

## Appendix 15: Chilterns Conservation Board

1.	<b>Chilterns Cons</b>	servation Board
1.1	Representation	1. Our Plan allows us to adapt to these uncertainties and deliver solutions.
		We are proposing an approach that focuses on reducing demand for water and developing long-term strategic regional water supply options where we would jointly build a new reservoir with a neighbouring water company and transfer water using a canal
		Do you agree? Yes
		Reason for choice:
		The Board supports Affinity Water's proposed twin-track approach of resource development and demand management. The development of new strategic water resources to supply increasing demand whilst bringing an end to unsustainable levels of abstraction is vital. It is also critical that per capita consumption and leakage are reduced. Over 90% of the water supplied by Affinity Water across the Chilterns area is for household supply. Per capita water use in the Chilterns is amongst the highest in the country. While it is encouraging that water usage across Affinity's Central supply area has been declining steadily since 2010, it is clear that there is some way to go before per capita consumption reaches even the UK average, let alone the aspirational target of 110l/p/d. The Board welcomes Affinity's commitment to driving water use down further and in particular, its ambition in setting a target of 129l/p/d pcc by 2025.
		The Board is pleased to see that Affinity Water are actively supporting Thames Water in the development of a South East Regional Reservoir. However, we remain concerned at the proposed timing of this option. As shown in the diagram on page 1 of the draft WRMP, the situation in Affinity Water's Central Region is that there is not enough water to meet demand and sustain the environment now and this situation will worsen before any significant new water resources are developed. The result is that the chalk streams in this area are suffering from chronic low flows and some have ceased to flow almost entirely.
		Although we have welcomed and supported the sustainability reductions that Affinity Water have carried out in some of the Chilterns chalk stream catchments recently, it is clear that much more needs to be done to attain truly environmentally sustainable abstraction levels. We are concerned that these important rivers will likely decline in condition further before new significant water resources are brought on stream in 2037. As a consequence, the Board feels that the timetable for the introduction of new strategic sources of water, particularly the South East Strategic Reservoir, needs to be brought forward in order to relieve pressure on the Chilterns chalk streams and reverse their decline.
		The Board is wary of the proposals regarding long distance transfers of water to the area on the basis of the potential environmental impact to both source and receiving waters and the cost implications around the development and management of the required infrastructure and the treatment costs associated with these proposals.
	Our Response	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.
		Although we were generally aligned at the rdWRMP19 stage, our final WRMP will be fully consistent with neighbouring company WRMPs in respect of shared option timing and magnitude of water supplied to Affinity Water. Our adaptive strategy allows us to do that.
		Additional sustainability reductions beyond December 2024 - we include a possible need to further reduce abstraction from chalk catchments by 7 MI/d in our Challenging future. We have added a "further reductions in abstraction from the chalk" scenario to our sensitivity testing. This considers the position if we are required to deliver up to an additional 40 MI/day of abstraction reductions. 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



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		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.	
		Wider improvements to chalk streams through our river restoration programme are outlined in our Business Plan 2019.	
		As described under section 10.2.4 of our SoR, we will be carrying out detailed water quality and environmental investigations on transfer schemes prior to 2023 and before we commit to the development of a scheme.	
	Summary of any	An update regarding decision making provided in Chapter 5 of the fWRMP19.	
	change to our final WRMP	Further reduction in abstraction from the Chalk is explored as a scenario in Chapter 5 of the fWRMP19.	
		An update regarding how customers have shaped our plan is provided in Chapter 2, of the fWRMP19.	
1.2	Representation	2. Leakage	
		We are committed to reducing leakage. In 2015, leakage was around 21% (189 million litres of water per day) of the water we put into supply. By 2025 we will have reduced this down to 15%.	
		In our Plan, we aim to reduce leakage to between 11% and 13% of water we put into supply by 2045, provided we can do it in an affordable way for customers. This would be a reduction of nearly 50% since 2015.	
		Do you agree? Yes	
		The Board believes that cost-effective leakage reduction is an essential component of the plan proposed by Affinity to address the water resource deficit it faces. Reducing leakage is important for the environment as it should ultimately reduce what is abstracted from the chalk aquifer, enabling more water to be left available to the area's chalk streams. However, the Board feels that the cost of the water remains too low and that an increase in cost in order to further increase the rate of leakage reduction should be considered.	
	Our Response		
		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.	
		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.	
		In recognition of the changes that were made to the draft plan we undertook a period of further consultation for eight weeks from 1 March to 26 April 2019. The purpose of the further consultation was to provide an opportunity for regulators, stakeholders and customers to comment on the revisions that we had made to our draft plan and to seek endorsement of our proposals. The price of water is set by the Ofwat determination process. Regarding acceptance of our Plan, 80% of customers were found to be either very accepting or fairly accepting of Affinity Water's Water Resource Management Plan as a whole and the cost.	



