modelling, until which time it remains difficult to optimise against alternative imports where Affinity Water do have clearer visibility over potential upstream costs.	We have held a number of meetings and telephone discussions with Affinity Water in preparing our revised dWRMP. Now that we have concluded the modelling for our revised dWRMP and finalised our planning solution, we are able to model and provide costs for the export to Affinity Water. We aim to provide these by the end of September 2018.	n/a
4	Bedford Borough Council	Council officers support AWS's approach of planning to meet local authority growth targets.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
5	Bedford Borough Council	Yes, AWS is right to prioritise demand management, but the demand savings need to be regularly reviewed to ensure that they remain on target.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.	Technical documents: Demand Management Strategy
6	Bedford Borough Council	Compulsory metering is not always possible to all properties, especially those with shared supplies. Perhaps a compromise?	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
7	Bedford Borough Council	Council officers consider that the investment programme should include this additional [Adaptive Planning] investment.	Please refer to the revised dWRMP for details of our new adaptive planning approach. We have included investment for this approach in our PR19 Business Plan.	Revised dWRMP - Chapter 8

8	Bedford Borough Council	Yes, this [£2.20 p/a average bill increase for drought resilience] is an acceptable strategy as rota-cuts and standpipes are unlikely to be popular in a severe drought event, leading to significant reputational issues and logistical problems to solve.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7  PR19 Business Plan
9	Bedford Borough Council	Can a compromise be considered? Could there be some investment from 2027 onwards? It is appreciated that this could affect investment across two different AMP periods though.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
10	Buckinghamshire County Council	We support the approach of planning to meet local authority growth targets rather than using trend-based projections.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
11	Buckinghamshire County Council	The demand management strategy being based on both action by Anglian Water and crucially by the customers in taking responsibility for their own water demand and management should be a key priority going forward. The introduction of smart metering is a good way forward in this area.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.	Technical documents: Demand Management Strategy
12	Buckinghamshire County Council	It would be good to consider compulsory metering in AMP7. More information of the benefits of this and the projected reduction in demand would be useful, alongside the reasons for why this is not seen as the right strategy.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
13	Buckinghamshire County Council	Additional investment should be kept on the table as an option and re-considered on a regular basis. The uplift in annual bills per household is small and the benefits that the extra investment would secure are large, making this an attractive option.	We will continually review our future investment requirements as part of our adaptive planning approach.	Revised dWRMP - Chapter 8
14	Buckinghamshire County Council	The resilience to drought and a small charge per household per annum seems a reasonable strategy. Is the charge in addition to the extra charge mentioned in point 4?	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
15	Buckinghamshire County Council	The investment in climate change resilience should not be deferred but implemented as soon as possible.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Technical documents: Supply Forecast
16	Buckinghamshire County Council	The ambitious leakage reduction programme and the intention to work with developers to ensure that new housing is as water efficient as possible are both welcomed.	These are retained in the revised dWRMP.	n/a

17	Buckinghamshire County Council	Ambition is to prevent deterioration in WFD status. It would be good to see an ambition for delivering improvement in WFD status of water bodies.	Anglian Water is committed to delivering both improvements to water bodies, and preventing deterioration of water bodies. In AMP7, we will be delivering our largest ever programme of improvement schemes, as well as carrying out investigations and options appraisals to look at other areas that may need further improvement. We also have various environmental initiatives such as our Flourishing Environment Grant, and River Care.	Revised dWRMP - Chapter 7  Technical documents: Sustainable Abstraction
18	Buckinghamshire County Council	With regard to integration of natural and social capital accounting in the optioneering for the WRMP to better understand environmental valuation of natural assets. This is mentioned in the Strategic Environmental Assessment but where is the supporting documentation for the Ecosystem Services Assessment?	We will make this available to our regulators and more generally on request.	Available on request
19	Buckinghamshire County Council	It would be useful to have more detail on what the recommissioning of Foxcote would entail.	The recommissioning of the reservoir at Foxcote no longer appears in our Preferred Plan. As part of our adaptive planning process and preparation for WRMP 2024 we will work with the Environment Agency to assess in further detail, where appropriate, the environmental assessments and mitigation required for individual options.	Technical documents: Supply-side Option Development
20	Buckinghamshire County Council	Any recommissioning or construction of new reservoirs would require Flood Risk Assessments in addition to geotechnical investigations mentioned.	We are aware of the requirement to complete Flood Risk Assessments, which have already been completed for some reservoir options as part of our adaptive planning process. We only undertake these assessments at site selection stage and not for all the options considered in the WRMP process. We have updated the narrative in our revised dWRMP to include flood risk assessments as well as geotechnical investigations.	Revised dWRMP - Chapter 7 (Section 7.4.3)
21	Canal & River Trust	Having reviewed the Anglian Water dWRMP19 we are encouraged that canal transfer schemes have been assessed as feasible options. However, in our opinion there are unexplained discrepancies in the cost information provided and the assumed yields on the proposed canal schemes.  We also believe that investment into canal schemes will allow the waterways to contribute fully in delivering significant social and economic outcomes and this should be included in Anglian Water's assessment of all feasible options. This will ensure their customers, regulators and stakeholders have greater transparency on future supply and demand investment decisions.	The differences in costs are those associated with our subsequent actions including abstraction, pumping, pre-treatment etc.  In terms of the yield benefit of options, the canal transfers are limited by storage availability and network constrains within Ruthamford. We have sufficient treatment capacity in Ruthamford North and therefore we would be using such a transfer to maintain storage levels. Whilst the Trust is welcome to submit proposals for a smaller transfer this may give yet smaller benefits because there is a non-linear relationship between additional transfers and Water Resource System deployable output.  In addition, we would require assurances about the reliability of the yields offered, particularly with reference to severe droughts.	Technical documents: Supply-side Option Development
22	Canal & River Trust	We also understand that Anglian Water have calculated social and environmental costs or benefits associated with any of the supply-demand options, to inform their preferred plan. Anglian Water have provided a consolidated breakdown of these costs, but it is not clear how benefits are calculated, if at all. We feel that this lack of clarity has the potential to disadvantage proposed canal schemes.  It is widely recognised that vibrant waterways significantly contribute to economic development, social welfare, wellbeing, environmental enhancement and community benefit. By excluding these positive impacts in their assessments, Anglian Water are not reflecting the full value of canal transfers in their draft plan.	We have calculated a number of social and environmental costs and benefits as part of our appraisal process.  We welcome further information from the Trust on benefits specific to waterways.	n/a

23	Canal & River Trust	We were pleased to see that both canal schemes were deemed technically and environmentally feasible by Anglian Water (referenced above), but disappointed that neither of the schemes are proposed in their preferred plan.	The yield benefits of the canal options are limited and the total costs are relatively higher than the options selected in our Preferred Plan.  In addition, we would require assurances about the reliability of the yields offered, particularly with reference to severe droughts.	n/a
24	Canal & River Trust	When analysing the detail within the plan, the following questions are raised: 1. Why is there a significant increase in the assessed schemes Capex and Opex compared to those originally proposed by the Trust?  2. Why is there a difference in the option benefit (Ml/d) to those originally proposed by the Trust?	The differences in costs are those associated with our subsequent actions including abstraction, pumping, pre-treatment etc.  In terms of the yield benefit of options, the canal transfers are limited by storage availability and network constrains within Ruthamford. We have sufficient treatment capacity in Ruthamford North and therefore we would be using such a transfer to maintain storage levels. Whilst the Trust is welcome to submit proposals for a smaller transfer that this may give yet smaller benefits because there is a non-linear relationship between additional transfers and Water Resource System deployable output.	Technical documents: Supply-side Option Development
25	Canal & River Trust	There is a significant difference in the Capex and Opex figures in the Market Information tables from those originally proposed by the Trust for these schemes which is shown by the estimated increase in AIC. There is no clarity or explanation for this variance within the draft plan and can only assume the it is due to Anglian Water treatment and distribution costs but are not certain.  The Trust would like greater transparency on how these schemes have been assessed to ensure that the optimum supply solutions are developed for Anglian Waters customers.	The Market Information tables represent the whole life costs of the options, taking into account factors such as asset renewal and on-going operational costs; in contrast the WRZ summaries document provides initial, in-year or annual costs only.	Technical documents: Supply-side Option Development
26	Canal & River Trust	Since publishing their dWRMP19, Anglian Water have informed the Trust that the options benefit of 4.6 Ml/d was used for both schemes as defined by the deployable output gain from Pitsford reservoir. If Anglian Water had informed the Trust of this requirement earlier, we would not have proposed the two previously mentioned schemes. The Trust will now develop a costing summary for a 5 Ml/d canal transfer to the Ruthamford WRZ and would like assurances from Anglian Water that this will be evaluated fairly and consistently against other supply options.	In terms of the yield benefit of options, the canal transfers are limited by storage availability and network constrains within Ruthamford. We have sufficient treatment capacity in Ruthamford North and therefore we would be using such a transfer to maintain storage levels. Whilst the Trust is welcome to submit proposals for a smaller transfer this may give yet smaller benefits because there is a non-linear relationship between additional transfers and Water Resource System deployable output.  In addition, we would require assurances about the reliability of the yields offered, particularly with reference to severe droughts.	Technical documents: Supply-side Option Development
27	Canal & River Trust	Whilst the Trust are supportive of their inclusive approach, we will require reassurance that the proposed canal schemes have been assessed fairly and consistently with other supply options.  The Trust would like Anglian Water to consider the following summarised key points in preparation of their revised draft and final plans: - Inclusion of quantified social and environmental costs and benefits for all feasible schemes; - Provide greater cost transparency on the assessment of canal schemes and the assumptions made, ensuring that the optimum supply solutions are developed for Anglian Water customers; and - Provide assurances that a Trust proposal for a 5 Ml/d variant to RTN9 and RTN10 options will be assessed and evaluated consistently against other supply options.	See the responses to the specific Canal and River Trust comments.	n/a

28	Central Bedfordshire Council	<p>We would seek the inclusion of wording in the WRMP offering strong support for Local Plan policies which require the higher water efficiency standard as a means to reduce demand.</p> <p>The Council's Submission Local Plan includes a Climate Change and Sustainability policy which supports minimising water usage through high water efficiency standards (110 litres per person per day) and seeks a water sensitive approach to the design of all new developments.</p>	<p>Changes to Local planning efficiency standards (reducing current stipulations from 125l/h/d to 110l/h/d and below), designed to increase efficiency are actively supported and encouraged.</p> <p>We monitor the current status Local Authorities 'design efficiency standards', across the region. as detailed in the revised Demand Management Strategy Report.</p> <p>We are also looking to encourage developers to investigate the potential for grey/black water reuse, with incentives being considered.</p>	Technical documents: Demand Management Strategy (Section 5.4.3)
29	Central Bedfordshire Council	Central Bedfordshire Council support the twin track approach to mitigate supply-demand risk and the prioritisation of demand management through the installation of smart meters and the reduction in leakage, over increasing supply.	This approach remains the same in our revised dWRMP.	n/a
30	CPRE Norfolk	It should be mentioned that another change in the draft Plan is to re-define the areas of the existing Water Resource Zones; but while the maps mentioned above [map at Figures 1.8, 1.9] delineate the new boundaries, they are not labelled on these or elsewhere.	We have provided a new chapter (3) on Water Resource Zone integrity and a comprehensive map (Figure 3.3) and table (3.1) describing the changes.	Revised dWRMP - Chapter 3
31	CPRE Norfolk	<p>We note that with the demand management measures in the preferred Plan AW is confident to more than satisfy the planned growth; and this approach is both sensible and appropriate.</p> <p>We add however that AW should continue to track housing delivery, and that any continuing shortfall in delivery could offer some flexibility for other related uses.</p>	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
32	CPRE Norfolk	So in summary, CPRE Norfolk strongly supports Anglian Water in their approach to prioritise demand management of water resource.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.	Technical documents: Demand Management Strategy
33	CPRE Norfolk	<p>There should be no exemptions to metering.</p> <p>There is a need to start this approach with AMP7, the upcoming business plan for 2020-2025; but if not then, in the following five years. The introduction could come in the form of a pilot scheme in a county; we say county because that has more public recognition in progressing a scheme. Further we suggest that Norfolk is a strong contender for implementing a pilot scheme as it faces the whole spectrum of challenges, and we suggest the greatest public awareness on the issues.</p>	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
34	CPRE Norfolk	<p>CPRE Norfolk strongly supports the retention unchanged of the WFD, as do many organisations, albeit there may be pressures to weaken as being unnecessary red tape. But the Plan has to assume that they remain.</p> <p>In summary then, in response to Q4, CPRE Norfolk considers that the investment proofing for sustainability reduction is integral to the Plan requirements, and is not an additional option.</p>	<p>Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP3 and the capping of all groundwater licences to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025.</p> <p>We will continue to investigate the potential for further sustainability reductions as part of our adaptive planning.</p>	Revised dWRMP - Chapter 7
35	CPRE Norfolk	Drought proofing should also be taken as an integral part of the Plan. This is something the public would want and expect; and should remove pressure from the public and politicians that river flows, wildlife and landscapes should take the 'knock' in a drought event.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7

36	CPRE Norfolk	<p>There is a case for deferring climate change work as stated above to 2029-30. It would allow Anglian Water to incorporate the UK Climate Projections 2018 which are to be launched formally in November 2018. Deferring climate changes impacts however increase the risks (including rota-cuts and standpipes) in the short term compared to the preferred strategy.</p> <p>CPRE Norfolk suggest that there is a fine balance here, but delay should lead to a better and more effective long term Plan, with better data and less uncertainty, and this should be given due weight.</p>	<p>Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).</p> <p>We will review the UK Climate Change Projections 2018 during our preparations for WRMP 2024.</p>	Technical documents: Supply Forecast
37	East Suffolk Council	The SGPB therefore endorses Anglian Water's approach to using local plans as the most comprehensive source documents, supported by significant analysis, and these should continue to be used to inform investment proposals by infrastructure providers.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
38	East Suffolk Council	We note that 2 of the 7 water resource zones (out of a total of 28 WRZs) that are expected to face large deficits in supply from 2020 onwards are in Suffolk (Bury Haverhill WRZ & East Suffolk WRZ). As a result, while an overall demand management approach can be taken, Anglian Water must continue to prioritise investment in securing supply particularly in those areas that have already been identified as having an imbalance. We welcome the two supply side transfer initiatives that are proposed (BHV5 & ESU8) for these WRZs.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years.	n/a
39	East Suffolk Council	As a predominately public sector board we do not have a view on compulsory metering.	n/a	n/a
40	East Suffolk Council	It would be useful to compare this increased cost to the worst case future investment requirement if this £88m is not invested in the short term (by 2025) – i.e. in the short term there is a savings of 14% per customer but over the longer term this could increase to x% additional cost.	<p>Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP3 and the capping of all groundwater licences to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025.</p> <p>We will continue to investigate the potential for further sustainability reductions as part of our adaptive planning.</p>	Revised dWRMP - Chapter 6
41	East Suffolk Council	This question relates to the balance of demand and supply side measures that are proposed by Anglian Water and the associated costs to the customer. The SGPB, as a predominately public sector board, is keen to ensure that Anglian Water explore all opportunities to ensure all customers receive the highest level of service at a competitive cost.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
42	East Suffolk Council	<p>While the SGPB recognise the merits in delaying investment in specific climate change measures to await further evidence collection and analysis, we would not want to see prohibitive restrictions, e.g. rota-cuts &amp; standpipes, implemented should we face a water shortfall in the six year period (2019-2025). Based on the data presented in the report the overall capex saving of £300m equates to a per customer saving of £6.10p.a. or £36.60 over the six year period of delay.</p> <p>Should we face a severe drought and water is cut off, particularly to rural areas, is the cost, both financial and non-financial in terms of disruption and public hygiene, likely to be more than £36.60 per household?</p>	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6



43	Environment Agency	<p>Recommendation 1 - The company should produce a new truly resilient long term strategic plan, that ensures climate change, time limited licences and other risks are incorporated</p> <p>There are a number of specific risks and uncertainties identified throughout this plan which affect the supply-demand balance and, in combination, could lead to deficits, both in the initial part of the plan and in the longer term. Whilst identified elsewhere in this report, these issues have been drawn together in an over-arching recommendation. References to the issues elsewhere in this report containing supporting detail have been included so the detail is not duplicated.</p>	<p>We have produced a revised plan that addresses all key risks. Details are provided in response to specific points.</p>	<p>Revised dWRMP - Chapter 2, 6 and 7</p> <p>Technical documents: Supply Forecast, and Sustainable Abstraction</p>
44	Environment Agency	<p>The company should demonstrate its best understanding of the supply demand balance through the full planning horizon. The company should produce a revised plan that:</p> <ul style="list-style-type: none"> <li>- includes the impact of climate change impacts from the beginning of the planning period</li> <li>- include the risk associated with renewals of time limited licences on more restrictive terms</li> <li>- delivers all measures required by the WINEP and to meet existing obligations</li> <li>- ensures transfers are consistent with neighbouring companies</li> <li>- ensures deployable output is correct.</li> </ul> <p>It is possible that the improved methods the company has adopted for this plan have resulted in deficits which previously did not exist. Where these deficits occur in the initial years of the plan, they may be difficult to resolve and the company should identify these clearly and outline its approach to close the deficits as quickly as possible.</p>	<p>We have now incorporated these risks into the first five years of the planning period. In summary:</p> <ul style="list-style-type: none"> <li>- climate change has been brought forward to 2020/21</li> <li>- time limited licence reductions have now been considered in 2022 in the main plan, rather than in our Adaptive Plan scenario in AMP8, along with a cap to all groundwater sources to reflect the future licence changes these are likely to experience</li> <li>- current modelling suggests the full Hall yield is resilient to a 1 in 100 year event. This Water Resource Zone only becomes resilient to a 1 in 200 year drought event after investment in 2024</li> <li>- we have engaged with detailed discussions with our neighbouring water companies to agree final trading numbers</li> <li>- these changes have all been represented in our Aquator system model and deployable output recalculated for all scenarios. comment on differences between old and new DO method = small</li> <li>- we have identified residual supply-demand deficit in South Essex and Ruthamford South and we have sought to manage this through short term solutions. This is discussed in chapter 6.</li> </ul>	<p>Revised dWRMP - Chapter 2, 6 and 7</p> <p>Technical documents: Supply Forecast, and Sustainable Abstraction</p>
45	Environment Agency	<p>R1.2 Risk of supply demand deficits due to on-going uncertainty</p> <p>A number of key uncertainties remain in deliverability of schemes and options. These include:</p> <ul style="list-style-type: none"> <li>• suitable timescales are allowed for the development of strategic options (see Recommendation 3)</li> </ul>	<p>The deliverability of options is assessed as part of the options appraisal process as detailed in the Supply Option Development and Demand Management Strategy supporting technical documents.</p>	<p>Revised dWRMP - Chapter 7</p>

