

Appendix 10: Campaign to Protect Rural England (CPRE), Hertfordshire

1. CPRE Hertfordshire		
1.1	Representation	CPRE Hertfordshire is pleased that proposals to protect chalk streams by reducing aquifer abstractions and supporting flows in Affinity's Central region (situated in Hertfordshire and elsewhere) have been included in the rdWRMP. We note that Affinity's plans will meet in full the reductions in abstractions from chalk catchments proposed by the Environment Agency. This is long overdue but nonetheless welcome.
	Our Response	Thank you for your support.
	Summary of any change to our final WRMP	N/A
1.2	Representation	We are concerned that water supplied from the proposed South East Strategic Reservoir (SESR) at Abingdon is regarded as necessary to support chalk stream protection, and this theme has been taken up by some river protection groups and angling interests. The earliest date for the completion of the SESR is 2037: in 18 years without urgent action many stretches of chalk streams could be lost or damaged beyond repair. The parlous state of the River Ver between Redbourn and St Albans was evident on the BBC's Countryfile programme on Sunday 21st April 2019.
	Our Response	Our fWRMP19 includes a scenario to test the implications of sustainability reductions in our sensitivity analysis. Within this scenario we will need to continue limited reliance on Drought Orders and Permits until our first strategic resource can be developed. We would therefore need to consider developing either the GUC transfer, or a water trading option with Thames Water as these have shorter lead times than the other strategic options. As a result of our sensitivity analysis of "high growth" and of sustainability reductions our fWRMP19 provides for us to assess at the 2023 decision point whether the risk from high-growth and/or additional sustainability reductions is such as to require acceleration of supply-side development beyond our Challenging future. This has been included as an additional adaptive pathway in our strategy. Under this scenario we will need to continue to rely on some Drought Orders and Permits (in the order of 6 to 12MI/d) until a strategic scheme is developed. We may therefore need to develop shorter lead time options such as the GUC transfer to reduce the period over which we have to continue to rely on these orders and permits. If reliance on shorter lead time schemes has significant cost implications (once AMP7 investigations have confirmed scope and cost of schemes), then we will need to consult with customers to determine their views on incurring this additional cost.
	Summary of any change to our final WRMP	Updated Chapter 5 in the fWRMP19.
1.3	Representation	We support the Ver Valley Society's call to take urgent action now to protect chalk streams. The Society calls for trigger levels for heavyweight water saving campaigns and Tactical Usage Bans (TUBs – formerly hosepipe bans) to be reset, so that they are introduced at an earlier point as groundwater levels fall. The Ver Valley Society's website (April 2019) points out that the groundwater at the head of the Ver Valley is at the lowest official level, i.e. 'exceptionally low', and has been below the Long Term Average for 54 consecutive months – 4.5 years – and yet water saving messages are minimal and a TUB isn't close to being implemented. There appears to be a total disconnect between the poor state of the chalk stream environment in the field and the remedial action being taken. The parlous state of the Ver today is a troubling indicator of what could continue to happen unless significant changes are made urgently.

