



20 February 2023

CPRE Hertfordshire's Comments on Affinity Water's Draft Water Resources Management Plan 2024 (dWRMP24)

Summary of our main points

1. CPRE Hertfordshire is the county group of CPRE The Countryside Charity.
2. Our principal concern is to protect the countryside and green spaces in Hertfordshire from inappropriate development, which may cause destruction or damage, or reduce or prevent the public's enjoyment of those places.
3. As a group within the wider CPRE network we are also concerned to ensure that development justified to support and enhance essential resources in Hertfordshire does not directly or indirectly cause harm to the countryside of other counties.
4. We strongly support the restoration of our internationally unique chalk streams requiring reductions in groundwater extraction.
5. Along with other local CPREs within the Water Resources South East (WRSE) area, we support strategic options for river basin transfer schemes.
6. Along with other local CPREs within the WRSE area, we remain very critical of the priority given to the South East Strategic Resource Option (SESRO) reservoir.
7. The assessment of likely population growth on which future water demand is based is, we believe, flawed.
8. We believe that the ambition for leakage reduction in the dWRMP24 is insufficient.
9. We believe that the ambition for lobbying for enhanced building regulations is insufficient in respect of their scope and timing. In particular we think that building regulations for compulsory rainwater harvesting and grey water reuse in all new homes and also in property renovations should be in place as soon as possible.
10. We believe that a variable pricing system, with a substantial increase in unit costs for the highest users, would deliver the message that water is not cheap, is scarce in this part of England, and should not be used carelessly or profligately.

Our detailed comments below on the dWRMP24 are based on the considerations set out in paragraphs 2 and 3.

11. We note that dWRMP24 largely follows the metrics included in the emerging Water Resources South East (WRSE) plan, and as such we have a number of criticisms of the baseline assumptions used to inform that plan.
12. We are particularly concerned that the infrastructure requirements set out in the dWRMP24 are not described by reference to size or visual appearance, so that it is difficult to assess the impact of these on landscapes and visual receptors.

13. In respect of the 'best value' approach, we believe that greater weight should be given to environmental impacts including the impacts during infrastructure construction phases, and the impacts on local communities during construction and operational phases.
14. We note that nearly 44% of the responses to the WRSE emerging regional plan expressed opposition to the South East Strategic Resource Option (SESRO). We are aware that this option is very unpopular within Oxfordshire.
15. In respect of customers' views on options, we note that customers are supportive of demand management options. We also note their preference for tried and tested supply-side solutions. We question whether the basis of planning might be relying too heavily on this finding, at the expense of exploring less environmentally-damaging options. We note that the deliberative research has shown the high level of priority that participants placed on environmental protection. We also note that participants wanted more detail of local level impacts of strategic resource options.
16. It is surprising that a visualisation tool is only in development for the SESRO proposal, showing bank height and impact on the landscape, *following* the stakeholder workshops held for this scheme.
17. We note that nearly 25% of Affinity customers use at least 300 litres of water per person per day (l/p/d). This is a particularly worrying statistic given the government target of 110 l/p/d. We think that the ambition on messaging in respect of all water users needs to be strengthened, alongside a variable pricing structure.
18. Much of the 'new' water resource identified in the WRSE plan is to provide enhanced drought resilience and would only be needed during drought conditions. Public awareness campaigns and social media have been shown to be remarkably successful in reducing water use at critical times. The water companies and government need to work together to both standardise and refine this messaging. We understand that the WRSE plan uses climate change calculations based on the IPCC RCP8.5 scenario. This scenario is the highest emission scenario tested and is now regarded as unrealistically high. Using the median climate change scenario instead of the highest in the WRSE plan would have the effect of reducing the estimated water supply deficit in the region from 240 Ml/day to 125 Ml/day.
19. The Affinity dWRMP24, by mirroring the WRSE metrics, is using one of the very highest growth projections, based on published local authority housing plans. We recognise that this reflects OFWAT guidance. However, by basing the scenarios on published local plan figures we think the growth estimates are too high by a significant amount. There are numerous reasons for this: firstly, current housing plans are based on Office for National Statistics (ONS) 2014 population projections, which are now known to be far too high, and the 'Standard Method' used for these plans projects up to 40% more growth than the ONS14 base population projection. Secondly, a number of Regulation 18 local plans published in 2021 in Hertfordshire were subsequently withdrawn due to the very high number of objections, in particular to the very high housing numbers requiring substantial Green Belt losses. If these were included in its analyses by the WRSE they clearly skew the figures. Thirdly, extrapolations of population growth to 2050 in the WRSE forecasts also use ONS14 data. Fourthly, local CPRE groups including ourselves are aware that local plan housing targets are nearly all aspirational and unlikely to be achieved, for a variety of reasons. Finally, recent government announcements, proposed changes to national planning policy and the levelling up agenda mean that planned housing targets in Affinity's area are likely to reduce substantially, in particular as local planning authorities will no longer be required to alter Green Belt boundaries to accommodate housing.
20. By taking the median population projection for the WRSE region, instead of the much higher projection selected, the future demand for water in the region would halve. We would expect a similar reduction for the Affinity area.
21. We note that, for the WRSE area as a whole, there is considerable uncertainty over the amount of new water resource required to return the chalk streams to a pristine state, ranging from 520 Ml/day to 1360 Ml/day. We also note that the WRSE preferred pathway chooses the largest number. There are clearly many gaps in our knowledge about the best way to restore our chalk streams. There are uncertainties in the level of reductions in abstractions required to produce acceptable flows in the chalk streams. The proposed abstraction reductions will enhance flows in the upper reaches of the chalk streams, with the result that

additional water will be available in the lower reaches of the streams, which could be abstracted without causing environmental damage. Estimates of the amount of additional water which would be available vary hugely. We note that the 'Chalk Streams First' analyses suggest this figure is considerably higher than that shown in paragraph 5.56 of the dWRMP24, namely 80% of the additional water resource enabling abstraction reductions instead of 17%.