46	Environment Agency	<p>R1.2 Risk of supply demand deficits due to on-going uncertainty</p> <p>A number of key uncertainties remain in deliverability of schemes and options. These include:</p> <ul style="list-style-type: none"> <li>• considering risk that the demand and leakage management strategy will not deliver savings as planned (see Recommendation 3, Improvement 7)</li> </ul>	<p>Additional detail has now been included regarding the leakage savings found in the smart meter trials, along with those expected from other leakage interventions.</p> <p>Further scenario testing (with reduced demand management reductions) has been conducted and described in the Demand Management Strategy Report.</p> <p>Risks and issues have been identified and the plan will be progressed, with metrics identified and continuous monitoring strategies in place, such that alternate mitigations can be enacted if expected savings do not materialise.</p>	<p>Technical documents: Demand Management Strategy</p>
47	Environment Agency	<p>The company should complete work identified as part of the specified recommendations and improvements to consider risks of implementation of options. The company should produce one plan to address these risks and uncertainties to provide confidence in security of supplies and clarity to regulators and stakeholders.</p>	<p>The deliverability of options is assessed as part of the options appraisal process as detailed in the Supply Option Development and Demand Management Strategy technical documents.</p> <p>In addition, we have considered risks associated with the demand management options by stress testing our preferred plan using lower levels of demand (-15% and -30%).</p>	<p>Revised dWRMP - Chapter 6 and 7</p>
48	Environment Agency	<p>R1.2 Risk of supply demand deficits due to ongoing uncertainty</p> <p>A number of key uncertainties remain in deliverability of schemes and options. These include:</p> <ul style="list-style-type: none"> <li>• the scale of the problems the company faces and what is driving them (Improvement 1).</li> </ul>	<p>We have undertaken further work to quantify uncertainty and risk. We have updated the assessment of the challenges we face in light of the consultation.</p>	<p>Revised dWRMP - Chapter 2</p>
49	Environment Agency	<p>R 2.1 Overriding of scaling equation delays investment</p> <p>The company has adopted the Environment Agency scaling equation as outlined in the supplementary note but has amended the glide path so that all climate change impacts are delayed until 2024/25. The company has undertaken this to allow choice between supply / demand balance options. The company is also consulting with customers about extending the deferral to 2030.</p> <p>Anglian Water should not hide potential deficits in resource zones by moving the impacts of climate change. The company must include the impacts of climate change as set out in the guidance and ensure it has options to cope with them. If it does not, it will need to tell its customers and change the planned level of service.</p>	<p>Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30. Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards but for our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).</p> <p>By including climate change impacts from the start of the planning period, we do not have sufficient time to invest in Ruthamford South. As a result we are reporting a supply-demand deficit in the first four years of AMP7. We have sought to manage this risk through preparation for a Drought Permit application. This is discussed in chapter 6.</p>	<p>Revised dWRMP - Chapter 2 and 6</p> <p>Technical documents: Supply Forecast</p>
50	Environment Agency	<p>R2.2 Complete modelling of all selected climate change projections</p> <p>Whilst considerable climate change work has been undertaken by the company, much of this is undertaken using its previous source works models and only limited work appears to have been implemented within Aquator. Of the 33 climate change projections previously modelled, 5 have been selected for modelling within Aquator, including a single projection representing the best estimate and a further two "high" and two "low" scenarios to inform uncertainty.</p>	<p>In order to assess the climate change scenarios in the most efficient manner, all 33 were run through our rainfall-runoff models and groundwater models to assess impact on surface water and groundwater yields respectively. This allowed a representative selection of scenarios to be identified for use in the Aquator DO impact assessment.</p>	<p>Technical documents: Supply Forecast</p>

51	Environment Agency	The company should run the full range of climate change projections for the appropriate tier through its baseline model and select the most appropriate projection from outputs as the best estimate. This will also allow greater definition of uncertainty for use within headroom.	We believe that it is adequate to select the best estimate and headroom runs on the basis of the climate change projections and the modelling of the impact on yield (e.g. in rainfall-runoff models). In addition, we have reviewed the results of the WRE simulator modelling. Running all of the climate change projections through AQUATOR would be very time consuming and would not provide much additional information especially as projections often overlap.	Technical documents: Supply Forecast
52	Environment Agency	R2.3 Choice of climate change tier in context of problem characterisation  The company has adopted a tier 2 approach to climate change assessment, but on the basis of a pilot study making a comparison with tier 3 in a sample catchment. The company believes tier 2 to present a greater range of uncertainties than tier 3.  Tier 2 use of spatially coherent projections has been adopted company-wide for all climate change work.  The company has undertaken a tier 2 approach, informed by a tier 3 assessment. This is not fully compliant with the guidance.  The company should present further evidence and justification should it wish to continue with its adopted tier 2 approach, albeit supported by the pilot study, to confirm this is suitable for the whole company area.	We have updated the Supply Forecast technical document to provide further justification for Tier 2 application.	Technical documents: Supply Forecast
53	Environment Agency	R2.4 Outline how climate change projections inform headroom distribution of uncertainty.  There is little information on how the selected climate change projections have been used to represent uncertainty within headroom.  The headroom assessment lacks clarity as it is poorly documented.	We explored a number of potential candidates from among the Spatially Coherent Projections for high and low projections to inform the headroom distribution. We selected High 10 and Low 4. Full details of the volumetric impacts are provided in the Managing Uncertainty and Risk supporting technical report.	Technical documents: Managing Uncertainty and Risk
54	Environment Agency	Representation of climate change uncertainties within headroom should be fully presented. This should build upon the completion of the work identified in Recommendation 1 above.	We explored a number of potential candidates from among the Spatially Coherent Projections for high and low projections to inform the headroom distribution. We selected High 10 and Low 4. Full details of the volumetric impacts are provided in the Managing Uncertainty and Risk supporting technical report.	Technical documents: Managing Uncertainty and Risk
55	Environment Agency	The reporting is confused due to the parallel assessments of climate change using the company's old model assessment and new assessment approaches.  There is a lack of clarity in the reporting with the assessment of climate change.  Improve reporting on assessment of climate change	All of the climate change assessments have been carried out using our updated rainfall-runoff models for river flows and groundwater models for groundwater yields, which have then been used in Aquator for DO assessment. This builds on our previous work for the 2014 WRMP. We have updated the reporting of climate change in the revised dWRMP and supporting Supply Forecast technical document to improve the clarity of this explanation.	Revised dWRMP - Chapter 2  Technical documents: Supply Forecast
56	Environment Agency	Recommendation 3: When producing its final plan, the company must clearly demonstrate options are viable and they can be implemented in time (linked to Directions 3(f), and 3(h))	Additional detail has now been provided regarding the assessment of the options, with data to support the current assumptions that inform the options.  Detail regarding the demand strategy rollout and delivery programmes has been included, showing the geographic distribution of smart meter installations; the respective customer cohorts that will be targeted by water efficient measures, and the targeting of leakage programmes.	Technical documents: Demand Management Strategy

57	Environment Agency	R3.1 Direction 3(f)  The company has not presented clear information on the costs of its current metering strategy for optants and change of occupier, which is a continuation of existing company policy, although some of this appears in unpublished detailed costings reports.  The company must present relevant costs for its on-going metering strategy.	Further data regarding the costs of the metering options, the breakdown of the component metering programmes and their rollout have been included in the Revised Demand Management Strategy Report.	Technical documents: Demand Management Strategy (Section 5.2)
58	Environment Agency	In addition the company has not provided a clear comparison of supply options compared to metering and other water demand management options.	We have taken the decision to prioritise demand management options following consultation with our customers and regulators, as described in Chapter 4. As such, we have not directly compared demand and supply options.	Technical documents: Demand Management Strategy
59	Environment Agency	The company must present clear information on the costs of the different metering options and their comparison with alternative options to balance supply and demand.	We have taken the decision to prioritise demand management options following consultation with our customers and regulators, as described in Chapter 4. As such, we have not directly compared demand and supply options.  Additional detail regarding the cost and rollout of the component metering programmes has been detailed in the Demand Management Strategy Report	Technical documents: Demand Management Strategy (Section 6.4.7)
61	Environment Agency	R3.3 Direction 3(h)  The company has not presented clear information on the cost of compulsory metering compared to optant and change of occupier/selective metering. These are presented as current policy without clear costings although some of this appears in unpublished detailed costings reports and an additional note on compulsory metering costs and benefits.	Further data regarding the costs of the metering options, and the breakdown of the component metering programmes, costs, programme delivery and projected savings, has been included in the Revised Demand Management Strategy Report. Option development has been described in greater detail.	Technical documents: Demand Management Strategy (Section 6 (6.4.7))
60	Environment Agency	R3.2 Planned metering installations and water savings  The company has not presented clear information on its planned domestic metering installations and water savings for each aspect of its metering programme and alternative metering options although some of this appears in unpublished detailed costings reports and an additional note on compulsory metering costs and benefits.  The company should present clear information on numbers of households and water savings for each category of domestic metering.	Further data regarding the costs of the metering options and the breakdown of the component metering programmes and rollout has been included in the Revised Demand Management Strategy Report.  Additional detail has been presented regarding cost and saving breakdowns for the preferred plan and the alternate options considered.  Additional detail has been provided regarding savings that have been catalogued from the smart meter trials in Newmarket and Norwich. This data is presented in the revised Demand management Strategy Report	Technical documents: Demand Management Strategy (Section 5 (5.2), Section 6 (6.4), Section 7)
62	Environment Agency	R3.4 Appropriateness of options selected and timing of delivery  The final options selected may not be appropriate as a result of underestimating risk and uncertainties identified in Recommendation 1 and the limitations in the decision making process (see Improvement 1)  Some options may require significant lead times, other options may be required and need to be implemented sooner than currently planned. This undermines confidence that the selected options are a cost effective way of securing public water supplies and protecting the environment and that they will be delivered in a timely way.	We have repeated the options appraisal process including the updated and short-term risks.  Although some options require significant lead times, these are not required in AMP7, and therefore will form part of our adaptive planning process. We have also compared future selection of options with larger storage options to test for redundancy. For further details see the results of our stress testing and long-term runs summarised in chapter 6 and more fully discussed in the Managing Uncertainty and Risk supporting technical report.	Revised dWRMP - Chapter 6  Technical documents: Managing Uncertainty and Risk

63	Environment Agency	<p>R3.5 Sustainability of individual options</p> <p>Some options in either the principal plan or adaptive plan may not be environmentally sustainable, or require further assessment and possible mitigation measures. In particular, Foxcote reservoir recommissioning and some options using river Trent transfers.</p> <p>These options may not be deliverable, or their costs and cost effectiveness may be significantly different.</p>	<p>We have undertaken a thorough feasibility assessment of all of the options included in our EBSD modelling phase, in accordance with the WRP guidelines. The individual options highlighted in this comment no longer appear in our Preferred Plan. As part of our adaptive planning process we will work with the Environment Agency to assess in further detail, where appropriate, the environmental assessments and mitigation required for individual options.</p>	<p>Revised dWRMP - Chapter 5</p> <p>Technical documents: Supply-side Option Development</p>
64	Environment Agency	<p>The company should review its Strategic Environmental Assessment (SEA) (see also Recommendation 7) and undertake further work to assess the sustainability of these options and review its option selection for the final plan. This should include full appraisal of mitigation measures, water quality impacts and invasive and non-native species impacts.</p>	<p>The selection of options for the revised draft plan used the Economics of Balancing Supply and Demand (EBSD) methodology to identify the lowest overall cost, or 'least cost' solution, to meet the supply demand deficit. This least cost plan was further developed into a best value plan which takes account of a wider range of factors such as environmental impacts of programmes, resilience, customer preferences, in addition to cost.</p> <p>The revised dWRMP is likely to have a number of positive effects on delivering reliable and sustainable water supplies that are flexible to cope with future growth. Positive effects identified include: increased availability and resilience of water supplies for human use; increased availability of water within the natural environment thus increasing resilience, benefiting water dependant ecological sites and maintaining an attractive natural landscape; reducing the need for future water supply infrastructure; and allowing customers to understand their water usage.</p> <p>Where negative effects were identified in the options assessment, these have been mitigated through the options design process where possible, by re-routing pipelines or using directional drilling under sensitive sites and rivers or investigated further through the HRA and WFD processes. The use of best practice construction methods will also be utilised to minimise any effects during the construction phase. Minor negative effects remain for one option due to the predicted moderate effects on WFD objectives. Where effects relating to greenhouse gas emissions were known, all options had minor negative effects apart from three options where major negative effects were identified. Use of renewable energy technologies could help to reduce effects.</p> <p>We are committed to delivering the required mitigation to deliver the options defined in the Preferred Plan.</p>	<p>Technical documents: SEA report</p>

65	Environment Agency	<p>R3.6 Environmental costs and benefits</p> <p>There appears to be limited quantification of environmental costs and benefits in relation to the scale of the problem. It is unclear what has influenced social and environmental costs in the differences between Average Incremental Costs (AIC) and Average Incremental Social Costs (AISC) in the planning tables.</p> <p>The company should review and provide clearer explanation of what these costs and benefits are and how they have been derived alongside a review and clear explanation of the role of SEA and environmental appraisal in the final option selection.</p>	<p>We have undertaken a thorough assessment of Environmental and Social impacts, following the 'building blocks' approach proposed in the WRP Guidance. The SEA (informed by the Habitats Regulations Assessment (HRA), WFD assessment and Invasive Non-Native Species (INNS) assessment) provided qualitative and semi-quantitative assessments of the environmental and social effects at a detailed level. We have also undertaken a qualitative Ecosystems Service Assessment (ESA) to complement the SEA. We considered the use of environmental valuation (using a monetised Ecosystems Services Approach). However, the absence of an agreed methodology and a lack of data means that currently, only certain environmental and social effects can be costed, thereby leading to a partial assessment. The only exception is carbon, which we have monetised and included in the AISC calculations.</p> <p>We have made improvements to the description of our final option selection process including how we have used a multi-criteria approach (including environmental costs and benefits).</p>	<p>For a high level description of our multi-criteria assessment approach see Chapter 5 of the revised dWRMP.</p> <p>Supply Option Development supporting technical document (appendices), and Demand Management Strategy supporting technical document (appendices)</p>
66	Environment Agency	<p>R3.7 Lack of detail on feasibility studies and economic analysis of supply options</p> <p>The company has referenced but not provided detailed feasibility studies and economic analyses for the development of supply options used in the options appraisal.</p> <p>This has made audit by regulators difficult and reduced confidence that the proposed options will deliver secure supplies in a timely way and will protect the environment.</p>	<p>We have provided all the feasibility studies requested to the Environment Agency to accompany the draft WRMP. The full suite of studies that have been updated for the revised draft WRMP will be available.</p>	<p>Technical documents: Supply-side Option Development</p>
67	Environment Agency	<p>The company should provide detailed feasibility studies of selected options as part of its plan along with sufficient information on economic appraisal to allow the costs to be audited.</p>	<p>The full suite of feasibility studies that have been updated for the revised draft WRMP will be available.</p>	<p>Technical documents: Supply-side Option Development</p>

68	Environment Agency	<p>R3.8 Improved level of service</p> <p>The company has liaised with its customers and has presented support for adopting improved levels of service for moving to no emergency drought orders in a 1:200 event. However, the company has not fully completed its assessment of the economic benefits of undertaking this change to levels of service. Reference is made to further work by economic consultants, however this report is not yet complete and a draft was not available for review as part of this audit.</p> <p>The company has not presented the full economic case for improving its levels of service.</p> <p>To complete this work, the company should present the full economic argument in support of moving to a better level of service. This should be supported by the external consultant's report when complete.</p>	<p>We have now completed the assessment of the economic benefits of moving to an improved level of service. Our proposed investments are cost-beneficial. We will provide our consultant's report to our regulators.</p>	<p>See report on Huddle</p>
69	Environment Agency	<p>Some options within Table WRP5 for dWRMP19 have missing AIC and AISC cost values or zero values. Presentation of feasible and preferred options between Tables 5 and 6 unclear/missing information.</p> <p>Stakeholders cannot understand the costs of options. There is a lack of clarity on whether final choice of options is cost effective.</p> <p>The AIC/AISC values for smart metering, supply pipe repairs and water efficiency options are very low (&lt;1p/m3). Some option type costs appear to have changed substantially between WRMP14 and dWRMP19 (e.g. effluent re-use, desalination) and it is unclear why.</p>	<p>We have completed all costs information in the WRP tables allowing the AIC and AISCs to be calculated. The AIC/AISC values for the demand management options have been updated.</p> <p>We have included an explanation as to differences in cost and scope between options that featured in the WRMP 2014 and WRMP 2019 in the Supply-Side Options Development report.</p>	<p>Technical documents: Supply-side Option Development</p>
70	Environment Agency	<p>Recommendation 4: The company should protect the environment and invest in new solutions where changes cause a deficit or reduce resilience</p>	<p>We have planned for all water resources related environmental obligations listed in the WINEP, including the closure of our Ludham source in 2021. The timing of impacts are aligned to meet obligation dates, as well as the renewal dates of our time-limited licences, and risks associated with possible changes to permanent and time-limited licences to prevent deterioration. As a result, we are investing in supply-side options to address sustainability reductions, as well as a significant number of agreed environmental mitigation options.</p>	<p>Revised dWRMP - Chapter 2 and 6</p> <p>Technical documents: Sustainable Abstraction</p>
71	Environment Agency	<p>R4.1 Time limited licence renewals and no deterioration</p> <p>The company has a significant number of time limited licences which are due for renewal on 31 December 2022. The renewal is expected to be on more restrictive terms to prevent deterioration in Water Framework Directive (WFD) waterbody status. The company has made some allowance for this in its adaptive plan, but the timing and quantities may be earlier and larger than it is planning.</p>	<p>We have committed to maintaining all of our groundwater abstractions below recent historical abstraction rates in order to eliminate the risk of WFD deterioration. To reflect this, we have assessed the impact of sustainability changes on all groundwater sources in 2022 in our Preferred Plan, rather than in AMP8 as detailed in our dWRMP Adaptive Plan scenario.</p>	<p>Revised dWRMP - Chapter 2 and 7</p> <p>Technical Documents: Supply Forecast, and Sustainable Abstraction</p>