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		<p>We also support the position held by our colleagues CPRE Oxfordshire, and by Group Against Reservoir Development (GARD) in respect of the proposed SESR at Abingdon, as a means of meeting projected water demand within the plan period, including water required to protect chalk streams. The proposal is potentially the slowest new strategic resource proposed for utilisation by Affinity Water to be realised. It is projected to be operating from 2037, assuming no delays arise in the obtaining of necessary permissions. Taking 12 years to construct, it would have a massive detrimental impact on the environment during the construction period and thereafter. The proposal is contrary to Affinity's stated aims in the Executive Summary of the rdWRMP of providing water whilst protecting the environment and increasing Affinity's resilience to drought.</p>
	Our Response	<p>We will reduce PCC to 129 litres per head per day (l/h/d) by 2025 through the continuation of our existing Water Saving Programme and employing new demand management options (this is the largest PCC reduction in the industry for this period). Significant additional explanation and quantification has been added to Chapter 6 of the fWRMP19 to demonstrate how we will meet the 129 l/h/d AMP7 target and the strategy beyond that.</p> <p>We anticipate 80%-meter penetration by 2025 and 90% meter penetration by 2045. We recognise this represents a lower target than at the dWRMP19. This is largely as a result of the higher than anticipated need to install internal rather than external meters, and taking on board experience to date around the practicalities of installing meters internally as well as wider industry learning. An explanation of the reasons for, and very limited implications of, the slower rate of metering as part of the Water Saving Programme are included, along with justification of the approach to smart metering rollout in Chapter 6.2 Our demand management strategy in the fWRMP19.</p> <p>Our fWRMP19 Section 6.2 describes our demand management strategy in detail, the main components of which are:</p> <ul style="list-style-type: none"> • reducing PCC of household customers • reducing non-household demand • reducing leakage <p>We have recently launched our 'manifesto' of water efficiency and have already started public events (such as our #whynotwater campaign), which seeks to gain public and NGO support for initiatives such as Water Efficient Labelling Schemes (WELs) and hence influence local authorities and national bodies to support initiatives that will inherently improve the efficiency of water using devices to reduce demand.</p> <p>The timing of our first strategic option has been carefully considered and determined according to our decision making methodology. The results of that modelling are provided in section 7.2.4 of the main SoR document.</p>
	Summary of any change to our final WRMP	Updated Chapter 6 in fWRMP19.
1.4	Representation	<p>The SESR as proposed, covering an area of four square miles, would have banks up to 30 metres high above existing ground levels, and would appear as an extremely unsightly intrusion in the landscape. There would be massive disruption to local communities during the construction period and permanently. GARD briefings advise that 150 million cubic metres of material would be moved in and out of the site, involving huge numbers of lorry movements. There is likely to be a permanent increase in flood risk and as yet unquantified changes to the water table due to disruptions to local drainage and the weight of the reservoir and water.</p> <p>Ironically one of Oxfordshire's two chalk streams, the Letcombe Brook, is expected to be impacted by the proposed reservoir construction.</p> <p>All the Parish Councils, and the District Council, in the area impacted by the SESR are opposed to the proposal. Eight years ago the public inquiry held to examine a previous proposal to build a reservoir in this location held it to be not justifiable and Thames Water had not investigated viable alternatives.</p>

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		<p>We note that Affinity Water is the only water company committed to joining Thames Water in the SESR proposal. Other water companies have declined to do so. Southern Water has instead proposed desalination as a more drought-resilient option to increase water supplies.</p> <p>The SESR with its huge surface area would not be drought-resilient, being likely to suffer from poor water quality and algae blooms during droughts and hot weather, as well as high rates of surface evaporation. Since it would depend on winter flows from the Thames to supply the reservoir, in drought conditions water could simply run out. It is estimated that the reservoir would take 18 months to refill. If the current run of low winter rainfall years in the south and east of England continues or recurs the reservoir would become unviable.</p> <p>Affinity's plan includes a much quicker way of achieving the Environment Agency's required abstraction reductions of just over 33 Mega litres per day in the Central region, without waiting for supplies from the SESR, by fully utilising an existing water supply from Anglian Water's existing Grafham reservoir, which at present is only partly utilised. Using this source planned sustainability reductions for chalk streams could be in place by 2025, rather than having to wait until the late 2030s for the reservoir.</p>