22. We are alarmed that paragraph 5.50 suggests there may be a wait until AMP8 (2030) before unsustainable abstractions are reduced, and that further investigation work to inform further abstraction reductions will be undertaken after that. We think this is too slow and may potentially result in complete loss or severe damage to some of Hertfordshire's chalk streams.
23. We strongly support the Chalk Streams First and the DEFRA-sponsored 'Catchment Based Strategy' which recommends priority for streams where abstraction exceeds 10% of recharge (A10%R). Such a strategy requires much lower resource requirements to regenerate the priority streams. We would urge, as a matter of urgency, that work to investigate the best and cost effective strategies to restore our chalk streams is expanded (along with immediate action on the most vulnerable streams).
24. In respect of Chapter 7, we think that domestic and small-scale harvesting and storage solutions should be included within the options.
25. We note in Chapter 1 at paragraph 1.11 that in 2015 leakage in the Affinity network was 21% of the total water supply. The target to 2025 was to reduce this to 15%. Paragraph 1.11 demonstrates that with increased effort the rate of leakage reduction can be substantially increased. We think this level of ambition for leakage reduction should be sustained. It is absurd not to be seeking to reduce the loss of treated water to the lowest possible level as soon as possible, and thus reduce the need for expensive infrastructure with high environmental impacts such as the SESRO.
26. The dWRMP24 does not include, for Affinity, the option to make use of water reuse schemes being developed by Thames Water which have been incorporated into the WRSE options (as described at paragraph 7.30). Clearly Affinity is not averse to using reused water in its supply as it is exploring reuse options associated with the Minworth transfer via the Grand Union Canal. It appears that Affinity could benefit from reuse schemes supplied by Mogdon, and potentially at Beckton, where there is scope to locate a reused water treatment plant alongside the existing sewage treatment works on brownfield land. The supply of water for reuse is presumably reasonably constant and predictable, in contrast to flow in the upper Thames, a major source of supply to the proposed SESRO scheme.
27. We think that Nature based Solutions (NbS), as well as improving catchment resilience and boosting water retention across landscapes (paragraphs 7.54 to 7.60) could be given enhanced significance as a potential and sustainable source of water supply. There is clearly potential for NbS contributions to water supply as several are included in the draft WRSE plan.
28. We note that the best value strategic investment plans are those produced by WRSE and Water Resources East (WRE). We have already expressed our concerns about the population growth scenario adopted by WRSE. We note in Table 8.2 WRSE best value metrics that neither landscape and visual receptor impacts, nor community impacts, are included as value criteria. We think these (and potentially other similar constraints such as flood risk) should be built into the evaluation of options.
29. We support the proposed Grand Union Canal transfer which could provide, very quickly, water needed to reduce extraction along the Chilterns and thus allow the remediation of the Chiltern chalk streams in the next few years. Similarly, we support the development of the Severn-Thames transfer. This scheme is scalable, adaptable and causes minimal environmental damage. We understand that it could be operational by the early 2030s, thus providing water quickly for improved resilience and river improvements. We do understand that pumping across the Cotswolds has a carbon cost but this disappears if the Government's target of decarbonising the electricity grid (which currently has a target date of 2035) is achieved.
30. We remain very critical of the SESRO reservoir proposal. This development would not be scalable or adaptable and has considerable environmental impacts and risks. It is obvious that the environmental damage during the construction phase would be huge, not just on the 10 square kilometre site but in the

surrounding area and access roads. The bunded construction, in the middle of a flat area of countryside close to a number of villages, would have a huge visual impact. Even beyond the construction phase any restoration of habitat and the creation of new habitat would take decades, for example for trees to grow and insect populations to recover. We find it difficult to believe that the assessed environmental impact would be anything but severe. If the SESRO project is to be progressed at any time in the future we urge that a full, transparent and independent study of the environmental and greenhouse gas emission consequences be undertaken.

31. We think a number of issues are missing from the dWRMP24. There is one mention only of building regulations, in respect of water labelling. We think this approach lacks ambition in respect of residential properties. It makes little sense to continue (it would appear) to plan to use approximately one third of the domestic water supply, treated as it is to potable standards, and transported at significant cost, to flush toilets. Both grey water use and rainwater harvesting at residential properties would address this issue. However, neither appears to be mentioned by the dWRMP24 and the WRSE target for improved building regulations and retrofitting is 2060.
32. We appreciate that as a water-only supply company Affinity is not directly concerned with waste water disposal. However, as this issue has become increasingly urgent in the last few years, we think it needs to form an aspect of planning for all water companies. Clearly reduced per capita water consumption will also lead to a reduction in the volume of waste water. For this reason we think that there should be much greater ambition to reduce this figure down to the government target in the shortest possible time, aiming to go below this figure in due course.
33. There is a necessary focus on chalk stream restoration to be achieved by abstraction reductions. However, the state of many rivers is now a national scandal due to sewage overflows and agricultural pollution. We think that all water companies should be showing much greater awareness of this issue in their planning processes, to acknowledge that a redirection of financial resources will be necessary to address the deterioration of water quality in many rivers and not just in chalk streams.

CPRE Hertfordshire is working nationally and locally for a beautiful and living countryside

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