72	Environment Agency	<p>The company should revise its plan to include details of which resource zones are at risk from more restrictive time limited licences and provide evidence to show how it will bring forward options from the adaptive plan if needed to maintain security of supply.</p> <p>The company should confirm how sustainability change scenarios have been derived and what mitigation it will put in place to prevent deterioration in WFD water body status whilst it develops long term solutions.</p> <p>It should complete a scenario with all groundwater licences (time limited and permanent) capped towards recent actual abstraction where increased abstraction risks causing deterioration in waterbody status.</p>	<p>We have committed to maintaining all of our groundwater abstractions below recent historical abstraction rates in order to manage the risk of WFD deterioration. To reflect this, we have assessed the impact of sustainability changes on all groundwater sources in 2022 in our Preferred Plan, rather than in AMP8 as detailed in our dWRMP Adaptive Plan scenario.</p>	<p>Revised dWRMP - Chapter 2</p> <p>Technical documents: Supply Forecast, and Sustainable Abstraction</p>
73	Environment Agency	<p>R4.2 Impacts of sustainability issues in neighbouring companies</p> <p>It is uncertain how Anglian Water's plan may be affected by sustainability issues in neighbouring companies' plans (Affinity Water, Cambridge Water and South Staffs Water and Severn Trent Water).</p> <p>Anglian Water should work with neighbouring water companies to confirm the impact of the latest version on WINEP and on their plans and if this affects options for transfers and trading water. The company should show how it will bring forward options from the adaptive plan if needed to maintain security of supply.</p>	<p>We have worked closely with our neighbouring water companies and the Environment Agency in the preparation of our revised dWRMP to confirm the impact of sustainability issues both on our own plan, and on neighbouring plans. These discussions have focussed on our existing trading agreements with Affinity Water, and the potential for a future trading agreement. We will continue to work with Affinity Water and Essex and Suffolk Water to deliver the required WINEP improvements in the Brett Catchment.</p> <p>Our adaptive planning approach demonstrates how we are investing to develop new resource options now to ensure they are ready for future delivery, should they be required. These options will be available should the need arise to support neighbouring companies in the future.</p>	<p>Revised dWRMP - Chapter 7 and 8</p>
74	Environment Agency	<p>R4.3 Deliverability of Water Industry National Environment Programme (WINEP) mitigation options</p> <p>The company has assumed options identified to deliver sustainability changes identified in the WINEP will provide full benefits, but work is still on-going to confirm the feasibility of the options.</p> <p>The company states that other options will need to be brought forward. However it does not provide further explanation of how or what may be done if its preferred options do not deliver the required benefits.</p> <p>Sustainability changes may have a greater impact on the plan than anticipated. The company may need to bring forward options in its adaptive plan sooner than it currently intends. If these options cannot be brought forward security of supply will be at risk.</p>	<p>In our dWRMP we stated that we were still in discussions with the Environment Agency regarding the WINEP mitigation options and that there may be some refinement to the final option set in time for the revised dWRMP. However, we had planned for the perceived worst case sustainability changes and hence there was a low risk that the impact upon our supply forecast would increase.</p> <p>All mitigation options have now been confirmed and agreed with the Environment Agency. There was no increase in the impact on the plan since the dWRMP. However, some detail remains to be confirmed for 2 schemes:</p> <ul style="list-style-type: none"> <li>• Kennet-Lee Brook river support: The final flow volume of the river support option, as well as the source of water for the support, is still in discussion with the Environment Agency. However, the sustainability change is confirmed, as is the restoration scheme.</li> <li>• Tiffey: Selection of the waterbody to receive river support is not yet complete. However, the sustainability change is confirmed.</li> </ul> <p>For the Bumpstead Brook, we have removed the option to relocate our source due to uncertainties over its feasibility. Whilst we are still investigating the feasibility of the source relocation option, we are now instead planning for a supply-side solution for the closure of the source to account for this uncertainty.</p> <p>In some cases, there is uncertainty over whether or not the solution will deliver the full benefits required, and as such, there is a potential need for additional mitigation options in AMP8. Where this is the case, schemes will be implemented in the early stages of the AMP to allow for the review of need before WRMP 2024.</p>	<p>Revised dWRMP - Chapter 2 and 7</p> <p>Technical documents: Sustainable Abstraction</p>



75	Environment Agency	The company should ensure its final plan includes all measures needed to deliver the WINEP and ensure security of supply.	We have planned for all water resources related measures listed in the WINEP, and included investment in supply-side options, demand management options, and mitigation options in order to maintain the security of supply	Revised dWRMP - Chapter 2  Technical documents: Sustainable Abstraction
76	Environment Agency	R4.4 Delivery of existing environmental obligations  The company has an obligation to deliver a further sustainability change at its Ludham-Catfield source to meet the deadline set out in the River Basin Management Plan (March 2021) and under the Habitats Regulations. We note that the company does commit to delivering this change as soon as possible within the first 5 years of the plan (Technical report – sustainable abstraction s3.2), but the full sustainability change is not scheduled until 2024 in the company’s planning tables (Happisburgh water resource zone).  The company risks failing to deliver its obligations under the Habitats Regulations.  The company needs to make the required sustainability change at its Ludham-Catfield source as soon as possible to meet our request to achieve the 2021 deadline as set out in the River Basin Management Plan and deliver its obligations under the Habitats Regulations.	Anglian Water is committed to meeting Habitat Regulation Directive requirements. Our revised dWRMP has been corrected to reflect the March 2021 obligation date for the closure of our Ludham source.	Revised dWRMP - Chapter 2  Technical documents: Sustainable Abstraction
77	Environment Agency	R4.5 Completion of Habitats Regulatory Assessment for all sites  Habitats Regulations Assessments have not been completed for all relevant sites (Humber and Wash European designated sites for options supported by abstraction from the Trent and Witham).  Impacts on internationally designated features of the environment have not been assessed. These may affect viability of the options or mean further measures must be considered to ensure the options are sustainable.  Habitats Regulations Assessments must include all relevant sites (Humber and Wash for options supported by abstraction from the Trent and Witham)	For the WRMP 2019 (BVP), LCP and the adaptive planning strategies; all options that include abstraction from the River Witham or the River Trent have been revisited to ensure any impacts on the Humber and the Wash have been identified appropriately. Where applicable, updated assessments have been included in the final HRA reports.  For the two desalination options (ESU1 - Felixstowe and NFN1 – Kings Lynn), the level of detail of the plan does not allow detailed consideration of effects on individual European sites and it has been concluded that the effects of the impacts identified during operation (i.e. potential increase in salinity as a result of brine discharge) will need to be explored further in order to demonstrate that the integrity of European sites will not be significantly adversely affected. This includes potential impacts on the Wash from the Kings Lynn desalination option. At this strategic level however, the assessment undertaken still allows confidence that the option could go ahead without harm to European sites, subject to more detailed scrutiny of mitigation options at the lower tier plan or project level and potential mitigation for this adverse effect has been recommended regardless. It is reasonably assumed that as these options are further developed, and the specifics of brine discharge within the options is fully understood; assessment at lower tier plan or project level HRA will result in appropriate mitigation being developed to ensure desalination options result in no significant adverse effects on the integrity of the European sites identified.	Technical documents: HRA report
78	Environment Agency	Recommendation 5: Demonstrate that transfers of water between Anglian Water and neighbouring companies have been presented consistently between plans	We have worked hard between dWRMP and revised dWRMP to improve the alignment between water company plans and specifically how existing agreements are presented. We are confident that there is now full alignment between our plans.	Revised dWRMP - Chapter 1

79	Environment Agency	<p>R5.1 Affinity Water transfer</p> <p>The company has presented the export to Affinity Water in both the principal and adaptive plans. There are some discrepancies in the timing and volume of this transfer between Anglian Water and Affinity Water's plans. Affinity Water may require more water sooner. There are also differences in the way in which uncertainty in this transfer has been considered.</p> <p>This uncertainty presents a risk to Anglian Water's supply demand balance if a significant additional export is required. Alternately if Anglian Water cannot provide it in the quantities and timing required by Affinity Water then there is a risk to Affinity Water's supply demand balance.</p>	<p>We are continuing to work closely with Affinity Water to understand their future trading requirements. We do not include an export to Affinity in our revised dWRMP Preferred Plan.</p> <p>However, we have considered a potential future export to Affinity in our stress testing, to ensure that we are able to adapt our Preferred Plan to meet future need which are currently uncertain.</p>	<p>Revised dWRMP - Chapter 7</p> <p>Technical documents: Managing Uncertainty and Risk</p>
80	Environment Agency	<p>Anglian Water should work closely with Affinity Water prior to the preparation of the revised dWRMP to ensure that options reliant on neighbouring companies are valid.</p>	<p>We have held several meetings with Affinity Water whilst preparing our revised dWRMP and we are now confident that our plans are aligned.</p>	
81	Environment Agency	<p>R5.2 Severn Trent Water transfer</p> <p>The company's preferred programme of measures to address deficits in its Ruthamford North zone includes a 36MI/d import from Severn Trent Water. The import is scheduled to start in 2030/31 at a rate of around 25MI/d increasing to 36MI/d by 2039/40. However, this transfer is not reflected in Severn Trent Water's planning tables.</p> <p>The company should clarify this new transfer with Severn Trent Water and report any exports through the relevant planning tables.</p>	<p>We have worked with Severn Trent Water in preparing our revised dWRMP to ensure the options included are the most up to date available. The option referred to in this comment does not appear in our revised dWRMP Preferred Plan.</p> <p>We will continue to work closely with Severn Trent Water via Water Resources East and the Trent Working Group in our adaptive planning and preparations for WRMP 2024.</p>	<p>Revised dWRMP - Chapter 6</p>
82	Environment Agency	<p>R5.3 Consistent results with other water company</p> <p>There are some minor discrepancies between recipient and donor water companies including timing of change of amended share of Ardleigh with Affinity Water.</p> <p>It is also expected that future deployable output estimates from Grafham and Ardleigh will also change with new levels of service.</p>	<p>We have liaised with Affinity Water to agree the share of Ardleigh and we are continuing discussions regarding management of short-terms risks in the area.</p> <p>We are not altering the deployable output estimate at Grafham because the design event has been assessed as being consistent with the revised levels of service; at Ardleigh the stochastic analysis of severe drought indicates that there would be no change to deployable output for the South Essex WRZ.</p>	
83	Environment Agency	<p>Anglian Water should liaise with its neighbours to ensure the latest transfers are used consistently and that any updates to deployable output are shared with the receiving companies.</p>	<p>We have worked hard between dWRMP and revised dWRMP to improve the alignment between water company plans and specifically how existing agreements are presented. We are confident that there is now full alignment between our plans.</p>	

84	Environment Agency	<p>R6.1 Hall source works deployable output is overestimated in the plan to 2024</p> <p>The company's Hall source works is reported to have a deployable output of 20MI/d, falling to around 4.5 MI/d in 2025 when a 1:200 year level of service is adopted. However, if 1976 is excluded from the analysis (as it is considered to be outside of the current level of service), the yield would be just under 8MI/d.</p> <p>This issue contributes to Recommendation 1 with regard to potential for deficits in the initial years of the planning period</p> <p>Deployable output for years up to 2025 for the Central Lincolnshire water resource zone (WRZ) is over estimated by around 12 MI/d. This could mean levels of service are currently over stated and options to address any deficits are not being brought forward quickly enough.</p>	<p>Current modelling suggests the full Hall yield is resilient to a 1 in 100 year event, based on rainfall return period analysis of the 2010-11 drought. The yield assessment of Hall is discussed further in the Supply Forecast technical report.</p> <p>With additional drought investment, Central Lincolnshire becomes resilient to a 1 in 200 year drought event in 2024.</p>	Technical documents: Supply Forecast
85	Environment Agency	<p>The company should include the best estimate of Hall source works contribution to WRZ deployable output from the start of the planning period for the current and proposed level of service.</p>	<p>Current modelling suggests the full Hall yield is resilient to a 1 in 100 year event, based on rainfall return period analysis of the 2010-11 drought. The yield assessment of Hall is discussed further in the Supply Forecast technical report.</p>	Technical documents: Supply Forecast
86	Environment Agency	<p>R6.2 The company has not prepared a drought permit for the newly commissioned Hall source works.</p> <p>The company has identified it will need a drought permit to reduce the hands-off flow condition to achieve the full output of the works. Whilst the company has considered the impact of a drought permit to lower the hands-off flow at this site, the permit does not appear in the company's published drought plan. There has been no consultation on the sustainability and feasibility of using such a drought permit as an option to increase supplies.</p>	<p>We are currently engaging with the Environment Agency and Natural England on the proposed Hall intake drought permit and will carry out formal consultation on it as part of the revised Drought Plan 2019. It was not included in the Drought Plan 2014 as the intake was not operational when the plan was written.</p>	
87	Environment Agency	<p>The company should investigate drought permit options and update its drought plan. This work should include establishing a frequency of proposed use of the drought permit aligned with appropriate triggers and complete all necessary work to ensure the permit will not have a significant adverse impact on the environment, including designated sites.</p>	<p>We are currently engaging with the Environment Agency and Natural England on the proposed Hall intake drought permit and will carry out formal consultation on it as part of the revised Drought Plan 2019. It was not included in the Drought Plan 2014 as the intake was not operational when the plan was written.</p>	
88	Environment Agency	<p>R6.3 Justify choice of flows for assessing yield of Hall source works and confirm suitability of artificial influences in adopted flow record.</p> <p>The assessment of reliability of the Hall source works with the current hands-off flow is highly dependent upon the methodology for deriving flows. Using modelled data, the yield is assessed at 4.5 MI/d during the critical year of 1976 though using historic data for the same event, the yield is assessed as around 8MI/d before impacts of climate change are assessed. It is unexpected that for this critical year the modelled flows are lower than the observed flows as the expectation is that there is a greater net import of water into the catchment than contained within the historic record.</p> <p>It is clear from this analysis that small changes in flow when assessed against a specified hands-off flow may have significant impacts on yield.</p>	<p>We agree yield results can be sensitive to small changes in flow and have undertaken further review of the modelled flow series and yield assessment for the Hall intake. We have had a number of discussions with the local EA hydrologists and have now been advised historic flows are below those we have modelled (using NRFA data). Using revised modelled flows, the yield assessment now suggests the modelled 1976 yield would be about 6.8MI/d, much closer to the historic yield.</p>	Technical documents: Supply Forecast

89	Environment Agency	The company should justify its choice of flows based on both model performance and representation of artificial influences in the 1976 historic record. This should be agreed with the Environment Agency as this assessment would need to be consistent with any consideration of changes to hands-off flow as part of an application for a drought permit for the source.	We have undertaken further review of the modelled flow series and yield assessment for the Hall intake. We have had a number of discussions with the local EA hydrologists and have now been advised historic flows are below those we have modelled (using NRFA data). Using revised modelled flows, the yield assessment now suggests the modelled 1976 yield would be about 6.8MI/d, much closer to the historic yield.	Technical documents: Supply Forecast
90	Environment Agency	Recommendation 7: Update the Strategic Environment Assessment Environment report to ensure legal compliance  The Strategic Environmental Assessment (SEA) is not currently legally compliant. The SEA Environmental Report does not contain sufficient information to allow a full assessment of the impact of the company's options. It requires updating with the inclusion of the non-technical summary and cumulative impact methodology, the cumulative effects assessment, monitoring plan, plan/policy/programme review and spatial scope.	The Environment Agency reviewed an earlier version of the SEA provided for audit. The final version published on website with our dWRMP did include all of the missing sections.	Technical documents: SEA report
91	Environment Agency	Recommendation 8: Ensure the plan is legally compliant by adhering to the WRMP Directions	We have reviewed the WRMP Directions and ensured that the revised draft WRMP is legally compliant.	
92	Environment Agency	R8.1 Direction 3(b) Describe the annual average risk of all restrictions as a percentage, and how they change through the planning period  The company has not set out how it expects the annual risk of the need to impose prohibitions or restrictions on its customers to change over the course of the planning period as a result of the measures that it has identified through its options appraisal. It has presented target information but expressed this in the form of return periods instead of percentage risk.	We have presented our current and future Levels of Service in our revised dWRMP in the form of annual average risks.	Revised dWRMP - Chapter 2  Technical documents: Supply Forecast
93	Environment Agency	The company must explain how the risk of customer-side restrictions is expected to change as the principal and adaptive plans are implemented through the planning period. It must present the information as an annual percentage risk.	For Central Lincs, Cheveley, Bury Haverhill, Newmarket and South Fenland, 2020-2024, we are maintaining our current Levels of Service, which allows one instance of severe restrictions (standpipes and rota cuts) experienced in a 1 in 100 year severity drought event. From 2024, following further drought investment, we have committed to ensuring our customers are protected against up to a 1 in 200 year event without the risk of any severe restrictions. We have presented this as an annual percentage risk.  We have assessed our other WRZs to already be resilient against up to a 1 in 200 year event without the risk of severe restrictions. Our frequency of restrictions for hosepipe and non-essential use bans remains the same.	Revised dWRMP - Chapter 2  Technical documents: Supply Forecast
94	Environment Agency	R8.2 Direction 3(c) Describe the assumptions it has made to determine the annual average risk of all restrictions  The company has not provided a methodology on how it has assessed actual risk of restrictions. It is not clear if it has undertaken this work (as part of Direction 3(b)).  The company must set out the assumptions used to estimate the planned annual risk for its planning period of (i) temporary water use restrictions; (ii) ordinary drought orders; and (iii) emergency drought orders under Direction 3(b).	We have not changed our methods or Levels of Service for LOS1 (Temporary Use Bans) and LOS2 (Non-Essential Use Bans / Ordinary Drought Orders). We have used a combination of historical and stochastic approaches to assess the yield of severe droughts, which has been used in AQUATOR to determine additional resources (where required) to avoid severe restrictions (LOS3, Rota Cuts and Standpipes / Emergency Drought Orders).	Technical documents: Supply Forecast