	Our Response	<p><i>Resilience to Drought of the SESR</i></p> <p>We have reviewed the technical reports relating to the drought and climate resilience of the SESR provided to us by Thames Water, which were peer reviewed through their technical stakeholder working groups, and consider that these clearly demonstrate that the SESR can provide the quoted yield reliably across a wide range of drought severities. We note that drought severity within those documents is as measured for the Thames Water supply system. We have therefore also carried out an initial review of the yield that we can expect from 50Mm³ of storage (one third of the reservoir capacity) under our drought design condition and confirmed that this should provide us with the expected 100MI/d benefit. However, more detailed modelling, which will need to account for the 'secondary benefit' provided by increased effluent returns to Thames Water's intakes (see response 0), plus the differences in timing and duration between our critical drought events and Thames Water's critical drought events, is required before we can confirm the benefits from the scheme. This modelling is included within our AMP7 joint working investigations and is due to report before the crucial 2023 decision point.</p> <p><i>Impacts of abstraction reductions and changes in demand on returns to the River Thames</i></p> <p>The 'conjunctive use' system simulation modelling and hydrological analysis required to quantify the impact that our investment programme might have on downstream flows in the River Thames does not currently exist, so we have committed to supporting the Water Resources in the South East (WRSE) group to develop the relevant analysis in AMP7. We have, however carried out a qualitative analysis of the impacts of our investment programme on downstream flows in the River Thames. In the short to medium term (pre 2038) the impact will depend on the balance between reducing demand, and hence effluent returns, versus the reduction in abstraction and the Grafham imports. There is a risk that flows may tend to reduce as a result. In the longer term the introduction of strategic supply schemes will have a beneficial affect on flows, but this will need to be set against licencing and quality implications. The potential additional benefits from these increased flows will need to be considered against water quality implications and licencing arrangements, which will need to be accounted for in the regional economic analysis during AMP7.</p>
	Summary of any change to our final WRMP	N/A
1.5	Representation	Affinity's plan includes the ' Supply 2040 ' scheme, allowing more transfer of water from south to north of its Central region. This network is intended by Affinity to take water extracted from the Thames, coming from the SESR, to supply the north of the Central region and help reduce abstractions. However, it does not need to rely on water from the

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		<p>SESR with a wait until at least 2037, as Affinity already has surplus water in its southern supply zones that could be used, via 'Supply 2040', to meet shortfalls in the north of its area. Thames Water supplies could also be used.</p> <p>GARD has proposed the following, to be brought into action by 2030:</p> <ul style="list-style-type: none"> • Use surplus water already available to Affinity in the Thames valley (c.25 Mega litres per day) • Use surplus water available to Thames Water in its Slough-Wycombe-Aylesbury area (another 15 Mega litres per day) <p>If needed eventually, Affinity could take some water from one of the Thames Water reservoirs near Slough.</p> <p>As a last resort, and in GARD's view only likely towards the end of the century, a new supply of water would be needed.</p> <p>This proposal would be viable because approximately 90% of the water flowing in the chalk streams into the Lea and Colne catchments ends up in the Thames where it becomes available to meet London's water needs.</p> <p>GARD has also advised that more ambitious targets for leakage reduction and reductions in water consumption in the rdWRMP could add considerably to the amount of water available to the Affinity area, in particular the Central region, where projected population increases will require substantial increases in water supplied.</p>
	Our Response	<p>We have included details of the timing and inclusion of schemes from our "Supply 2040" strategy in the fWRMP19, and shown how it affects individual WRZ supply-demand balances under all of our modelled futures within our Technical Report 4.9: Economics of Balancing Supply and Demand Modelling and Decision Making Process.</p> <p>In summary, all of the proposed AMP7 developments, which are detailed in our Business Plan, are required to support the transfer of 17MI/d out of WRZ6 into WRZ4, or to enable the Grafham transfer enhancement. AMP8 (2025 to 2030) then contains our second stage transfer from WRZ6 to WRZ4, and finally we have a scheme to transfer water from WRZ1 to WRZ3 in the longer term. This is now more fully described in the main Plan document.</p> <p>Our Plan incorporates the individual elements of "Supply 2040" as early as they are needed to ensure that surpluses within individual WRZs are usefully transferred into other WRZs in the Central Region. The fWRMP19 supports the requirement to distribute water to areas of need, avoiding strategic deficits and surpluses. We will continue to plan investment as quickly as is necessary to avoid water deficits and surpluses, which will also avoid building strategic schemes earlier or later than is necessary.</p> <p>We have updated Technical Report 4.9: Economics of Balancing Supply and Demand Modelling and Decision-Making Process to include the most up to date assessment of our supply demand balance for each future which supports the timing of the requirement for the transfers. The individual balances within each WRZ for each future are provided as graphs within the technical report.</p>
	Summary of any change to our final WRMP	Updated Chapter 6 in fWRMP19 and Technical Report 4.9: Economics of Balancing Supply and Demand Modelling and Decision Making Process.
