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Consultation Response on the Fenland Reservoir: A Phase 2 response from the Cam Valley Forum

INTRODUCTION

This is the **Phase 2 consultation response** from the Cam Valley Forum to the Anglian Water & Cambridge Water Company's initial Chatteris **Fenland Reservoir Proposal**.

As a major environmental River group in the Cam valley we speak to some degree as your partners in keeping the natural environment and our rivers in good health, as well as being individuals who are paying water industry customers. **The consultation Questions** that you have asked, are answered, within the numbered sections of this paper. Within Sections 1-8, below, your Questions (numbered 1 - 21, where relevant) are indicated **within our answers** as indicated within the header.

Response Summary

Cam Valley Forum and its principal concerns

- 1. The Emerging Design for the Reservoir at Chatteris*
- 2. The Reservoir Capacity*
- 3. Water Source Transfers to the Reservoir*
- 4. Unrestrained Growth as a hazard*
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About us. *The Cam Valley Forum* is a voluntary charitable organisation that works in partnership with many other local bodies. The Forum is essentially an association of local individuals with diverse environmental, recreational, academic and business interests, who are focused on the many aspects of the wellbeing of the rivers (Cam, Rhee and Granta) in our catchment. Your past company's cooperation and support is always welcomed, though at times of disagreement about our differing aims it can be a less than easy relationship! Our responding to this proposal (which is totally outside our area) is pertinent to us as our valley catchment is largely

in the Cambridge Water Company area **whose water abstraction sources might stand to benefit ecologically from the new reservoir**. This change in awareness is due largely to the support that our past campaigning for more abstraction-relief has gained both locally and nationally. Traction has also come about through our case being supported by both the water resources consultants' reports to the Greater Cambridge partnership on water shortage (e.g. Stantec) and more recently and acutely from the government's own Environment Agency, who have questioned where the water for new developments is to come from. We have contributed to many previous such planning discussions, including most recently your first Phase 1 consultation in December 2022. Two members of our Cam Valley Forum Committee have also attended a couple of your liaison meetings, but there has been scant opportunity there to emphasise what we want most to see.

About our group's enduring main concerns. (*Why the reservoir might help us*)

- The Chalk streams in the UK are internationally important ecosystems in the conservation of biodiversity. The UK has about three-quarters of the world total. This includes our Cam, Rhee and Granta and many of their tributary streams. They are precious assets.
- The viability of our local Chalk streams have declined over the past century for three principal reasons: channel modifications, water quality pollution and loss of Chalk aquifer flow. Our Chalk streams, as you have been forced to recognise, have suffered hugely from public water supply over demand - through excessive (and over-licenced) ground water abstraction. This view is now thankfully more widely acknowledged by government at every level. Cambridge Water Company are still 98% dependent on these Chalk sources. This Chalk aquifer is a highly sought source for good reason (taste, purity, and accessibility to suppliers), but it is intolerable to us that the Cam should continue to suffer the degree of loss that it has from its Chalk aquifer: that water should best support much needed summer flows in what is a globally rare ecosystem.
- In recent years the depth and degree of aquifer depletion has not reduced, nor can it be remediated for another decade until such alternative water sources as this one are available. It is of great distress to us that the unsustainability of present abstraction practice has taken so very long to be more widely acknowledged. The drying of wetlands, assisted by obsessive land drainage, has been accompanied by decade on decade of biodiversity losses. Even in the past year (2023-24) we are seeing absolutely fewer birds and insects in the natural environment, poorer water fly emergences, and worsening pollution effects.
- In our Cam catchment we would like to see a *Chalk Streams First* policy. This has been set out by the Forum in its *Let it Flow* paper (2020). This aim and destination is only attainable by major change in your (and our) water industry infrastructure.
- It is not just drying up alone that is the problem; low stream and river flows themselves have had the knock-on effect of exacerbating some pollution harm. The catchment's undiluted high river phosphate and nitrate levels cause eutrophication. The Cam's water quality is often classed as 'Poor' and that has a direct effect in harming biodiversity. This pollution and that from other anthropogenic sources are undiluted harms that also need addressing in parallel to these alternative new supply-source projects.
- It is our view that the Chalk aquifer, itself a reservoir which has served that ecosystem for millennia, has been robbed by us humans and harmed too much. **The Fen Reservoir is the first serious major investment in putting that mismanagement to rights.** We welcome it as that.

Cam Valley Forum's concerns with this Phase 2 consultation exercise.

1.0 The emerging design for the Reservoir site

(ref your question 1)

We heartily welcome most aspects of the emerging design for the reservoir site itself. We recognise that there is a general supply side problem with local water resources but we are concerned that you, in making your case, do not lose sight of the great need for this reservoir to **primarily relieve pressure on the Chalk aquifer**. This project is in no small part linked to our moral and conservation duty to conserve our Chalk streams better. Please emphasise this aspect as there are plenty of "Reservoir Critics" who have not grasped this essential.

That **'no deterioration in flows'** on our streams, that seemed at one time to be considered a gesture of merit, is a totally **insufficient ambition** given the size and scale of this project. This failing will again show itself if all the gains that the reservoir may well produce (by 2035/40) for the supply-side are swallowed up completely through our only meeting the inevitably increased and still increasing demand for supply. We shall then still be unhappy to say the least. Can you therefore please always advertise **that through this reservoir construction we can save Chalk streams much better**.

We make no comment on the engineering construction of the site and have presumed that the geological considerations have been thoroughly researched. This reservoir construction assumes that other scenarios (like major sea-level changes and climate changes) are highly predictable. These really are not and it could be considered foolhardy to go ahead with such a costly national infrastructure project upon which huge other plans may be being built. Governments might need to adopt the precautionary principle less uncritically.