95	Environment Agency	<p>R8.3 Direction 3(d) Describe the emission of greenhouse gases likely to arise as a result of each measure in its plan</p> <p>The company has presented information on carbon emissions associated with supply and demand options although some of this appears in unpublished detailed costings reports. However, it does not present the equivalent information for its current operations - although general text implies that the company does possess relevant information. In addition, whilst the company has used relevant government guidance (.gov.uk BEIS 2012) on greenhouse gases appraisal it is unclear which version of these costings it has used.</p> <p>The company must present the carbon emissions for its current operations. The company must clarify which version of greenhouse gas costs it has used and update its appraisal with up to date figures if necessary.</p>	<p>We have described the emission of greenhouse gases as a result of the Preferred Plan in terms of Tonnes of CO<sub>2</sub> equivalent in Section 5.8 of the dWRMP.</p> <p>Individual option carbon costs are provided in the updated WRP tables.</p> <p>We have provided the greenhouse gas emissions from our current water operations in chapter 1.</p> <p>We have used the traded central values of the December 2017 version of the BEIS tables.</p>	Revised dWRMP - Chapter 5 (Section 5.8)
96	Environment Agency	<p>R8.4 Direction 3(e)(i) Describe the assumptions made regarding the implications of climate change, including in relation to the impact on each of its supply and demand measures</p> <p>The company has included climate change in its assessment of baseline supplies and demands. The company has assessed the impact of climate change on its new options, but has not reassessed the uncertainty within its headroom assessment for the new configured supply system. This is evident from the baseline and final planning climate change headroom allowances as presented in the tables showing the same climate change uncertainty. Whilst the company may have considered the additional climate change uncertainty and determined that this is not significant, this is not reported explicitly in the brief headroom report, though the report does note that there are no headroom allowances for options.</p>	<p>This is the same as for the baseline because we are not developing any supply-side options that are sensitive to the impact of climate change.</p>	
97	Environment Agency	<p>The company must ensure the uncertainty for climate change within headroom is reassessed for the combined forecast supply for the final plan and report this separately, or explain why this is the same as the baseline climate change uncertainty.</p>	<p>This is the same as for the baseline because we are not developing any supply-side options that are sensitive to the impact of climate change.</p>	n/a
98	Environment Agency	<p>R8.5 Direction 3(f) Describe its metering programme, including costs, approach, implementation and timing of the programme</p> <p>The company has not presented clear information on the costs of its current metering strategy for optants and change of occupier which is a continuation of existing company policy although some of this appears in unpublished detailed costings reports.</p> <p>The company must include details of its selected metering strategy, including how it will implement metering across its area, and also the costs of installing and operating the meters in its metering programme to meet Direction 3(f).</p>	<p>Further data regarding the costs of the metering options, and the breakdown of the component metering programmes, costs, programme delivery and projected savings, has been included in the revised Demand Management Strategy Report. Option development has been described in greater detail.</p>	Technical documents: Demand Management Strategy (Section 5 (5.2), Section 6 (6.5-6.10), (6.4.7), Section 7)

99	Environment Agency	<p>R8.6 Direction 3(h) Describe its assessment of the cost-effectiveness of domestic metering types</p> <p>The company has not presented clear information on the cost of compulsory metering compared to optant and change of occupier/selective metering which are presented as current policy without clear costings although some of this appears in unpublished detailed costings reports and an additional note on compulsory metering costs and benefits. In addition the company has not provided a clear comparison of supply options compared to metering and other water demand management options.</p>	<p>Further data regarding the costs of the metering options, and the breakdown of the component metering programmes, costs, programme delivery and projected savings, has been included in the Revised Demand Management Strategy Report. Option development has been described in greater detail.</p> <p>Note the current plan aims to reach the feasible limit of metering (95%) early in the plan period.</p>	<p>Technical documents: Demand Management Strategy (Section 5 (5.2), Section 6 (6.5-6.10), (6.4.7), Section 7)</p>
100	Environment Agency	<p>The company must provide an assessment of the cost-effectiveness of the following types of metering to meet Direction 3(h):</p> <ul style="list-style-type: none"> <li>• Compulsory</li> <li>• Selective</li> <li>• Change of occupier</li> <li>• Optant.</li> </ul> <p>This will enable comparison with alternative options to balance supply and demand.</p>	<p>Further data regarding the costs of the metering options, and the breakdown of the component metering programmes, costs, programme delivery and projected savings, has been included in the Revised Demand Management Strategy Report. Option development has been described in greater detail.</p>	<p>Technical documents: Demand Management Strategy (Section 6 (6.4.7))</p>
101	Greater Lincolnshire Local Enterprise Partnership	<p>Given this is a 5 year plan, frequent contact should be maintained with the monitoring officer of the relevant Local Plan areas to gauge housing delivery against adopted Local Plan housing targets.</p> <p>Ideally, and recognising the need for a consistent and rigorous evidence base, it would be preferable to take a flexible approach that fully engages in local growth aspirations rather than determining a single fixed approach that is applied across the board.</p>	<p>We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.</p>	<p>Technical documents: Demand Forecast report</p>
102	Greater Lincolnshire Local Enterprise Partnership	<p>We fully support this approach.</p>	<p>We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.</p>	<p>Technical documents: Demand Management Strategy</p>
103	Greater Lincolnshire Local Enterprise Partnership	<p>We are concerned that the targets for leakage reduction and water efficiency are very ambitious and it is therefore essential that the Plan continues and is able to adapt to reflect future practices to drive efficiency campaigns, and to promote and provide opportunities for existing customers to 'retrofit' and make better sustainable use of the water that 'falls' within individual properties.</p> <p>Achieving realistic demand reduction targets on existing individual customers must be as much of a priority, as provision of water efficiency for future customers.</p> <p>We consider demand management to be an essential part of a wider suite of approaches that is appropriate for the immediate five year period of the draft WRMP; however, it is unlikely to remove the longer term need for planning for significant infrastructure improvements in line with local and national growth needs and should be considered alongside these.</p>	<p>We have continued to prioritise demand management within our dWRMP as described in Chapter 4. This includes our proposed programme of water efficiency initiatives. We have included supply options in the form of transfers and will continue to explore resource options over the next five years.</p>	<p>Technical documents: Demand Management Strategy</p>

104	Greater Lincolnshire Local Enterprise Partnership	A consensual, voluntary approach would appear to offer the best opportunity in the long term to promote water-saving behaviours alongside the introduction of technical solutions that could take advantage of them.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
105	Greater Lincolnshire Local Enterprise Partnership	Adaptive planning is therefore perhaps even more important than stated.  We also recognise the potential for wider multi-sector benefits than are referred to in the proposed adaptive plan including in the commercial sector. Given that there are three months between the WRMP consultation finishing and the publication of Anglian Water's Statement of Response, Lincolnshire County Council and its partners would support, and wish to participate in, any efforts made to re-shape the adaptive plan to create wider benefits and greater certainty of outcomes.	We agree that the adaptive planning process is very important. As such we have set out our initial plans in our revised dWRMP and have included investment in our PR19 Business Plan.  We look forward to working with stakeholders including Lincolnshire County Council in our adaptive planning, as well as in the next phase of Water Resources East.	Revised dWRMP - Chapter 7
106	Greater Lincolnshire Local Enterprise Partnership	It is good risk management to forward plan and identify appropriate resources to increase the resilience of the public supply, particularly in view of the existing projections for water availability in the east of England.  Therefore, we would support this approach, especially considering the disproportionate impact that interruptions have on those households most likely to be challenged by access to affordable utilities.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
107	Greater Lincolnshire Local Enterprise Partnership	Further to our comments made above, while it is desirable to keep bills as low as practicably possible, we would strongly support an approach that seeks to spread the investment in climate change resilience over a longer period to avoid a much larger requirement for adaptation later on, and to allow for effective future planning of infrastructure to support future growth requirements.  For these reasons, encouragement should be given to investing sooner rather than later in order to avoid these costs.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
108	Huntingdonshire District Council	We do not support a move to trend-based projections. Local Authority Growth projections as set out in the Annual Monitoring Reports offer the most reliable method of assessing future growth.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
109	Huntingdonshire District Council	No, the Council does not agree with this approach. Demand Management should not be the only priority of Anglian Water. Demand from population growth cannot be totally offset by demand management. Investment in new provision has to be a priority alongside demand management. Increasing the efficiency of transporting water by continuing to reduce water leakage in the network should also be a priority.	We have continued to prioritise demand management including leakage reduction within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years.	Revised dWRMP - Chapter 4 and 5
110	Huntingdonshire District Council	Yes, if legislation permits and there is clear evidence that this will reduce water usage, thus allowing for future housing growth and new demand can be partially fulfilled as a result. However, in rural areas, there are instances of pipes being shared where individual metering might be difficult to achieve. Such households should not be burdened with higher utility costs due to this situation.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy

111	Huntingdonshire District Council	If the additional investment will increase the availability of water to meet existing demand and growth, the investment would be relevant. However Anglian Water need to demonstrate that any additional financial impact on householder bills is directly invested towards improvements in the network, improved resilience etc. There needs to be tangible and demonstrable beneficial outcomes for householders in Huntingdonshire.	We have developed a plan that represents the best value for our customers and the environment over the long term and we have evidence from our customer engagement work to support additional investment to future proof our strategy.  Our Preferred Plan delivers resilience to the Huntingdonshire area, specifically to address the impacts of climate change.	For specific detail relating to the challenges and proposed investment in Huntingdonshire refer to the Water Resource Zone Summary reports. Huntingdonshire is our Ruthamford South WRZ (Area 2)
112	Huntingdonshire District Council	Yes, investment to improve resilience in the District is supported. Again as per our response to Q3, there needs to be tangible and demonstrable proof that householders will benefit from this expenditure.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
113	Huntingdonshire District Council	No, it should not be deferred. Investment is likely to protect and increase supply which will enable growth. Deferring investment is a risk and the Governments requirements should be met in the short term, not deferred.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
114	Lincolnshire County Council	Given this is a 5 year plan, frequent contact should be maintained with the monitoring officer of the relevant Local Plan areas to gauge housing delivery against adopted Local Plan housing targets.  Ideally, and recognising the need for a consistent and rigorous evidence base, it would be preferable to take a flexible approach that fully engages in local growth aspirations rather than determining a single fixed approach that is applied across the board.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
115	Lincolnshire County Council	We fully support this approach.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years.	Revised dWRMP - Chapter 4 and 5
116	Lincolnshire County Council	A consensual, voluntary approach would appear to offer the best opportunity in the long term to promote water-saving behaviours alongside the introduction of technical solutions that could take advantage of them.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy



117	Lincolnshire County Council	<p>While it is difficult to predict the course of future environmental regulation following the UK's exit from the European Union, it is reasonable to assume that a strong regulatory framework will remain in place and will need to be accommodated. For this reason, it seems preferable to include a realistic provision for remaining abreast of – and helping to influence – regulation, rather than incurring potentially greater costs in the future by reacting to it retrospectively.</p> <p>We also recognise the potential for wider multi-sector benefits than are referred to in the proposed adaptive plan. Given that there are three months between the WRMP consultation finishing and the publication of Anglian Water's Statement of Response, Lincolnshire County Council and its partners would support, and wish to participate in, any efforts made to re-shape the adaptive plan to create wider benefits and greater certainty of outcomes.</p>	<p>This is why the adaptive planning process is so important. As such we have set out our initial plans in our revised dWRMP and have included investment in our PR19 Business Plan.</p> <p>We look forward to working with stakeholders including Lincolnshire County Council in our adaptive planning, as well as in the next phase of Water Resources East.</p>	Revised dWRMP - Chapter 7
118	Lincolnshire County Council	<p>It is good risk management to forward plan and identify appropriate resources to increase the resilience of the public supply, particularly in view of the existing projections for water availability in the east of England. Therefore, we would support this approach, especially with regard to maintaining access to water for those households most likely to be challenged by access to affordable utilities.</p>	<p>Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a &lt;0.5% annual average risk of severe restrictions, from 2024-25.</p>	Revised dWRMP - Chapter 7
119	Lincolnshire County Council	<p>Further to our comments made above, while it is desirable to keep bills as low as practically possible, we would strongly support an approach that seeks to spread the investment in climate change resilience over a longer period to avoid a much larger requirement for adaptation later on, and to allow for effective future planning of infrastructure to support future growth requirements.</p> <p>We would also emphasise the need to take important decisions on investment in strategic infrastructure in time to manage identified need, thereby avoiding unnecessary environmental, economic and social costs. For these reasons, encouragement should be given to investing sooner rather than later in order to avoid these costs.</p>	<p>Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).</p>	Revised dWRMP - Chapter 2 and 6
120	Natural England	<p>We have raised a number of concerns in relation to the HRA and SEA assessment as we do not consider that they have fully assessed the impacts of the dWRMP on the natural environment.</p>	<p>Technical HRA and SEA documents have been amended for the revised draft WRMP to address the concerns raised. See individual reports for details.</p>	Technical documents: SEA report and HRA report

121	Natural England	<p>Natural England has a number of concerns with the HRA which can be summarised as follows:</p> <ul style="list-style-type: none"> <li>-The HRA Appropriate Assessment is incomplete as it does not assess all of the options included in the plan</li> <li>-There are three further options which we advise should be included in the HRA Appropriate Assessment which have been screened out at the HRA Screening stage</li> <li>-The HRA Appropriate Assessment does not include a clear conclusion on the legal test of Adverse Effect on Integrity to European Sites and is not consistent with statements in the dWRMP on this issue.</li> <li>-The dWRMP does not appear to include a clear commitment to provide the mitigation identified as necessary within the HRA Appropriate Assessment.</li> <li>- The in-combination assessment is too narrow in scope and has not considered potential in-combination effects with other plans and projects.</li> <li>-In terms of specific projects we have concerns on the assessment of the Humber Desalination Scheme.</li> </ul> <p>We therefore advise that the dWRMP is not currently compliant with the requirements of the Habitats Regulations.</p>	<p>HRA Screening and Task II reports have been revised to address concerns.</p> <ul style="list-style-type: none"> <li>- HRA Task II appropriate assessments undertaken for all options in the LCP, BVP and adaptive planning strategy with LSE identified during Screening.</li> <li>- Chapter 10 includes a summary of the HRA AA and conclusion on the effects on site integrity.</li> <li>- The final WRMP includes a clear commitment to provide the mitigation detailed in the HRA and SEA for the chosen options.</li> <li>- In-combination effects assessed: "A detailed in-combination assessment was not undertaken at the Task I: Screening stage in accordance with current guidance. The report has however given a preliminary assessment of the potential intra-plan in-combination effects of the final WRMP 2019. The assessment did not identify any WRMP options in the BVP or the LCP which could combine to result in potential cumulative effects on European sites. The implementation of the Adaptive Planning Solution however, has the potential to result in cumulative effects on:  <ul style="list-style-type: none"> <li>● The Wash SPA/Ramsar site/SAC, should the King's Lynn desalination and water reuse schemes be implemented; and</li> <li>● Stour and Orwell Estuaries SPA /Ramsar site should the Felixstowe desalination and Ipswich water reuse scheme be implemented.</li> </ul> </li> </ul> <p>This was explored further in the Task II: Appropriate Assessment which details both intra-plan effects and inter-plan effects.</p> <p>The potential for cumulative effects of the WRMP 2019 in-combination with neighbouring Water Company's WRMPs (based on draft WRMPs that were available) has also been identified for the Deben Estuary, the Ouse Washes and the Stour an Orwell Estuaries. This can only be explored when final neighbouring WRMPs become available."</p>	<p>Technical documents: HRA report</p>
122	Natural England	<p>There are inconsistencies between the selected options in the plan and those assessed in the HRA Appropriate Assessment Report. Of particular note are the following options which were identified as having a likely significant effect to European Sites in the HRA Screening Report but not included in the HRA Appropriate Assessment:</p> <ul style="list-style-type: none"> <li>- Fenland Reservoir,</li> <li>- Cliff Quay Water Reuse,</li> <li>- North Fenland WRZ to Norfolk Rural North WRZ Transfer (NNR6) and</li> <li>- Norfolk Rural North WRZ Norwich &amp; the Boards WRZ Transfer (NTB8).</li> </ul> <p>We note also that the options of South Fenland RZ to North Fenland RZ Transfer (NFN8) and Lowestoft water reuse (NTB3) are included in the Appropriate Assessment but do not appear to be part of the draft plan. The HRA Appropriate Assessment is therefore incomplete and must be amended.</p>	<p>The HRA Task I Screening was undertaken in two parts:</p> <ul style="list-style-type: none"> <li>● assessment of the feasible options list for the dWRMP as of June 2017 (Chapter 4); and</li> <li>● assessment of all options that were included in the revised dWRMP 2019 Best Value Plan (BVP), Least Cost Plan (LCP) or Adaptive Planning Strategy (Chapter 5). The revised WRMP includes some options that were included in the dWRMP but had been changed through the options design process. For example, by re-routing pipelines, agreement of the use of directional drilling under sensitive sites and rivers; or investigated further through the SEA and WFD processes. The dWRMP assessments for these options have been superseded, and the original assessments can be found in Appendix C of the HRA Task I Screening report.</li> </ul> <p>The revised HRA Task I: Screening Assessment identified six options (contained in either the BVP, LCP or adaptive planning strategy) that may result in Likely Significant Effects on European sites. These were:</p> <ul style="list-style-type: none"> <li>● ESU1 Felixstowe Desalination;</li> <li>● SHB2 Pyewipe Water Reuse for Non-Potable Use;</li> <li>● ESU2 Ipswich Water Reuse;</li> <li>● NFN1 Kings Lynn Desalination;</li> <li>● NFN2 Kings Lynn Water Reuse;</li> <li>● NFN3 Fenland Reservoir.</li> </ul> <p>Therefore, Task II: Appropriate Assessments were required to assess whether these options were likely to adversely affect the integrity of the potentially affected European sites. These are detailed in the HRA Task II: Appropriate Assessments report.</p>	<p>Technical documents: HRA report</p>