1.6	Representation	<p>Leakage Reduction</p> <p>Affinity Water currently has a poor record on leakage, with rates above most other water companies. Its leakage rate is 59% higher than South East Water, which covers a similar area. Nationally, Affinity's leakage per property is 8.4 litres per day, whereas the national average (excluding the worst performer) is 6.3 litres per property per day.</p>

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		<p>The National Infrastructure Commission (NIC) and Ofwat have set water companies a leakage reduction target of 50% between 2020 and 2050. While all other water companies have accepted this, Affinity's rdWRMP only aims to achieve a 40% reduction by 2050.</p> <p>Given that Affinity's leakage rate is currently higher than most other water companies, it should aim for a greater than 50% reduction in its leakage, aiming to achieve the average national leakage rate.</p> <p>Some of Affinity's proposals in the rdWRMP to reduce leakage are illogical. For example, the planned leakage reduction in two of its most important Central zone areas (Lea and Colne) is not due to take place until 2043 (i.e. after the proposed SESR would be built).</p> <p>If the leakage reduction in the Lea and Colne sub-zones was implemented earlier, then the need for water proposed to be supplied by the SESR would be delayed by six years on this action alone.</p>
	Our Response	<p>We fully support the ambitions to substantially reduce leakage by 2050. Our initial aim is to achieve a 50% reduction in leakage between 2015 to 2045. This 30-year programme to reduce leakage by 50% is planned to deliver five years earlier than most other water companies because we started the process in 2015, and will already have delivered a 14% reduction by 2020, followed by a further 18.5% reduction between 2020 and 2025. We will then aspire to achieve a higher level of reduction, to 57% from the 2015 position, which will allow us to reduce leakage by 50% from our 2020 position.</p> <p>Clarification of the 50% target and the ambition for 50% post AMP7 (i.e. 57% overall) is included in the fWRMP19 along with clarification of how we have handled mains renewals for leakage and trunk mains schemes. Explanation of how we will achieve leakage efficiencies and details of our leakage reduction strategy are provided in Technical Report 4.8: Leakage Strategy Report and referenced in the fWRMP19.</p>
	Summary of any change to our final WRMP	An update regarding leakage is provided in Chapter 6 and Technical Report 4.8: Leakage Strategy Report in the fWRMP19.