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	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.	
		An update regarding how customers have shaped our plan is provided in Chapter 2, of the fWRMP19.	
1.3	Representation	3. Options to increase the supply of water	
1.5	Representation	To ensure there is enough water available for future generations and be better prepared to cope with drought, our Plan is proposing two new supply options – a reservoir and a transfer of water via a canal.	
		3 a) We are proposing to construct a new storage reservoir in Oxfordshire, called the South East Strategic Reservoir, in partnership with Thames Water. The River Thames will be used to transfer water into the area we serve. This will provide an extra 100 million litres of water per day by the late 2030s.	
		Do you agree? Yes	
		Reason for choice: We believe that the development of a South East Strategic Reservoir (SESR) represents the only reliable new resource option that can meet the forecast water supply shortfall in the Central Region. The SESR would also enable the storage of water during times of surplus, allowing it to be used by Thames Water and Affinity Water during times of water scarcity, therefore affording enormously increased resilience to both droughts and flooding. In addition, the reservoir could help meet the future needs of neighbouring water companies and would allow for the reduction in unsustainable abstractions of chalk streams such as the River Chess, Misbourne, Ver and River Colne.	
		The Board feels that the development of the SESR should be brought forward to enable it to be brought online before the current timetable of 2037 to ensure that this new resource is made available as early as possible to cater for the levels of anticipated demand, increase supply resilience and prevent further deterioration of chalk streams.	
		The development of the SESR fits well with the UK government's own views as set out in the National Policy Statement for Water which recognises the necessity of strategic water resource development alongside leakage reduction and demand reduction.	
	Our Response	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.	
	Summary of any change to our final WRMP	An update regarding decision making is provided in Chapter 5 of the fWRMP19 and Technical Report 4.9.	
1.4	Representation	<b>3 b)</b> We will continue to investigate the potential to transfer treated wastewater via the Grand Union Canal. This would bring water to the area we serve from near Birmingham, where there is a surplus of water available. This could provide an additional 50 million litres of water per day to customers either in the longer term or as an alternative to the reservoir development.	
		Do you agree? Cautiously, Yes	
		Reason for choice:	
		We support the continued investigation of this option but only on the basis of it being an additional option rather than an alternative. The Board feels that alongside the potential benefits from a water supply point of view, this option could also enable the damaging impacts of the Canal & Rivers Trust's abstractions on the R. Bulbourne to be brought to an end. Currently the Trust abstract water from aquifer to supply the canal at Tring and these abstractions have been seen to cause the complete loss of flow in the Bulbourne.	
		However, the Board is concerned about the potential negative environmental impacts that this option may have, particularly with regard to the transport of invasive non-native species	



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		and the impact that water with a different chemistry will have on receiving waters after it is used.	
	Our Response	As described under section 10.2.4 of the SoR, we will be carrying out detailed water quality and environmental investigations on the GUC transfer scheme prior to 2023 and before we commit to development of the scheme.	
	Summary of any change to our final WRMP	N/A	
1.5	Representation	4. Reducing the amount of water used by each person per day	
		We have committed to support customers to reduce the amount of water they use each day from the current average of 152 litres per person per day to 129 litres by the end of 2025.	
		In our Plan, we are aiming to reduce this to between 110 and 120 litres per person per day by 2045, but only if this is affordable for customers and delivered in a way acceptable to them.	
		Do you agree? Yes	
		Reason for choice:	
		We agree with efforts to reduce demand and believe that this represents another vital component to meeting future water resource challenges. However, the Board feels that in order to bring about significant and lasting reductions in water use, a generational shift in how we all value water is essential. In order to achieve this the study of the water cycle, where our water comes from and the importance of using it wisely needs to be enshrined within the national curriculum. The Board is also of the view that the low cost of water remains a barrier to driving a change in how the public value and use water. Water is vital for our lives and the environment but how can it be truly valued when it is so cheap? Take the example of the introduction of a cost for plastic bags. When they were free, huge numbers were used and disposed of or discarded by the public, without regard for the environment. The introduction of a purchase price immediately drove a change in use and behaviour. The cost of water needs to be higher.	
	Our Response	The price of water is set by the Ofwat determination process.	
	Summary of any change to our final WRMP	An update regarding or demand management strategy is provided in Chapter 6 of the fWRMP19.	
1.6	Representation	5. Cost of our Plan	
		Delivering our Plan will mean a rise in customer bills from the 2018 annual average of $\pounds$ 171.70 to $\pounds$ 193.70 in 2080. This is an increase of 37 pence per year. This figure does not include inflation or wastewater (sewerage) bills.	
		Is this proposal acceptable? No	
		Please state the reason for your choice: As previously stated, the Board believes that the price of water is too low. This low cost has helped to drive the high levels of domestic water usage in Affinity's Central Region and led to the decline in the condition of chalk streams in the area. The increase in customer bills proposed by Affinity Water is woefully inadequate. It represents just a 13% increase in 62 years or 0.2% per year. It is hard to see how this can be justified particularly when compared to increases in domestic energy and fuel bills. The Board believes strongly that the price of water should be higher in order instil greater societal value of this precious resource, drive a significant and lasting reduction in household water use and enable the restoration of our highly threatened chalk streams.	
	Our Response	Regarding acceptance of our Plan, 80% of customers were found to be either very accepting or fairly accepting of Affinity Water's Water Resource Management Plan as a whole and the cost.	



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	Summary of any change to our final WRMP	An update regarding how customers have shaped our plan is provided in Chapter 2 of the fWRMP19.	