123	Natural England	We consider the SEA assessment for RTN2 is overly negative as it does not recognise that with appropriate mitigation and careful design the option is likely to result in biodiversity and landscape enhancements and that benefits to recreation and the local economy would result.	<p>The SEA report has been amended for the revised draft WRMP:</p> <p>Future strategic supply-side options include two new reservoir options. Reservoirs will have negative effects associated with landtake and visual intrusion. However, they also have significant opportunities for ecology and recreational enhancement.</p> <p>Positive effects include increased resilience of water supplies and recreational opportunities which may provide opportunities for employment. Mitigation measures will be implemented during construction to reduce effects on water quality, ecology, landscape, historic environment, and the community. The WFD Phase 2 assessment concluded there would be moderate effects. Carbon emissions will be generated during construction and operation. The scaled CO2e will be higher than the scaled operational average. Use of renewable energy technologies may reduce effects. There is significant opportunity to benefit ecology and recreation through providing wetland and other habitat creation and recreational facilities at the reservoir.</p> <p>Where negative effects were identified in the options assessment, these have been mitigated through the options design process where possible by re-routing pipelines or using directional drilling under sensitive sites and rivers or investigated further through the HRA and WFD processes. Negative effects for options associated with construction are assumed to be mitigated using best practice construction working methods. Minor and major negative effects remain for the following options: RTN1 / RTN2 South Lincolnshire reservoir - the options will have moderate negative effects on WFD objectives and will require a Phase 3 WFD if they are taken forward as WFD screening and Phase 2 assessment concluded potential for moderate adverse effects. The options will also have minor negative effects on the landscape due to the introduction of a new reservoir changing the landscape character. There is also an opportunity to create a reservoir which is a recreational and tourism asset and provides habitat creation. Cycleways and roads could also be enhanced as part of reinstatement works.</p>	Technical documents: SEA report
124	Natural England	Currently the dWRMP considers these options [Fenland and South Lincs reservoirs] purely in terms of their water supply benefits. Having established that they should form part of the Adaptive Planning Scenario we would encourage the inclusion in the dWRMP of a positive vision recognising how they would allow the water company to provide wider benefits to the environment and their customers.	<p>The South Lincolnshire and Fenland reservoir storage options are included in our pre-planning activity in Chapter 7.</p> <p>Since the dWRMP, the Ecosystem Services Assessment has been developed to recognise the potential environmental benefits of reservoir creation, including the opportunity for enhanced landscaping, improved fish stocks through aquaculture projects and wetland creation. Social benefits of reservoir construction highlighted in the revised dWRMP ESA include the opportunity to create a visitor centre and provide information boards on reservoirs and wetlands, the opportunity to promote the reservoir for recreational activities. However, these have not been included in the ecosystem services scores as the reservoir design is based on a standard baseline design and does not include any environmental enhancement measures. As mentioned in Chapter 7, during the pre-planning process these options will go through additional studies to support the Environmental Impact Assessments.</p>	Revised dWRMP - Chapter 7
125	NFU	Farms are often geographically isolated, and we would like to see clear provision made to deliver uninterrupted water services into rural areas. Farms are vulnerable to low mains water pressure and livestock farms in particular demand rapid response to those interruptions in the interests of animal welfare concerns.	<p>Our revised dWRMP Preferred Plan delivers resilience benefits to all our customers, including customers in rural, geographically isolated locations. Our Preferred Plan delivers substantial benefits for reducing the number of customers supplied by a single supply system. .</p> <p>We are also committed to delivering our performance commitment associated with interruptions to supply, as set out in our PR19 Business Plan.</p> <p>We have a legal duty under the Water Industry Act with regard to enabling new connections.</p>	PR19 Business Plan - Resilience in the Round

126	NFU	The agricultural sector is also vulnerable to ‘temporary use bans’ and we would like to see close correlation between the WRMP and related drought plan to ensure high levels of service for farming customers.	We are refreshing our Drought Plan this year and will ensure alignment with our revised dWRMP. We continue to offer the same Level of Service for Temporary Use Bans.	n/a
127	NFU	4. Commit Anglian Water to a twin-track approach (if not multi-track approach) that assesses demand management and new resource options on a long-term basis, taking full cost and benefit account of environmental and social effects	We remain committed to a twin-track approach, which will prioritise demand management but include significant supply-side investment	n/a
128	NFU	5. Favour the introduction of compulsory household metering, particularly in areas where water resources are under stress to the point of full cost/benefit justification, and as soon as practicable alongside improved tariffs and measures to protect those on low incomes	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
129	NFU	8. Explore opportunities for Anglian Water to further investigate sharing water resources and developing new resources in partnership with other companies, and with other sectors (like farming)	We have explored a number of water company trading and third party options in our dWRMP, and invited further interest via the Market Information platform. We will continue to investigate sharing and partnership opportunities through Water Resource East.	Revised dWRMP - Chapter 5 and 7
130	NFU	10. Favour a catchment approach which focuses on the greater involvement of all stakeholders in local water governance. We prefer the introduction of a programme to deliver the infrastructure that works on a catchment-by-catchment basis. This approach means that progress on implementation would be consistent with better understanding of the catchment and reacting to the local needs of users and the environment.	We support development of a catchment-based approach for certain aspects of public water supply. This is discussed in Chapter 6.	Revised dWRMP - Chapter 6
131	NFU	However, no improvements are proposed for temporary use bans and non-essential use bans that potential impact on non-household sites – now the customers of retailers – with these restrictions forecast to be introduced in a 1:10 year event.  We would like to see greater resilience offered to business consumers of water, particularly vulnerable consumers like farms (especially where animal welfare issues might arise).	Non-Essential Use Bans are expected once every 40 years on average (2.5% annual average risk).  We continually work with farmers and the Environment Agency to be as flexible as possible with our abstraction regimes for example through the Lower Nene-Middle Level working group.	n/a
132	NFU	We support this approach, consistent with longer term and thereby less certain decision-making.	n/a	n/a
133	NFU	Splitting previous WRZs into dWRMP19 seems a sensible step to take.	n/a	n/a

134	NFU	<p>We agree that sustainable levels of abstraction should be based on the principles of sound science, and we agree that Anglian Water should invest on the basis of robust evidence. But we have misgivings about the potential for disputes between Anglian Water and the Environment Agency regarding the nature and significance of each party's evidence; and would be dismayed if disagreements over evidence delayed transition to sustainable levels of public supply abstraction.</p> <p>The long term nature of these licence changes is increasingly harming the interests of local farmers, particularly in catchments such as Broadland Rivers. We are currently finding that farmers with short term licences face immediate risk of volume reduction or even revocation because of locally identified environmental pressures. In some of these cases, the dominant cause of the pressure is a large-volume 'perpetual' (no expiry date) Anglian Water licence with the farm licence having a relatively insignificant impact. But the farm licence is caught up in a review because its impact is considered 'in-combination' with the Anglian Water licence.</p> <p>We would like this indirect impact on agricultural licences to be identified and accommodated in the WRMP process by, for example, a speedier conclusion to licence negotiations between Anglian Water and the regulator which could have the effect of relieving some pressure on irrigation licences.</p>	<p>Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP 3 and the capping of all groundwater licenses to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025. In addition, we have acted collaboratively with the agricultural sector in response to the recent hot and dry weather.</p>	Revised dWRMP - Chapter 2
135	NFU	<p>Farmers recognise that the most effective – although also the most expensive and potentially complex – means of improving resilience to water scarcity is through the construction of on-farm storage reservoirs. Collaborative schemes between groups of farmers are gradually becoming more commonplace. We anticipate that WRE will examine the feasibility of multi-sector and multi-use storage.</p>	<p>We agree that Water Resources East will provide the principal platform for examining the feasibility of multi-sector and multi-use options, and will be continuing our support and involvement.</p>	
136	NFU	<p>We do not have a strong view, but it is logical for projections to be consistent with local authority growth targets</p>	<p>We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.</p>	Technical documents: Demand Forecast
137	NFU	<p>We agree that demand management must continue to be Anglian Water's priority, albeit within a clear twin-track approach.</p> <p>We congratulate Anglian Water on its industry leading performance on leakage, and we welcome steps proposed in dWRMP19 to improve leakage performance.</p>	<p>We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.</p>	Technical documents: Demand Management Strategy
138	NFU	<p>In areas where future supply risks being in deficit we believe that there is a strong case to be made for the introduction of compulsory universal household metering, perhaps in conjunction with variable tariffs and linked to water efficiency advice to all customers. We believe that compulsory metering should be the long term ambition for Anglian Water, and we support plans contained in dWRMP19 for the widespread introduction of smart meters.</p> <p>Nevertheless we understand the business case for the suggested current approach of achieving full meter penetration without resorting to compulsory metering</p>	<p>We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.</p>	Technical documents: Demand Management Strategy

139	NFU	Yes. Given the enormity of the water resources challenges faced by the region it seems very sensible to invest in future proofing.	n/a	n/a
140	NFU	We approve of the principle but are not qualified to comment on the costings.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
141	NFU	On the basis that forecast impacts of climate change will not diminish let alone disappear, then we do not think that investment should be delayed.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
142	Ofwat	there are a number of important areas where the plan fails to provide convincing evidence that it delivers in the best interest of customers	We have engaged extensively with household and non-household customers to understand their views of the risks and impacts associated with investment in resilient water supplies. The results of this research were central to the development of our dWRMP.  Details of our customer engagement strategy and results are provided in the Customer and Stakeholder Engagement Appendix. Chapter 6 of our main summary report describes how customer preferences shaped our Preferred Plan.	Revised dWRMP - Chapter 6 (Section 6.4), and Customer and Stakeholder Engagement Appendix
143	Ofwat	The company faces a number of challenges including population growth, climate change and abstraction licence reductions. Anglian Water also intends to enhance its drought resilience and has revised the number of water resource zones from 14 in the previous plan to 28 in the draft plan. Considering these factors we are therefore concerned the company has assessed and characterised the planning problem as low concern.	We completed a draft Problem Characterisation assessment in June 2016, which was discussed with the Environment Agency. The results showed moderate to high levels of concern across our region. This was primarily driven by uncertainty associated with complexity factors, including vulnerability to severe drought and Deployable Output (DO) calculations .  Since completing the draft assessment, we have significantly improved our understanding of the planning problem. For example, we carried out further modelling to allow us to refine our understanding of current DO. We also completed a detailed analysis of our vulnerability to severe drought and an extensive programme of customer engagement to explore trade-offs related to our WRMP.  In our final Problem Characterisation we have updated our assessment to reflect this improved understanding. The final assessment confirms that our supply demand balance is under significant pressure; however, the associated complexity is greatly reduced. Consequently we are facing lower concerns across our region compared with the draft assessment, and the EBSD approach to decision making is appropriate for use in Draft WRMP 2019.	Technical documents: Managing Uncertainty and Risk

144	Ofwat	<p>Anglian Water proposes significant investment in 2020-25 with the largest proportion allocated to interconnecting the multiple water resource zones identified. Further considerations:</p> <ul style="list-style-type: none"> <li>o The company should ensure that it uses robust methods to identify and fully justify this investment in its final preferred plan.</li> <li>o Anglian Water should demonstrate in the final plan that the solutions selected are appropriate, considering the uncertainties associated with the key drivers, and that they are also deliverable against the proposed timeline.</li> <li>o The company should clearly identify in the final plan how it will manage the uncertainty and deliverability risk associated with this significant programme.</li> </ul>	<p>We have added new sections on our approach to decision making, and the criteria used in adapting the least cost EBSD output to a 'best value' plan.</p> <p>We are using demand management options to mitigate growth impacts, whilst using supply-side measures (principally transfers) to mitigate supply-side impacts.</p> <p>We have presented a full justification of our strategic grid on a section-by-section basis, considering drivers in each Problem Characterisation area.</p> <p>The deliverability of options is assessed as part of the options appraisal process as detailed in the Supply Option Development and Demand Management Strategy technical documents.</p>	<p>Revised dWRMP - Chapters 4 (demand-side) and 5 (supply-side)</p> <p>For deliverability see technical documents: Supply Option Development, and Demand Management Strategy</p>
145	Ofwat	<p>Anglian Water has worked closely with the Water Resources East (WRE) regional group and recognises the importance of water resource cross-boundary schemes and trades. However, there are inconsistencies between draft plans of companies in this group.</p> <p>This is especially a concern as the potential for future exports drives investment in Anglian Water's plan. The WRE members should work to better coordinate their approaches and to clearly identify options in the near term that are beneficial at both the regional and national level.</p>	<p>We have worked hard between dWRMP and revised dWRMP to improve the alignment between water company plans and specifically how existing agreements are presented. We are confident that there is now full alignment between our plans.</p> <p>We will continue to support Water Resources East.</p>	
146	Ofwat	<p>We have concerns around the approach to problem characterisation, water resource zones and non-drought resilience.</p>	<p>See the responses to the specific Ofwat comments.</p>	n/a
147	Ofwat	<p>Planning tables are only presented for the principal plan which means it is not possible to fully understand the adaptive plan. This reduces transparency and for the final plan the company should consider what steps it could take to provide a clearer overview for both plans. This could include the provision of aggregated company level tables for each plan.</p>	<p>We provided the adaptive planning tables to the Environment Agency. However, for the revised dWRMP we are not producing a separate adaptive plan.</p>	n/a

148	Ofwat	<p>The company's problem characterisation assessment appears to conclude that it is facing a low level of concern. However, this is inconsistent with the approach of other companies facing similar challenges and Anglian Water's approach is presented differently in the draft plan narrative and technical appendices. Greater clarity on problem characterisation is required in the final plan to provide assurance the approach adopted is robust.</p> <p>The draft plan indicates that an earlier problem characterisation assessment suggested that the plan should be developed based on a higher level of concern. For clarity Anglian Water should provide a clear and transparent summary explaining how and why the assessment has changed.</p> <p>The draft plan indicates that an earlier problem characterisation assessment suggested that the plan should be developed based on a higher level of concern. For clarity Anglian Water should provide a clear and transparent summary explaining how and why the assessment has changed.</p> <p>... the problem characterisation is inconsistent between the narrative and technical appendix. The narrative states "We have since updated this initial assessment and completed a Final Problem Characterisation assessment, which confirms that we are facing moderate and high levels of concern across our region". However, the conclusion in the technical appendix is that the company faces low to moderate levels of concern and this is the approach adopted in the draft plan. This needs to be corrected or explained.</p>	<p>We completed a draft Problem Characterisation assessment in June 2016, which was discussed with the Environment Agency. The results showed moderate to high levels of concern across our region. This was primarily driven by uncertainty associated with complexity factors, including vulnerability to severe drought and Deployable Output (DO) calculations .</p> <p>Since completing the draft assessment, we have significantly improved our understanding of the planning problem. For example, we carried out further modelling to allow us to refine our understanding of current DO. We also completed a detailed analysis of our vulnerability to severe drought and an extensive programme of customer engagement to explore trade-offs related to our WRMP.</p> <p>In our final Problem Characterisation we have updated our assessment to reflect this improved understanding. The final assessment confirms that our supply demand balance is under significant pressure; however, the associated complexity is greatly reduced. Consequently we are facing lower concerns across our region compared with the draft assessment, and the EBSD approach to decision making is appropriate for use in Draft WRMP 2019.</p>	<p>Technical documents: Managing Uncertainty and Risk</p>
149	Ofwat	<p>Anglian Water has significantly increased the number of water resource zones to 28 from 14 in the previous plan. This is a key driver and is driving significant investment through the stated requirement to interconnect a number of zones. However, only limited information has been provided in the draft plan to support such a significant change and greater clarity needs to be provided in the final plan.</p>	<p>We have increased the number of WRZs from <b>19</b> to 28 in our current plan. We have set out a detailed explanation for this change in a new chapter of the revised dWRMP.</p>	<p>Revised dWRMP - Chapter 3</p>
150	Ofwat	<p>For transparency the company should provide a water resource zone integrity report with the final plan. This should clearly articulate the supporting evidence for each of the rezoning decisions, justify the splitting of zones that have previously been considered integral and demonstrate the risks faced in the current system.</p>	<p>We provided our WRZ Integrity Report to the Environment Agency and will make it available to all regulators. We have also set out a detailed explanation for this change in a new chapter of the revised dWRMP.</p>	<p>Revised dWRMP - Chapter 3</p>
151	Ofwat	<p>Linked to the above point the final plan should demonstrate the support for the change from key stakeholders, such as the Environment Agency, and detail the assurance process followed.</p>	<p>As discussed in the new chapter of the revised dWRMP we have followed the Environment Agency's method and liaised with the Environment Agency on our WRZ configuration.</p>	<p>Revised dWRMP - Chapter 3</p>
152	Ofwat	<p>It is unclear why, if there are now 28 independent water resource zones, they have been grouped into the same seven areas as in the previous plan for the problem characterisation exercise. Greater clarity is required on how this approach is appropriate given the significant changes made to the zones.</p>	<p>The grouping of WRZs was undertaken to make the Problem Characterisation more manageable and was possible because WRZs in each area have similarities in terms of resources and risks. However, they typically do not share resources or have a connected supply system and therefore cannot be considered single WRZs using the Environment Agency definition.</p>	
153	Ofwat	<p>There is some evidence of non-drought resilience consideration including the potential increased resilience to unforeseen events from increased connectivity. The company should consider providing further detail of its approach in the final plan, referencing the full range of potential hazards and threats, such as freeze-thaw events.</p>	<p>We recognise the importance of the WRMP in the context of our wider resilience strategy and have included some additional detail on the benefits and alignment of our plans in our revised dWRMP. However, we have refrained from providing extensive detail in this area as we feel this is more appropriately addressed in our PR19 Business Plan.</p>	<p>PR19 Business Plan (Resilient Water Supplies and Resilience in the Round chapters)</p>