1.7	Representation	<p>Reducing Consumption</p> <p>Affinity has placed insufficient priority on measures that could reduce individual consumption toward industry best practice. Its metering rate is below the industry average and it has only managed to increase metering by 3% over the last 4 years, well behind that achieved by many other companies.</p> <p>Some companies, e.g. Anglian Water, have found that installing 'smart meters' reduced usage another 11% beyond the savings achieved by installing dumb meters. Affinity plans to continue installing dumb meters for several years and instead should aim to fit smart meters much sooner. The NIC recommends widespread smart meter installation by 2035, and Anglian Water aims for 95% meter penetration by 2030. Affinity should aim to achieve such targets.</p> <p>Affinity is planning for hardly any improvement in individual water usage after 2025, and predictions for some of its zones show a marked <i>increase</i> in water usage. Some of the Affinity zones are predicted to rise above even the present industry norm of 130 litres per head per day. Affinity should be aiming for the future industry planned average of 100-120 litres per head per day. It should be considering the ability of smart meters, the effect of potential water appliance labelling and new house water efficiency to drive its usage down to similar levels as other water companies.</p> <p>At the Affinity meeting for stakeholders held in London in April 2019, it was reported that at least one water company, Folkestone and Dover Water, has already achieved 119 litres per head per day.</p> <p>GARD figures show that the combined water savings, achieved by Affinity meeting industry average target figures for both leakage and consumption reductions, could reduce its predicted deficit by 141 Mega litres per day by 2080, the end of the rdWRMP period. This is more than its anticipated take from the proposed SESR (100 Mega litres per day by 2050).</p>

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		<p>CPRE Hertfordshire believes that Affinity's rdWRMP lacks ambition in particular areas of water use reductions. For example, there is an urgent need to impose restrictions on non-essential water use, such as garden watering, and to bring in bans on hosepipe use at much earlier stages of actual or impending water shortages, including those indicated by low aquifer levels (as already referred to above).</p> <p>In addition, paragraph 6.2.11 of the rdWRMP lacks ambition to tackle the reduction of water consumption effectively. In view of the amount of predicted new house building in the Central region and elsewhere, Affinity in particular and together with the water industry nationally, should be taking urgent and high-level action to lobby for the immediate introduction of building regulations to deliver water efficient new homes, including rainwater harvesting and grey water reuse.</p>
	Our Response	<p>We will reduce PCC to 129 litres per head per day (l/h/d) by 2025 through the continuation of our existing Water Saving Programme and employing new demand management options (this is the largest PCC reduction in the industry for this period). Significant additional explanation and quantification has been added to Chapter 6 of the fWRMP19 to demonstrate how we will meet the 129 l/h/d AMP7 target and the strategy beyond that.</p> <p>We anticipate 80%-meter penetration by 2025 and 90% meter penetration by 2045. We recognise this represents a lower target than at the dWRMP19. This is largely as a result of the higher than anticipated need to install internal rather than external meters, and taking on board experience to date around the practicalities of installing meters internally as well as wider industry learning. An explanation of the reasons for, and very limited implications of, the slower rate of metering as part of the Water Saving Programme are included, along with justification of the approach to smart metering rollout in Chapter 6.2 Our demand management strategy in the fWRMP19.</p>
	Summary of any change to our final WRMP	Updated Chapter 6 in fWRMP19.
1.8	Representation	<p>New water sources for Affinity's needs (as proposed by GARD)</p> <p>The rdWRMP shows that the Affinity Central region has a surplus of 25 Mega litres per day in 2038, when it is claimed Abingdon Reservoir is needed. In fact, Affinity's own figures show it does not need a new source of water until the early 2050s.</p> <p>As already referenced above, Affinity's rdWRMP includes the 'Supply 2040' scheme, allowing more transfer of water from south to north in its Central region. This network is intended by Affinity to service the connection of its network to the extra water being extracted from the Thames, coming from the proposed SESR. It is an excellent idea in itself however, and does not need to rely on water from the reservoir – it can be used to transfer surplus water currently available in Affinity's and Thames Water's Thames valley supplies. Later, if needed, it can connect to Thames Water's London zone.</p> <p>As explained above 'Supply 2040' should be brought forward as much as possible to increase adaptability in the response to any increased demand, allowing larger and quicker reductions in chalk stream abstractions and improved ability to manage London supplies.