154	Ofwat	<p>However, it is unclear if customers fully understand and support the approach on areas such as resilience or bill impacts of potential solutions and greater clarity on these points is required in the final plan.</p>	<p>Our customer engagement strategy focussed on three areas:</p> <ul style="list-style-type: none"> <li>• Views on resilience and severe restrictions (such as rota cuts and standpipes)</li> <li>• Views on the choices of solution (i.e. demand management, new resource options), and</li> <li>• Impacts on bills and what customers are willing to pay for.</li> </ul> <p>We have explored in detail the acceptability of severe restrictions with our customers. We have worked hard to ensure that engagement was as meaningful as possible, by testing the language and materials used to communicate risk, and by ensuring that the descriptions used can be readily understood. The results of this research were central to the development of our dWRMP.</p> <p>Details of our customer engagement strategy and results are provided in the Customer and Stakeholder Engagement Appendix. Chapter 6 of our revised dWRMP describes how customer preferences shaped our Preferred Plan.</p>	Revised dWRMP - Chapter 6 (Section 6.4), and Customer and Stakeholder Engagement Appendix
155	Ofwat	<p>It is unclear whether the impact and timing of the selected level of resilience was discussed with customers in terms of the supply-demand balance, the scheduling of options or the bill impact. It is also unclear if customers have been presented with the impacts of selecting alternative levels of service or whether relative drought resilience levels have been compared with other companies to enable informed engagement.</p>	<p>Our customer engagement activities included research presenting customers with alternative levels of services, including investing in drought resilience (but not climate change), investing in drought resilience and climate change, and the inclusion of future proofing investments. Another study asked customers' preferences regarding alternative Levels of Service for severe restrictions, from 1:100 years to 1:200, to 1:500 to never.</p> <p>There is limited comparative information available on the Level of Service for severe restrictions. The majority of companies plan to ensure resilience against the historic record and this varies between regions, except for Yorkshire Water and Southern Water which provide a 1 in 500 year Level of Service. This was discussed with customers at the follow-up focus groups to the stated preference study.</p> <p>Details of our customer engagement strategy and results are provided in the Customer and Stakeholder Engagement Appendix.</p>	Revised dWRMP - Customer and Stakeholder Engagement Appendix
156	Ofwat	<p>Anglian Water presents bill impacts in its draft plan and states investment in supply-side enhancement will add about £10 a year to the average bill. However, it is unclear if customer support for this has been demonstrated and greater clarity is required in the final plan.</p> <p>It is unclear if the [£10 a year] increase was presented to customers in the context of one of a number of factors that could influence bills. It also appears the impacts are focused on aspects of the plan independently, such as supply, rather than as a package (supply and demand options).</p> <p>Given that Anglian Water have broken down the increase in bills into areas such as drought resilience, climate change and sustainability reductions the company needs to demonstrate this has been presented to customers in a transparent manner. We expect the final plan to clearly account for the influence of customer preferences and their willingness to pay.</p>	<p>Following the submission of draft WRMP 2019, we undertook further deliberative research with customers to discuss the acceptability of our Preferred Plan. We presented customers with three alternative options:</p> <ul style="list-style-type: none"> <li>o Investing in drought resilience (but not climate change), which would add £2.20 p.a. to the average bill by 2025;</li> <li>o Investing in drought resilience and climate change, which would add a total of £8.30 p.a. to the average bill by 2025; and</li> <li>o Future proofing our network by building additional capacity now, which would add a total of £10.00 p.a. to the average bill by 2025.</li> </ul> <p>The majority of customers supported the future proofing option (71%) as it carries the least risk and was felt to be the most proactive (although note that this is not robust pricing research).</p> <p>We have taken the decision to prioritise demand management options following consultation with our customers and regulators, as described in Chapter 4. As such, we have not directly compared demand and supply options.</p>	Revised dWRMP - Customer and Stakeholder Engagement Appendix

157	Ofwat	The draft plan does not include reference to engagement with, or challenge from, the company's Customer Challenge Group (CCG) on the customer participation programme. In the final plan clarity is required on the approach adopted to CCG engagement and how this engagement has shaped the plan.	In the initial stages of developing our strategy in 2016 we agreed a number of objectives with our Board and our Customer Engagement Forum. These were then reviewed again by the Customer Engagement Forum in March 2018 and updated.  Our objectives include: <ul style="list-style-type: none"> <li>• To run a programme of engagement activities that are genuinely co-created and designed with a representative group of customers and other stakeholders (employees, Customer Engagement Forum etc.), with special attention paid to customers in circumstances that may make them vulnerable</li> <li>• Demonstrate best practice customer engagement in a way that builds understanding and enables stakeholders to recognise us as a leader</li> <li>• Be clear that we are interested in customers' long term priorities</li> <li>• Be strategic and have a clear thread between the different elements of the programme, as well as a clear view about how customer insight will drive decision making</li> <li>• Draw evidence from all the different channels through which we engage with customers and triangulate the insights</li> </ul>	Revised dWRMP - Customer and Stakeholder Engagement Appendix
158	Ofwat	Anglian Water should continue to engage with retailers and large users to further validate the demand forecast, and reflect these outputs in the final plan.	Non-Household demand is currently 99.5% metered. This has provided extensive data, upon which the Non-Household forecast has been based.  We continue to engage with the retail and non-household sectors, through our retail partners to drive water efficiency and monitor consumption.	Technical documents: Demand Management Strategy (Section 5 (5.4.4)), and Demand Forecast (Section 6)
159	Ofwat	However, the company faces significant challenges with respect to abstraction licence reductions and climate change. Further explanation is required regarding the status of its system model and the relationship between the restrictions that have been identified and the selection of options in the preferred plan.	We have created an infographic in the main Plan which summaries our option selection and relationship to key drivers.	Revised dWRMP - Chapters 2 and 5
160	Ofwat	The impacts of the Water Industry National Environmental Programme (WINEP) abstraction licence changes are presented differently in the principal and adaptive plans	We have committed to maintaining all of our groundwater abstractions below recent historical abstraction rates in order to manage the risk of WFD deterioration. To reflect this, we have assessed the impact of sustainability changes on all groundwater sources in 2022 in our Preferred Plan, rather than in AMP8 as detailed in our dWRMP Adaptive Plan scenario.	Revised dWRMP - Chapter 2  Technical documents: Supply Forecast, and Sustainable Abstraction
161	Ofwat	For the final plan we expect Anglian Water to revise its forecasts with reference to the latest WINEP outputs (release 3) and explain any variations between these two releases and how the selected plan, either principal or adaptive, has changed as a consequence. This should also provide details on how the company intends to appropriately manage this uncertainty around reductions.	Our revised draft WRMP has been updated to reflect WINEP3 and the Preferred Plan has been updated to reflect this. The timing of these impacts has also been updated to reflect consultation responses received. We clearly describe the differences between our dWRMP and revised dWRMP.	Revised dWRMP - Chapter 1  Technical reports: Supply Forecast

162	Ofwat	Anglian Water states it has delayed the impact of climate change in its plan from 2020 to 2025, to allow the choice between supply-demand options, rather than phasing in climate change over the period. For clarity, the final plan should provide a further detail on the benefits and risks of this approach.	We are no longer adopting this approach	Revised dWRMP - Chapters 2 and 5
163	Ofwat	Given the inherent uncertainty regarding potential climate change reductions the company should clarify if they have considered how this would be accounted for in the adaptive plan. This would reflect the potential for both lower and higher impacts and identify the flexibility of the plan and the key decision points to ensure effective investment decisions.	We have considered alternative climate scenarios in the stress testing section of the Preferred Plan	Revised dWRMP - Chapter 6
164	Ofwat	In a change from the previous plan Anglian Water has used a new system modelling approach for the Ruthamford and Lincolnshire zones. The company should confirm if it plans to extend this approach further across its area and how the plan has been influenced by the identification of network constraints through this modelling.	We have built a systems model in Aquator to represent our entire region which has been used for our deployable output assessment in all but two Water Resource Zones. Our Ruthamford and Lincolnshire areas are considered to be more conjunctive than others and this has been represented in Aquator through inter-zone transfers. We are exploring options to improve connectivity between the rest of our zones which we will represent in Aquator as appropriate. Aquator has improved our understanding of network constraints on DO as previously these were not considered, which has allowed us to identify options to utilise existing resource.	Technical documents: Supply Forecast  Technical documents: Supply Options
165	Ofwat	The outage allowance is approximately 3%, marginally lower than the previous plan and below the industry average of 6%. The company states the intention of updating outage for the final plan based upon its resilience assessment and the final plan should clearly explain any changes from the draft plan.	The outage allowance has been updated and the average level reduced, taking into account the reduced risk from single source of supply.	Technical documents: Managing Uncertainty and Risk
166	Ofwat	Anglian Water use a simple approach to headroom adapted from the approach defined in the guidance. Target headroom is 5% of demand in 2020, increasing to 12% of demand by 2045 which is slightly higher than the industry average. There are inconsistencies in its presentation between the narrative and planning tables, as the narrative states headroom will be no greater than 6.5% of demand by 2045 rather than the 12% noted above. This should be explained or corrected in the final plan.	Headroom is capped to 7.5% (AMPs 7-10) and 6.5% (AMP11) in the baseline forecast; the same volumetric headroom is used in the final forecast and therefore there may be some differences in the percentages relative to the final forecast especially in WRZs where demand has reduced significantly.	Technical documents: Managing Uncertainty and Risk
167	Ofwat	In the final plan we expect Anglian Water to provide clear evidence for the choice of final planning scenario (either principal or adaptive). This should explain how the outcomes of consultation with customers and key stakeholders have influenced the decision.	In moving from our draft to our revised draft WRMP we have simplified our description of the planning scenario, and associated investment plan. We are no longer referring to a 'Principal' and 'Adaptive' plan, instead we have one Preferred Plan, and we describe the process of adaptive planning that we will undertake as we move towards WRMP 2024. In our revised dWRMP summary report we describe the justification for the selection of the planning scenario and Preferred Plan. We have included more detail and further justification than we did in our dWRMP.	
168	Ofwat	A review of the supply-demand balance components is complicated by the number of zones in the Anglian Water area. The company should consider whether production of an aggregated company level table for both scenarios would aid understanding and transparency of the plan.	We have provided aggregated summary numbers in our revised dWRMP; However, in general terms the WRZs are the building blocks.	Revised dWRMP - Chapter 2

169	Ofwat	Anglian Water has considered a wide range of supply and demand options, reflecting the scale of challenge faced. However, as referred to in section 1, further evidence is required to justify the drivers for the options selected.	<p>We have created a new section in our revised dWRMP to strengthen the justification for our Preferred Plan (Chapter 6 Preferred Plan). We also include details of the development of our demand management strategy in Chapter 4 and our supply-side strategy in Chapter 5.</p> <p>In addition, we have also updated the supporting graphics for our plan to help explain the justification for the strategy and specifically to explain the need to develop the strategic grid. The figure, which appears on the third graphics page in the Executive Summary, and in Chapter 7 Preferred Plan, shows how each transfer scheme addresses deficits in specific water resource zones. The map on the first graphics page in the Executive Summary also provides a visual aid to explain the drivers of the deficits in each WRZ. We have also strengthened the description of the drivers in Chapter 2, the scale of the challenge.</p>	Revised dWRMP - Executive Summary, and Chapters 2, 4, 5 and 6
170	Ofwat	There is uncertainty regarding the trading requirements of neighbouring companies which would have a large impact upon the proposals, especially those in adaptive plan.	Following the publication of the draft WRMPs, we have worked closely with our neighbouring water companies, Defra and the Environment Agency to clarify the position relating to future trading requirements. We agreed with Affinity Water to consider a future export of 50 MI/d, which although does not form part of our Preferred Plan, was included in the stress testing scenarios. We will continue to work with Affinity Water to develop this export option ahead of WRMP 2024.	Revised dWRMP - Chapter 6 (Section 6.5)
171	Ofwat	However, third-party options appear to have been screened out due to insufficient information and we would welcome further evidence to show the criteria have been applied consistently.	<p>We included a number of trading and third party options in our feasible option set. We have engaged in detailed discussions with our neighbouring water companies as well as water management organisations in our region such as the Environment Agency and the Canal and River Trust. We have also held discussions with third party suppliers and other large industrial users in our region to explore trading opportunities. We considered trading and third party options identified through: Unconstrained options workshops, Collaborative water resource planning projects/groups, and the Market Information platform.</p> <p>All of the options identified were assessed using the same method for in-house options, and any discounted options are recorded in the rejection register.</p>	Technical documents: Supply-side Option Development
172	Ofwat	Anglian Water has provided evidence of engagement and discussion with third parties to generate options for consideration within the planning process. However, the consideration of third party options appears to have focused on supply-side options and the company should consider what it could do in order to promote further demand-side options.	We sought input from third parties via the Market Information platform.	n/a
173	Ofwat	Beyond the regional options discussed above, no third party options have been included on the feasible list and a number were rejected due to insufficient data being available. For these options Anglian Water should continue to actively engage with the third parties and provide support to ensure viable options are not unnecessarily screened out.	<p>We included a number of trading and third party options in our feasible option set.</p> <p>We did not receive details of any further third party options through the Market Information Platform but we will continue to liaise with stakeholders through the Water Resources East programme. The Market Information platform will also be regularly updated.</p>	Revised dWRMP - Chapter 5 (Section 5.3.1)  Technical documents: Supply-side Options Development

174	Ofwat	We expect Anglian Water to demonstrate equal vigour in gathering data on third party as in-house options and to ensure equal treatment of these options. It should be careful to ensure that its in-house options are not unfairly or unduly favoured and that the principles for company bid assessment frameworks are followed.	<p>We requested option data to ensure that the trading and third party options were assessed using the same methodology as our own supply-side options.</p> <p>For some third party options, the risks associated with yield reliability, invasive non native species and water quality were considered too great to be included in the feasible options set without further investigation and so were not included in the dWRMP programme appraisal modelling.</p> <p>We will continue to liaise with stakeholders through the Water Resources East programme and the Market Information platform to further develop third party options.</p>	<p>Revised dWRMP - Chapter 5 (Section 5.3.1)</p> <p>Technical documents: Supply-side Options Development</p>
175	Ofwat	Water trading is a key feature of Anglian Water's plan reflecting its location and the company's involvement in groups such as WRE. However, we have concerns regarding the consistency of the presentation of some transfers and the limited evidence of the development of a regional strategy and clarity on these points need to be provided in the final plan.	<p>We have worked hard between dWRMP and revised dWRMP to improve the alignment between water company plans and specifically how existing agreements are presented. We are confident that there is now full alignment between our plans.</p> <p>Our revised dWRMP Preferred Plan is consistent with emerging Water Resources East strategy as described in chapter 6.</p>	Revised dWRMP - Chapter 6
176	Ofwat	The starting value, trend and end point of the reduced export to Affinity Water is not consistent between the two companies. For example there is a difference of 23 MI/d in its starting value. Further justification for this trade is also required given the near term needs that Affinity Water faces.	<p>We are continuing to work closely with Affinity Water to understand their future trading requirements. We do not include an export to Affinity in revised dWRMP Preferred Plan.</p> <p>However, we have considered a potential future export to Affinity in our stress testing, to ensure that we are able to adapt our Preferred Plan to meet future needs which are currently uncertain.</p>	
177	Ofwat	The new import does not appear to be represented in the Severn Trent Water preferred plan where over 50 MI/d of new exports are identified in total with no clear description of the individual component trades.	<p>We have worked with Severn Trent Water in preparing our revised dWRMP to ensure the options included are the most up to date available. The options referred to in this comment does not appear in our revised dWRMP Preferred Plan.</p> <p>We will continue to work closely with Severn Trent Water via Water Resources East and the Trent Working Group in our adaptive planning and preparations for WRMP 2024.</p>	
178	Ofwat	In the adaptive plan significant new exports of up to 60 MI/d to Affinity Water and Cambridge Water commence in 2025-30. However, these do not appear as imports in the respective companies preferred draft plans.	<p>We are continuing to work closely with Affinity Water to understand their future trading requirements. We do not include an export to Affinity in revised dWRMP Preferred Plan.</p> <p>However, we have considered a potential future export to Affinity in our stress testing, to ensure that we are able to adapt our Preferred Plan to meet future needs which are currently uncertain.</p> <p>We no longer include an export to Cambridge Water, as agreed with the company.</p>	
179	Ofwat	The focus on leakage reductions aligns with the reported customer preferences and there is an expectation that smart meters will help reduce supply pipe leakage. Anglian Water appears to be relying on the reduction in water bills as sufficient incentive to drive this behaviour. It should clarify its evidence and underlying assumption for this and whether alternative approaches have been considered.	Our assumptions are built upon our smart meter trials in Newmarket and Norwich. However, we do not consider smart metering to be a technological 'fix'; rather, it will be accompanied by water efficiency activities.	Technical documents: Demand Management Strategy (Section 5.2.12-5.2.16)