</p> <p>Affinity has surplus water in its southern supply zones that could be used, via 'Supply 2040', to meet shortfalls in the north of its area.</p> <p>A link to Thames Water's London supplies, via 'Supply 2040', would allow much larger reductions to chalk stream abstractions than currently planned, with only a small impact on London's supplies. A predicted 90% of the water from London would return to London in enhanced chalk stream flows. This would be a much faster and less costly way of relieving chalk streams than waiting for the proposed SESR.</p> <p>Affinity's rdWRMP shows that the two most southern zones in the Central region, the Pinn and Wey zones, are in surplus (without needing the proposed SESR) until the early 2040s by 25 Mega litres per day. As a first phase, this surplus should be used in the 2030s, via the early implementation of 'Supply 2040', to relieve the northern zone shortages, which would enable more chalk-stream reductions to occur.</p>

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		<p>As a second phase, there should be transfer of part of Thames Water’s licence to extract at Sunnymeads on the Thames to Affinity’s extraction point ‘next door’. This is possible because TW’s ‘Slough, Wycombe, Aylesbury’ (SWA) zone, supplied by Sunnymeads, is forecasted by Thames Water’s plan to be in surplus by at least 15 Mega litres per day until beyond 2080. The transfer of 15 Mega litres per day from 2051 would feed into the Supply 2040 network and delay the need for a strategic resource for Affinity (SESR or otherwise) until 2056.</p> <p>As is generally true about ‘Thames’ water supplied to Affinity Water in this way, at least 70% of the water supplied to Affinity is almost immediately returned as treated effluent to the Rivers Thames and Lea and subsequently reused by Thames Water to supply London. So the ‘borrowing’ of this licence returns water to Thames Water’s available supply.</p> <p>This feature of water supplied to the northern part of Affinity’s Central region arises because of the drainage patterns of the region’s streams and rivers. The majority of these drain into locations mostly upstream of TW’s London supply intakes. This feature enables the third phase of GARD’s proposal. This involves connecting to Thames Water’s Queen Mary reservoir (using pipelines and water treatment works already in the Affinity rdWRMP) and taking up to 100 Mega litres per day to transfer into the ‘Supply 2040’ network – equal to the amount proposed in the rdWRMP to be taken from the SESR. About 77% of this supply would be returned to TW’s network in the rivers Lea and Thames. The transfer thus has a true ‘cost’ to London of around 23 Mega litres per day.</p> <p>As a by-product, the use of these supplies sent to the northern part of the Central region would also allow further augmentation of the chalk-stream flows.</p> <p>The minimal impact on the London Thames Water supplies of this third phase could be easily accommodated by implementing any number of small schemes. It is also noteworthy that 23 Mega litres per day represents less than 3% of the present leak rate from Thames Water’s supply network.</p> <p>Finally, GARD notes that about 70% of the water which would be transferred from Affinity’s second favourite strategic scheme (the Grand Union Canal transfer) would be available to the London network via the river network of Affinity’s Central region.</p> <p>As indicated, about 70% of the water supplied to Affinity is almost immediately returned to the Rivers Thames and Lea as treated effluent and subsequently reused by Thames Water to supply London. With the SESR option however, Affinity would be charged 100% of the cost for a net 30% of the water supplied. GARD has proposed several quicker and easier ways for Affinity to increase its water supply using a mix of Thames Water’s surpluses and existing London supplies. Since 70% of this could be returned to the Thames upstream of Thames Water extraction points, it would be available for reuse.</p>
	<p>Our Response</p>	<p>The ‘surpluses’ identified by GARD appear to refer to the release of water from WRZ6, and the DYAA availability from Thames Water’s SWA WRZ. In the first case our more detailed analysis provided in Technical Report 4.9. shows that the Supply 2040 bulk transfer proposals fully utilise any surplus before strategic developments occur. In the second case GARD are incorrect to assume there is a surplus. The way that Thames Water’s hydrology is modelled for WARMS means that flows only take account of actual recent abstraction from the upstream sources, so if annual average abstraction were to increase as a result of any trading arrangement then this would derogate the London WRZ DO. We also note that there is no surplus under the baseline critical period condition for SWA, and limited surplus (10MI/d or less) forecast for the 2038+ period following Thames Water’s preferred plan investments. We have both a DYAA and DYCP risk in the medium term, and do not have any raw water storage, so require that any new supplies are reliable throughout the summer and autumn period, which would not be the case for the SWA ‘surplus’.</p> <p>GARD appear to have mis-understood the timing and purpose of the elements of “Supply 2040”, as there is no requirement to complete all elements by 2030, even under higher sustainability reduction scenarios. We have clarified this within the fWRMP19 Chapter 6, which includes details of the need and associated timing of development. We have also shown how Supply 2040 affects individual WRZ supply-</p>

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		<p>demand balances under all of our modelled futures within our Technical Report 4.9: Economics of Balancing Supply and Demand Modelling and Decision Making Process. Because the plan allows us to balance supply and demand across all WRZs, any further investment is unnecessary for water resource management purposes and represents an unnecessary cost to customers.</p> <p>In summary, all of the proposed AMP7 developments, which are detailed in our Business Plan, are required to support the transfer of 17Ml/d out of WRZ6 into WRZ4, or enable the Grafham transfer enhancement. AMP8 (2025 to 2030) then contains our second stage transfer from WRZ6 to WRZ4, and finally we have a scheme to transfer water from WRZ1 to WRZ3 in the longer term. This is now more fully described in the main Plan document.</p> <p>Our Plan incorporates the individual elements of “Supply 2040” as early as they are needed to ensure that surpluses within individual WRZs are usefully transferred into other WRZs in the Central Region. The fWRMP19 supports the requirement to distribute water to areas of need, avoiding strategic deficits and surpluses. We will continue to plan investment as quickly as is necessary to avoid water deficits and surpluses, which will adapt in line with our adaptation in the timing of strategic options. We would only accelerate options beyond that where there is a clear benefit to customers – for example the low-cost Arkley North scheme has been brought forward to AMP7 to address intra zonal needs, even though it is not triggered in EBSD until later to meet WRZ level deficits. This was shown to be a cost effective solution that will better enable local flexibility at the same time as addressing the longer term, inter zonal supply/demand balance requirements.</p> <p>We have updated Technical Report 4.9: Economics of Balancing Supply and Demand Modelling and Decision Making Process to include the most up to date assessment of our supply demand balance for each future which supports the timing of the requirement for the transfers.</p>
	Summary of any change to our final WRMP	N/A
1.9	Representation	<p>Strategic Supply Options</p> <p>CPRE Hertfordshire is opposed to the proposed SESR in Oxfordshire for the reasons outlined above. In our view the proposed SESR is not acceptable due to the massive environmental damage it would cause and because it is not drought resilient. According to GARD’s figures it is not needed either as other sources of water could be made available to meet the deficits in the Central region, by much more ambitious leakage reductions and reductions in per capita usage, and by adapting existing water sources in the Affinity and Thames Water areas. This includes the reality that much of the water supplied to Affinity’s Central zone is returned to the Thames catchment and available to be reused by Thames Water.</p> <p>The rdWRMP references other sources of water which could become available to meet its deficits. These include transfers from wetter areas of the county, notably the Severn catchment, including along the Grand Union Canal (GUC). In addition desalination has been proposed by Southern Water, for example, in preference to reservoir-supplied water, because it would provide a continuous supply not affected by drought or climate change.</p> <p>Transfers using the Grand Union Canal have not been ruled out but the SESR option is preferred in the rdWRMP. The reasons for this are not transparent in the rdWRMP. Nor are the reasons for the dismissal of desalination as an option transparent in the rdWRMP. Both alternatives are more drought resilient. The necessary pipeline from a desalination plant would have relatively little environmental impact once constructed (as is the case with existing pipelines).</p> <p>Much of the infrastructure is already in place for the GUC option and personal communication with the Canal and River Trust (CRT) suggests that the lead time is relatively short. Moreover, the CRT has a track record of water transfer using its network, at least one in excess of 200 Mega litres a day.</p>

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		We understand that the decision on buy-in to the SESR by Affinity will be required by 2023. We urge Affinity in the next four years to reconsider less environmentally damaging and more drought resilient options than the SESR, including that proposed by GARD, and to share this information in a transparent and comprehensive way with its stakeholders.
	Our Response	We have provided further explanation of how we intend to continue the work on alternatives to preferred strategic regional options in our plan e.g. liaison for the STT and water trading options with Thames Water.
	Summary of any change to our final WRMP	Updated Chapter 5 in our fWRMP19.