180	Ofwat	Anglian Water has an ambitious metering programme with the level of metering penetration forecast to rise from 83% in 2020 to 90% by 2025. However, the company should provide further evidence to support the deliverability of this strategy within the final plan.	Actual meter installation penetration is currently 89% and is forecast to increase to 93% by 2020.  Our Preferred Plan is proposing company-wide roll-out of smart meters. We discuss deliverability in the Demand Management Strategy.	Technical documents: Demand Management Strategy (Section 5.2.7, 5.2.8)
181	Ofwat	Anglian Water's long term target for average per capita consumption (PCC) is identified as 122 l/h/d by 2045 in the planning tables. This is consistent with the average for other companies nationally and it is therefore maintaining comparative level of performance. We welcome the proposals to investigate the feasibility of greywater and rainwater reuse and consideration should be given to scaling these options to help drive further reductions to meet challenges faced.	We adopt the same approach to demand management in our revised dWRMP.	Technical documents: Demand Management Strategy (Section 5.4)
182	Ofwat	New interconnections between zones are included in the preferred plan for 2020-25 with a significant expenditure. This includes the creation of a linked strategic grid. However, as referenced in section 1, greater clarity for the drivers behind this are required in the final plan.	We have provided more detailed information on the extension of our strategic grid in our revised dWRMP, including in relation to the drivers within each Problem Characterisation area and WRZ.	Revised dWRMP - Chapters 5 and 6
183	Ofwat	New interconnections - The company should present options considered for each interconnection and explain how these have been evaluated in the context of the potential change in key drivers, such as future trades and climate change.	We provide more detailed information on the extension of our strategic grid in our revised dWRMP, including in relation to the drivers within each Problem Characterisation area and WRZ.	Revised dWRMP - Chapters 5 and 6
184	Ofwat	New interconnections - Anglian Water need to demonstrate how it has optimised the solution and considered the benefits of a flexible approach, such as extending the delivery phase. The company should provide evidence the solution presented represents an appropriate balance of risk and it is adaptable to varying future scenarios.	We have undertaken stress testing and long-term EBSD runs which both demonstrate the robustness of the interconnections included in the Preferred Plan.	Revised dWRMP - Chapter 6
185	Ofwat	A large variety of supply-side options have been considered and significant supply-side options are included throughout the planning period in both plans. We expect Anglian Water to consider the scale of investment required in its final plan, in light of potential uncertainties, in particular if the future exports to Affinity Water and Cambridge Water of 60 Ml/d are not required.	We have adjusted the supply risks in our revised dWRMP to take into account consultation feedback and updated modelling. We have struck a balance between future proofing and minimising redundancy through extending our strategic grid, whilst minimising the need for new resources.	Revised dWRMP - Chapters 6 and 7
186	Ofwat	The company is proposing development of a significant number and scale of supply-side options within 2020-25 and therefore should include greater detail on the potential risks in terms of environmental mitigation, deliverability and uncertainty in timing.	The deliverability of option is assessed as part of the options appraisal process as described in the Supply Option development technical report	Technical documents: Supply-side Option Development

187	Ofwat	Anglian Water has adopted an economics of balancing supply and demand (EBSA) approach to develop its plans. However, we have concerns around the transparency and robustness of the decision making in the draft plan. We would expect to see greater clarity provided on the deliverability of the programme and the assurance processes undertaken in the final plan.	We have added new sections on our approach to decision making, and the criteria used in adapting the least cost EBSA output to a 'best value' plan. We have also included information on the deliverability of the options and the assurance that has been undertaken.	Revised dWRMP - Chapters 4 (demand-side) and 5 (supply-side)  For deliverability see technical documents: Supply Option Development, and Demand Management Strategy
188	Ofwat	The preferred plan is based on the principal plan with additional investment to enable the development of options in the adaptive plan. However, it is unclear how the preferred plan was selected and further clarity is required in the final plan.	We have added new sections on our approach to decision making, and the criteria used in adapting the least cost EBSA output to a 'best value' plan.	Revised dWRMP - Chapters 4 (demand-side) and 5 (supply-side)
189	Ofwat	While there is a large amount of material provided on both plans it is unclear how the final preferred portfolio was selected. Anglian Water should clarify the decision making process and in the final plan include a clear summary that concisely explains how and by whom the preferred plan was decided.	We have added new sections on our approach to decision making, and the criteria used in adapting the least cost EBSA output to a 'best value' plan.	Revised dWRMP - Chapters 4 (demand-side) and 5 (supply-side)
190	Ofwat	As noted in sections 4 and 6 above, there is significant uncertainty in both the level of abstraction licence reductions and the water trading requirements of neighbouring companies. Anglian Water should provide a clear explanation of how this uncertainty has impacted its decision making process and how further information subsequent to the draft plan led to any revisions for the final plan.	Based on significant further engagement with neighbouring companies, we have concluded the trading arrangements and agreed a scenario to capture future uncertainty. We will continue with all existing trades. To capture potential future requirements, we have agreed scenarios with Affinity Water for export to Affinity East and Affinity Central. The most significant scenario is exploring a 50 Ml/d export to Affinity Central. This is captured in the stress testing of our preferred plan and will be included in our adaptive planning.	For stress testing, see revised dWRMP Chapter 6.  For adaptive planning, see revised dWRMP Chapter 7.
191	Ofwat	Given the high levels of uncertainty Anglian Water should consider how it can ensure flexibility in the final plan to enable it to adapt to a variety of outcomes. The plan should consider key trigger points for decision making to promote efficient investment. Additionally the evaluation and selection of options should account for this, ensuring lower regret options are considered first and the benefits of more flexible solutions are realised (such as modular delivery).	We have undertaken stress testing using several scenarios and long-term EBSA runs which both demonstrate the robustness of our Preferred Plan.  We will be moving into a phase of adaptive planning, during which we will develop key trigger points and alternative options pathways.	For stress testing, see revised dWRMP Chapter 6.  For adaptive planning, see revised dWRMP Chapter 7.

192	Ofwat	As noted in section 1, the challenge Anglian Water faces suggest more advanced decision making techniques could be adopted. Anglian Water should consider how it could further validate its decision making through more advanced techniques and set out its considerations in the final plan.	We have added new sections on our approach to decision making, and the criteria used in adapting the least cost EBSD output to a 'best value' plan. We have also included information on the deliverability of the options and the assurance that has been undertaken.	Revised dWRMP - Chapters 4 (demand-side) and 5 (supply-side)  For deliverability see technical documents: Supply Option Development, and Demand Management Strategy
193	Ofwat	It is not clear how deliverability of the preferred plan has been considered in the decision making process and this needs clarifying in the final plan. For example there is considerable investment planned in both demand-side and supply-side options in 2020-25 which could represent a challenge for delivery at a programme level.	The deliverability of options is assessed as part of the options appraisal process as detailed in the Supply Option Development and Demand Management Strategy technical documents.  In addition, we have considered risks associated with the demand management options by stress testing our preferred plan using lower levels of demand (-15% and -30%).	Technical documents: Supply-side Option Development, and Demand Management Strategy  For stress testing, see revised dWRMP - Chapter 6.
194	Ofwat	Anglian Water briefly refer to the assurance process for the plan and approval by the company Board. The company should provide greater clarity on the assurance process followed and Board involvement for the final plan.	Our plans have been through rigorous internal and external assurance processes. This includes a three step process of: a) challenging and justifying the need for an investment b) ensuring we select the most appropriate solution to meet need, including considering innovative approaches, and c) costing the selected solution from a baseline of our own achieved efficiencies, testing against industry benchmarks, and then applying further productivity enhancements and stretch efficiencies across our entire investment programme.	
195	Ofwat	Anglian Water has demonstrated it worked closely with WRE and groups such as the River Trent and Ouse steering groups during plan development. However, further work is required to build a regional strategy consistent with WRE. We expect the regional level discussions to be ongoing and for greater clarity on these considerations to be provided in the final plan.	We agree that these groups will continue to be important and we remain committed to them, including in our adaptive planning process.	Revised dWRMP - Chapter 7
196	Ofwat	The company states where options in the preferred plan are consistent with the WRE outputs. However, to increase transparency the plan would benefit from a summary and explanation of the differences between WRE outputs and the preferred plan.	WRE strategy is broad and includes a grid and wide variety of options; our preferred plan builds part of the grid envisaged by WRE and keeps options open regarding source of new supplies; both have significant DMOs	Revised dWRMP - Chapter 6



197	Ofwat	<p>Anglian Water has selected the standard planning period of 25 years while other companies have used longer periods. We note WRE uses a longer term horizon and considers impacts into the 2060s. The company should clarify its chosen planning horizon in the context of the regional plan outputs it is using for comparison.</p>	<p>For the revised dWRMP we have undertaken long-term EBSD runs to 2065 and 2085. These demonstrate consistency with our Preferred Plan.</p>	<p>Revised dWRMP - Chapter 6</p>
198	Phillips 66	<p>To consider the potential impact of the treating and diverting the non-potable water out of Elsham, Phillips 66 requests that Anglian Water provides:</p> <p>a) data on volumes of water currently treated and exported as non-potable to the South Humber Bank industrial customers;</p> <p>b) forecast data on volumes of water required as non-potable supply by the South Humber Bank industrial customers;</p> <p>c) forecast data on volumes of non-potable water to be treated and transferred out of Elsham as potable.</p> <p>For example, the capability, reliability and stability of the Pyewipe non-potable water supply as well as quality and composition of such water must be, in all regards, at least equivalent to, or better than that provided by the current supply from Elsham Water Treatment Works.</p> <p>There follows a list (a-h) of requirements for further analysis of the Pyewipe option.</p>	<p>As we finalise our plans we will be in a position to answer these questions more fully, however we can offer the following comments at this stage:</p> <p>- Question (b): the forecast demand volume remains static at 46 MI/d (note water available is 57 MI/d giving an 11 MI/d surplus)</p> <p>- Question (c): we currently anticipate transferring 17 MI/d potable water from Elsham in 2024-25, rising to 25 MI/d from 2025-26. [in our revised dWRMP we have altered the utilisation rises more gradually from 2025-26]</p> <p>We have already held post-dWRMP discussions which will continue with retailers on the South Humber Bank.</p> <p>We will continue to develop the Pyewipe option whilst also considering alternative resources.</p>	<p>n/a</p>
199	Phillips 66	<p>There is also a concern whether adequate water supply back-up capabilities will be implemented to supplement short-term and long-term shortages of non-potable water supply.</p> <p>In this regard, Phillips 66 requests that Anglian Water facilitates:</p> <p>a) Consultation on the number of days of back-up supply available to the South Humber Bank industrial customers in the event of a failure at the Pyewipe facility, or other disruption issues on the water supply infrastructure;</p> <p>b) Creation of a back-up supply by retaining a properly maintained connection to the Elsham Water Treatment Works, including details of how such back-up facilities would be implemented and any short-term supply disruption that may occur on switching to the back-up supply.</p>	<p>As we finalise our plans we will be in a position to answer these questions more fully.</p> <p>We have already held post-dWRMP discussions which will continue with retailers on the South Humber Bank.</p> <p>We will continue to develop the Pyewipe option whilst also considering alternative resources.</p>	<p>n/a</p>
200	RSPB	<p>We want Anglian Water to commit in your final plan to playing a full role in continuing with the next phase of Water Resources East and more generally in promoting and participating in national and regional scale water resource planning initiatives in AMP7</p>	<p>We are committed to playing a full role in the next phase of Water Resources East and remaining an active participant in other regional and national planning initiatives.</p>	<p>Revised dWRMP - Chapter 7</p>
201	RSPB	<p>However, given the limited resources in East Anglia and the South East we would also like to see these companies collaborating more on demand side measures. For example; on leakage or PCC where currently Anglian Water are at the leading edge and Affinity are not. This could free up additional valuable resources</p>	<p>We have been collaborating regionally through the WRE strategy which includes a significant focus on Demand Management Options. We have referenced this strategy, whilst producing the dWRMP.</p>	<p>Technical documents: Demand Management Strategy (Section 4)</p>

202	RSPB	<ul style="list-style-type: none"> <li>We want Anglian Water to clearly set out in your final plan what steps you are taking to understand, promote and build the resilience of the natural environment in line with OFWAT's Resilience Planning Principle 2.</li> </ul>	<p>Our revised dWRMP includes significant levels of sustainability reductions, which will leave large quantities of water in the natural environment for the benefit of ecosystems and biodiversity.</p> <p>We have also reduced the need for further abstraction from the environment through our ambitious demand management programme and the transfer of existing resources.</p> <p>Environmental impacts of options have been considered as part of the options appraisal process.</p>	n/a
203	RSPB	<p>We are pleased to see the WINEP scheme to cease abstraction at Ludham borehole near Catfield Fen by March 2021. We would like to see Anglian Water support eco-hydrological monitoring of this internationally important site so that the beneficial impacts of the WINEP scheme can be confirmed</p>	<p>We are dedicated to the improvements of Catfield Fen and the Ants Broads and Marshes. We are committed to closing our Ludham source by March 2021, and are managing uncertainties surrounding potential future changes to other sources in the area. We are fully supporting the Environment Agency and Natural England in their ongoing investigation into the wider Ants Broads and Marshes.</p>	<p>Revised dWRMP - Chapter 2</p> <p>Technical documents: Sustainable Abstraction</p>
204	RSPB	<ul style="list-style-type: none"> <li>We want Anglian Water to commit to continuing the investigative work in WRE in AMP7 to assess future risks to conservation sites and the environment arising from your abstractions given a likely climate change scenario of changing flow patterns and groundwater levels.</li> </ul>	<p>We have supported this type of investigative work as one of the technical packages under Water Resources East. With other partners, we will review the technical requirements for the next phase of work in due course.</p>	
205	RSPB	<ul style="list-style-type: none"> <li>We ask Anglian Water to set out in more detail their proposals for utilising AIM in AMP7 including where and how they will use AIM to mitigate for risks of impact on environmental sites and WFD status.</li> </ul>	<p>AIM is one of several performance commitments set out in our PR19 Business Plan. We list these performance commitments in our revised dWRMP. Further detail on our AIM commitments has been included in the Sustainable Abstraction supporting technical document and also our PR19 Business Plan.</p> <p>We expect that the delivery of sustainable abstraction schemes in AMP7 will remove the need for AIM at all sites following their completion.</p>	<p>Revised dWRMP - Chapter 7</p> <p>Technical Reports: Sustainable Abstraction</p>
206	RSPB	<ul style="list-style-type: none"> <li>We are pleased to see that Anglian Water is not planning overall to put more water into distribution by the end of AMP7 in 2025. This is one of our priorities in the Blueprint for PR19. We would like to see a similar commitment in the longer term to 2045.</li> <li>We are pleased to see Anglian Water's evident commitment to remain at the leading edge in the sector on leakage given the water scarcity challenges in the region.</li> <li>We are pleased to see Anglian Water's short and long-term commitment to metering</li> <li>We are pleased with Anglian Water's ambition on PCC in both the short and long term.</li> </ul>	<p>Our revised dWRMP sees distribution input fall from 1130 MI/d in 2017-18 to 1112 MI/d in 2025, remaining close to 1112 MI/d in 2045.</p>	<p>Technical documents: Demand Forecast</p>

207	RSPB	<ul style="list-style-type: none"> <li>• We want to see Anglian Water highlighting to OFWAT any issues that it is having in engaging business customers on water efficiency via the new water retail companies given the water resources challenges highlighted in the draft plan.</li> <li>• We want Anglian Water to commit in your final plan to piloting the use of household and community incentives during dry weather periods or in water stressed areas to reduce demand.</li> <li>• We want Anglian Water to commit to stepping up its engagement with developers and local planning authorities to ensure all new major development incorporates water efficient homes. We would also like to see the company work with other stakeholders to advocate to government for stronger building regulations in water stressed areas.</li> </ul>	<p>Changes to Local planning efficiency standards (reducing current stipulations from 125l/h/d to 110l/h/d and below), designed to increase efficiency are actively supported and encouraged.</p> <p>We monitor the current status Local Authorities 'design efficiency standards', across the region. as detailed in the revised Demand Management Strategy Report.</p> <p>We are currently developing incentive systems, tied to our smart meter rollout, that will be able to be targeted at specific households, locations and communities. Given the potential for a much more dynamic relationship with our customers we will be able to apply these incentives at times of greatest water stress (dry weather, drought)</p> <p>We are planning to incentivise developers to build more efficient homes (building to a 100l/h/d standard) with reduced/waived zonal charge fees.</p>	Technical documents: Demand Management Strategy (Section 5.4)
208	RSPB	However, there seems to be a significant level of uncertainty around the scale of sustainability/WFD no deterioration reductions needed and this has led to a rather complex set of possible additional options. We believe that if, as stated, the sustainability reductions are likely then Anglian Water should act sooner rather than later to build in future proofing for the system. This would be preferable to the risk, which has materialised for Southern Water, of a supply system that is not fit for purpose following sustainability changes and relies on frequent drought permits and orders.	We are now addressing in AMP7 all of the sustainability reductions recognised in the dWRMP.	Revised dWRMP - Chapter 2
209	RSPB	• Given the levels of uncertainty and the range of potential future supply side options we suggest that Anglian Water starts the planning for 2025 onwards early, working with stakeholder and customers to help refine and focus a robust plan for 2025 onwards.	We agree, and will move into a phase of adaptive planning as soon as our WRMP is finalised.	Revised dWRMP - Chapter 7
210	RSPB	• Under the Adaptive Plan reference is made to a Fenland Reservoir in addition to the South Lincolnshire Reservoir however it does not appear to be shown on the plan maps or listed in the tables. Please could more information be provided on this option in the final plan. There is an opportunity for such a scheme to provide multiple benefits for farmers, conservation, flood risk and water supply and we would like to find out more about this proposal.	Neither the Fenland Reservoir or the South Lincolnshire reservoir currently feature in our Preferred Plan. They are options are considering as part of our adaptive planning process in preparation for WRMP 2024. We agree that both reservoirs have the potential to provide multiple benefits not just to public water support but also the agricultural and environmental sectors. These	
211	RSPB	However, we have found it difficult to get a clear picture on the scale and location of inter-company transfers. We understand that discussions are still live between companies and with the regulators and that these include major schemes such as the Severn Thames transfer.	We have worked hard between dWRMP and revised dWRMP to improve the alignment between water company plans and specifically how existing agreements are presented. We are confident that there is now full alignment between our plans.	
212	RSPB	• We believe that additional stakeholder and customer engagement will be necessary if there are any substantive changes between the draft and final plan with respect to the preferred supply side solutions.	We have carried out extensive stakeholder and customer engagement in the development of our plan as outlined in the Customer and Stakeholder Engagement Appendix. There have been no substantive changes in our preferred supply side solutions which would warrant further customer and stakeholder engagement.	

213	RSPB	<ul style="list-style-type: none"> <li>• We want Anglian Water to commit in its final plan that all the supply side water resource schemes you progress in AMP7 will deliver a net gain in biodiversity and for the wider environment</li> </ul>	<p>Our revised dWRMP includes significant levels of sustainability reductions, which will leave large quantities of water in the natural environment for the benefit of ecosystems and biodiversity.</p> <p>We have also reduced the need for further abstraction from the environment through our ambitious demand management programme and the transfer of existing resources.</p> <p>Environmental impacts of options have been considered as part of the options appraisal process.</p> <p>Inevitably with the transfer schemes there will be environmental impacts and whilst these will be mitigated wherever possible, some will remain, especially related to carbon emissions associated with energy use from pumping.</p>	
214	RSPB	<ul style="list-style-type: none"> <li>• We were disappointed to see so little in the draft Plan on your catchment management programme and proposals for AMP7 given the relevance of catchment management to current and future water supply in the region. We know the company are doing some excellent work in this area and are surprised at the lack of connection made in the draft plan between this work and your current and future management of regional water resources. We hope this is something that can be addressed in the final plan.</li> <li>• We are disappointed to see so many energy intensive metaldehyde removal schemes in the draft Plan. We know that Anglian Water have been progressing catchment initiatives to reduce levels and risk and that the company has also been advocating the use of regulatory measures such as a targeted ban where voluntary catchment actions have not been, or are unlikely to be, sufficiently successful. We strongly believe that it is in the customers interests for targeted bans to be brought in as soon as possible, through the vehicle of Water Protection Zones.</li> </ul>	<p>We have added some further detail on the alignment between our revised dWRMP and our catchment management strategy.</p> <p>We support the need for a targeted ban to address the risks associated with metaldehyde. However, until there is certainty from the Government on the implementation of the ban the ban we chosen to include metaldehyde treatment in our plan. This ensures we are compliant with the DWI guidance and related water quality legislation and that no customers are at risk of deteriorating water quality.</p>	<p>Revised dWRMP - Chapter 6</p> <p>Technical documents: Supply Forecast</p>
215	RSPB	<ul style="list-style-type: none"> <li>• We are pleased to see that Anglian have undertaken a qualitative ecosystem services assessment as part of its draft plan that assesses the potential impacts of options on the provision of ecosystem services. We are aware of Anglian Water's wider work on Natural Capital and are pleased that the company is considering setting a bespoke reputational performance commitment on it. We would like to see Anglian Water commit in the final Plan to continue to progress its work to integrate Natural Capital into decision making on water resource options and also wider business decisions.</li> <li>• We want to see Anglian Water commit to undertake an assessment of the Natural Capital stocks it is directly responsible for across its estate and to make a commitment to maintain and enhance those stocks.</li> </ul>	<p>We have worked with researchers at the University of East Anglia through the Centre for Water Studies to develop a register of the natural capital found in our region and consider the pressures it faces. Understanding the risks that natural capital stocks face and the opportunities for better management will help inform our decisions on how best to secure long-term water resilience, alongside reducing flood risk, reducing our carbon footprint, enabling sustainable housing and economic growth, and supporting healthy lifestyles.</p>	

216	RWE Generation	<p>we do not support measures that would have the effect of reducing low flows in the Ouse at Little Barford</p> <p>We do not support any diversion of effluent that would otherwise have been discharged to the Ouse upstream of Little Barford at low flow</p> <p>we support measures that either increase flows at low flow or have the potential to increase flow at low flows at Little Barford</p> <p>We may be supportive of transfers into the Ouse upstream of Little Barford that would operate at low flows on the Ouse</p>	All the supply-side options on the Ouse within the feasible list are downstream of Little Barford and should not impact on flows in this area of the river.	Technical documents: Supply-side Option Development
217	South Holland District Council	South Holland District Council supports your approach of planning to meet local authority growth target. Housing growth is a top priority for us, as for other Local Authorities and Government. We are committed to accelerating our rates of housing and employment delivery, and therefore agree with your preferred approach.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
218	South Holland District Council	South Holland District Council supports your approach to prioritise demand management. It is important that the country makes the efficient use of natural resources and that Anglian Water continues to invest in tackling leakage and encouraging all customers to reduce their water use.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.	Technical documents: Demand Management Strategy
219	South Holland District Council	South Holland District Council supports your approach that water meters should not be made compulsory. We encourage you to provide information on comparative costs of metered and un-metered water supply for typical households in order that consumers can make informed choices.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
220	South Holland District Council	South Holland District Council supports your prudent approach, but would urge you to review this aspect as soon as you understand the implications of the proposed new environmental regulations.	<p>Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP3 and the capping of all groundwater licences to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025.</p> <p>We will continue to investigate the potential for further sustainability reductions as part of our adaptive planning.</p>	Revised dWRMP - Chapter 7
221	South Holland District Council	South Holland District Council supports the investment in increased resilience to drought, and would ask you to work with the Environment Agency and others to ensure that water supplies for agricultural uses are planned alongside the water supplies needed for homes and business.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
222	South Holland District Council	South Holland District Council is not equipped to assess this strategic risk but, on balance, would support a decision to invest sooner rather later because there is a tendency to postpone investment in strategic infrastructure and later regret the decision.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6

223	South Holland District Council	South Holland District Council recognises the need to plan for the future needs of the area, and that a new storage reservoir would be subject to full consultation through a formal planning process. At this stage, the Council's view is that any new storage reservoir should be designed so that it has ecological benefits for plant and animal life, and also provides amenity and leisure opportunities. These should enhance health and wellbeing as well as benefitting the local economy.	As part of our adaptive planning process, we will carry out planning activities to develop potential large scale supply options (including new storage reservoirs) which may be needed in the future. Assessment of opportunities for wider ecological, health and wellbeing benefits will form part of this.	
224	Suffolk Authorities	The SGPB therefore endorses Anglian Water's approach to using local plans as the most comprehensive source documents, supported by significant analysis, and these should continue to be used to inform investment proposals by infrastructure providers.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
225	Suffolk Authorities	While the Growth Programme Board recognises why Anglian Water has chosen to prioritise demand management in this Water Resources Management Plan 2019, we note that 2 of the 7 water resource zones (out of a total of 28 WRZs) that are expected to face large deficits in supply from 2020 onwards are in Suffolk (Bury Haverhill WRZ & East Suffolk WRZ). As a result, while an overall demand management approach can be taken, Anglian Water must continue to prioritise investment in securing supply particularly in those areas that have already been identified as having an imbalance. We welcome the two supply side transfer initiatives that are proposed (BHV5 & ESU8) for these WRZs.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years.	Technical documents: Demand Management Strategy
226	Suffolk Authorities	As a predominately public sector board we do not have a view on compulsory metering.	n/a	Technical documents: Demand Management Strategy
227	Suffolk Authorities	It would be useful to compare this increased cost to the worst case future investment requirement if this £88m is not invested in the short term (by 2025) – i.e. in the short term there is a savings of 14% per customer but over the longer term this could increase to x% additional cost.	Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP3 and the capping of all groundwater licences to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025.  We will continue to investigate the potential for further sustainability reductions as part of our adaptive planning.	Revised dWRMP - Chapter 7
228	Suffolk Authorities	This question relates to the balance of demand and supply side measures that are proposed by Anglian Water and the associated costs to the customer. The SGPB, as a predominately public sector board, is keen to ensure that Anglian Water explore all opportunities to ensure all customers receive the highest level of service at a competitive cost.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
229	Suffolk Authorities	While the SGPB recognise the merits in delaying investment in specific climate change measures to await further evidence collection and analysis, we would not want to see prohibitive restrictions, e.g. rota-cuts & standpipes, implemented should we face a water shortfall in the six year period (2019-2025). Based on the data presented in the report the overall capex saving of £300m equates to a per customer saving of £6.10p.a. or £36.60 over the six year period of delay.  Should we face a severe drought and water is cut off, particularly to rural areas, is the cost, both financial and non-financial in terms of disruption and public hygiene, likely to be more than £36.60 per household?	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6

230	Tendring District Council	The Council agrees to an approach of planning to meet local authority objectively assessed needs. The preparation of a sound Local Plan sits at the heart of our corporate priorities and the provision of adequate infrastructure is a key part of our Plan. We want to be sure that Anglian Water is working with the most up-to-date information available.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
231	Tendring District Council	As stated, planning for the proposed new development should be a key consideration and prioritising demand management appears to be prudent.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4. We have included supply options in the form of transfers and will continue to explore resource options over the next five years. Further detail is provided in the Demand Management Strategy technical document.	Technical documents: Demand Management Strategy
232	Tendring District Council	The Council has no comment on this.	n/a	Technical documents: Demand Management Strategy
233	Tendring District Council	This would appear to be a logical approach.	n/a	n/a
234	Tendring District Council	It is important to include measures to increase resilience to drought.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
235	Tendring District Council	It is considered that adopting the Environment Agency's 2017 method for calculating climate change impacts is one of the most appropriate methods. It is considered logical to address these impacts and therefore invest in a timely manner in line with Environment Agency advice.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
236	The Water Retail Company	Yes, we agree with the approach of using the local authority growth targets. If local growth targets are not quite being met currently, this means that the water resources exceed growth which we believe ensures water supplies are secure. Additionally, should housing growth 'catch-up' with targets, this will not endanger security of supply in the Anglian Water region.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
237	The Water Retail Company	Yes, we believe that this is a good approach. We believe that Anglian Water's ambitious growth targets set a precedent for the industry and the investment in the latest technology encourages innovation within the industry. The Water Retail Company is committed to water efficiency and would welcome a collaborative approach with Anglian Water to assist in consumption reduction and demand management amongst our clients.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4.  We look forward to working with retailers on demand management.	Technical documents: Demand Management Strategy
238	The Water Retail Company	The Water Retail Company believe that Anglian Water should consider compulsory metering in the upcoming business plan (2020-25). Full metering will aid the delivery of demand management, it will also provide higher resolution data for water resource management and leakage control and allow the roll-out of smart water technology for domestic properties.	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy

239	The Water Retail Company	Yes, we believe that this is important. It is a small annual cost increase per customer which will ensure that security of supply. We believe this money would be well invested in future-proofing.	Our revised dWRMP commits to the delivery of all sustainability reductions included in WINEP3 and the capping of all groundwater licences to ensure sustainable levels of abstraction. We are committed to delivering these changes between 2020 and 2025.  We will continue to investigate the potential for further sustainability reductions as part of our adaptive planning.	Revised dWRMP - Chapter 7
240	The Water Retail Company	Yes, we also believe that investment in drought resistance is highly important. Again, this would be a modest increase in bills which we believe would provide essential investment and reduce the impact of a severe drought event.	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7
241	The Water Retail Company	No, we strongly believe that investment in climate change should NOT be deferred until 2029-30. Climate change poses a significant risk and action should be taken as early as possible to mitigate any impacts. We assume that the expenditure in point 6 will also offset some of the expenditure in points 4 and 5.	Following the consultation on our dWRMP we have chosen not to defer investments in climate change impacts until 2029-30 and have accommodated these impacts within our Preferred Plan (with a residual risk in the South Ruthamford WRZ that we are managing via preparation for a Drought Permit application). Our dWRMP supply forecast modelled climate change impacts from 2024-25 onwards. For our revised dWRMP we have included climate change impacts from the start of the WRMP planning period (2020-21).	Revised dWRMP - Chapter 2 and 6
242	Water Level	We broadly agree with the approach, on the basis that historic trends are irrelevant in the face of political pressure to meet national house-building targets. These targets have historically been over-optimistic. Nevertheless, we believe that incumbents should prepare their Plans on the basis of current targets.	We have used the latest local authority growth targets as the basis of forecasting population within our demand forecast. We will continue to work closely with local authorities in our region to monitor on-going housing delivery against targets. Further detail is provided in the Demand Forecast technical supporting report.	Technical documents: Demand Forecast
243	Water Level	We believe that it right to prioritise measures which make best use of existing resources before investing in developing additional resources. Whilst we recognise Anglian's current achievements in this area, we note the ambitious future targets, and the reliance on (sustained) customer behaviour changes to achieve them. We regard this as a vulnerability in the Plan, unless steps are taken to facilitate upside performance in other areas of water use efficiency, particularly in relation to new build sites.	We have continued to prioritise demand management within our dWRMP as described in Chapter 4, including water efficiency activities as well as smart metering.  In addition we have modelled reduced demand management options scenarios as part of the stress testing of our Preferred Plan.	Technical documents: Demand Management Strategy
244	Water Level	We regard this measure as being almost inevitable, and that it should be part of future planning	We have considered the range of views expressed regarding compulsory metering during our consultation, as well as a wider analysis of the costs and benefits (as described in the Demand Management Strategy technical document). We have also taken into account our high level of meter penetration (which is forecast to reach 93% of households metered and 86% paying measured charges by 2020). As a result, we have not included compulsory metering in our revised dWRMP. We will continue to monitor the proportion of customers billed based on a meter reading and will review the need for compulsory metering at WRMP 2024.	Technical documents: Demand Management Strategy
245	Water Level	Future-proofing of the Plan against potential sustainability reductions appears to Waterlevel to be a sensible measure.	These sustainability reductions are now addressed in AMP7. However, we will continue to assess other scenarios as part of our adaptive planning process.	
246	Water Level	We agree that resilience to drought should be a significant aspect of water companies' Plans, and that all methods of effectively addressing this issue should be explored	Our revised dWRMP position on severe drought remains the same as for the dWRMP: we will ensure that all of our customers have a <0.5% annual average risk of severe restrictions, from 2024-25.	Revised dWRMP - Chapter 7



247	Water Level	<p>We therefore endorse the “adaptive planning” approach, and believe that Anglian Water should take this one stage further. Waterlevel offers a collaborative approach to doing so, in two key areas:</p> <p>Waterlevel proposes the joint development of an Insurance and Emergency Service. We have defined this Service as:</p> <ul style="list-style-type: none"> <li>a. reserving resources and delivery capacity</li> <li>b. incurring the higher cost of transporting water just once a year (a “proving delivery”)</li> <li>c. Taking water more frequently when there is an operational need to do so.</li> </ul>	<p>Your proposal for an Insurance and Emergency Service is interesting and requires further information. In particular we require considerable detail on water quality, volumes (the consultation response quotes different amounts) and costs.</p> <p>Whilst we seek to retain a flexible and collaborative approach to planning, please note that formal trading offers should be submitted via the Market Information platform established by Ofwat. This requires additional information to that provided to date so that we can continue to evaluate options on a consistent and timely basis. Our Market Information Bid Assessment Framework has been published as part of our PR19 Business Plan.</p>	PR19 Business Plan
248	Water Level	<p>We believe that Anglian Water has been unambitious in its assessment of the potential for non-potable water to reduce additional demand for water and sewerage services on new housing developments. It has ignored the extent to which “Community Based Solutions” for new developments can replace potable demand at the boundary with site-generated water from SUDS, rainwater harvesting and recycled effluent.</p> <p>Waterlevel offers to act in collaboration with Anglian Water, and its neighbours, to develop a framework within which such services could be provided on a long-term basis to the majority of new build sites in its area.</p>	<p>We note your suggestion of the potential for non-potable water to reduce additional demand for water and sewerage services on new housing developments. However, we believe this has limited overall potential due to the disparate nature of much new development and the relative cost compared to other demand measures, which feature significantly in our revised dWRMP. However, this is something we are considering in relation to a number of specific large developments which are currently at pre-planning or planning stage. We are intending to undertake pilot studies in the period between 2020 and 2025.</p>	Technical documents: Demand Management Strategy