We are, however, **more encouraged by our reading of the Cambridge Water WRMP 24** where the Fens Reservoir features as a regional option (a Strategic Resource Option) that has been selected in your **plan specifically to meet the demanded licence reductions** resulting from the outstanding need to achieve good ecological status on all our Chalk Streams and to enhance key designated sites and Chalk rivers generally

As we understand it, this reservoir is now to be considered as **a strategic regional asset**. We gather from this ascription that it is the considerable volume of water that the Fen Reservoir will be designed to hold that will see to it as being classed as a **Nationally Significant Infrastructure Project** (NSIP) and will therefore be treated separately from the current local authority planning processes. We assume therefore that it will go ahead as soon as it is accepted by the central (not County) **Planning Inspectorate** and thereby will be signed off by the Secretary of State for Environment, Food and Rural Affairs (DEFRA). We understand that it is principally the Secretary of State that makes that final decision. We know now that the new government's pressure for new housing development is what drives most such national infrastructural decisions but **we are glad that some environmental ambition is at last also there as a part of this**. Without the Environment Agency support for Chalk stream flows, which we have had from them, we would not have got this far. **We may remind the DEFRA Minister of that fact**. If it would help the Water Companies concerned (Anglian Water and Cambridge Water) the Cam Valley Forum might register perhaps with the Planning Inspectorate to become an 'Interested Party' by making a Relevant Representation **in support of the application**. Please bear this in mind.

2. The Reservoir Capacity.

(Ref your question 2 on emerging designs and question 8)

The overall question to which we still want a clear answer has not yet been set out by you for our response here! This is puzzling as a figure must be on the planning table. Is the capacity of this first reservoir seemingly not up for discussion in Phase 2? If so, we cannot know or say whether it will be big enough! We find this strange as without an adequate reservoir provision its capacity will not meet the criteria for our, or indeed the Environment Agency's support, of the entire project! If Cambridge Water is to meet the demanded licence reductions resulting from the outstanding need to achieve good ecological status on our Chalk Stream flows you must have some notion of the volumes that can be strategically planned. **We need please to be informed of the Reservoir's area, depth, volume and storage capacity.** Regardless of your stated proviso, "that it is not up for discussion here", we must comment on this aspect nevertheless.

As we have made clear Cam Valley Forum, are pleased that policy changes are now happening at Cambridge Water, but basically we still have too little confidence in the two Companies' ability to significantly and sufficiently reduce the level of present demand without a very considerable future Reservoir's support. We have had welcome and extensive discussions with you in the company about shifting the Supply side and Demand side options towards a solution of this water scarcity problem. But we need not reiterate these ambitions here, for we do need to be reassured that you will have here **the capacity to meet a 60-70% cut in current actual abstraction.**

The Cam Valley Forum is very much in favour of enabling your delivery of the Water Framework Directive (WFD) targets. We are however, pretty anxious that this cannot be achieved seemingly before 2040 at the earliest. **That is a long time ahead.** Your WRMP24 plan should ensure that abstraction reductions are indeed delivered over the next 25 years in order to counteract the impacts of climate change and ensure that the environment has more of the water it needs. We are pleased to see in the Cambridge Water WRMP that the destination % abstraction reduction is now 64%. All this depends on adequate water supplies available and adequate reservoir storage. We can only trust that the EA and WRE can find adequate winter water flow and deliver sufficient to the reservoir.

(N.B. In **Phase 1** we previously answered questions 3, 4 and 6)

3. Water Source Transfers to the Reservoir (your questions 7, 10, 11, 12)

This catchment is outside our Cam Valley area, but is within the Cam and Ely Ouse Catchment (CamEO) area to which we are linked.

We note that the present sources open to you for filling the Chatteris Reservoir are going to be the **River Nene** and its Counter Drain, **the Ouse Washes** (River Delph) and **The River Great Ouse**. This element of the plan is clear and well set out. We can only trust that they will be adequate sources of water in lower rainfall winters. How is this to be ascertained?

We are aware that water transfer may require considerable energy sources for pumped transfer. It goes without saying that achieving this by the least carbon expenditure possible should be an aim. We have not forgotten that wind-power once drained the Fens!

We aware that the Water Companies as well as Defra, Natural England and the Environment Agency are aware that the transfer of water is a potential route for the spread of **Invasive Non-Native Species (INNS)**. As these are already interrelated catchment rivers we see this as a **low risk**, which is good. This is an important consideration none the less as Cam valley Forum has had to do battle with alien species and it is hard to win once they are there.

There is a very considerable wildlife conservation interest in the Fens (e.g. Fen flora, wetland birds and wildlife, freshwater fish biodiversity, etc.) **Your full and thorough consultation with Natural England, the EA and NGOs such as BSBI, RSPB, WWT should go without saying. That is our advice.**

Many of us that are familiar with the Fens have very considerable doubts about there being **enough water for this project** without more careful planning of the natural environment elements. This is particularly true in establishing reliable wetland management for birds and the flora. The Fens have a very high national conservation status (and biodiversity) that must not be assaulted. Secondly, Fenland agriculture also needs to evolve to fit in with these natural environment requirements. **It has to change.** Much fen farming was essentially **unsustainable and exploitative** in the past (certainly in terms of carbon loss). Government must recognise that this 'English bread basket' is not going to be necessarily the rich food source it was in the past

4. Unrestrained Growth as a project hazard.

(we have no pertinent responses on Questions 13, 14 on water sources more generally)

That our successive Governments and the water companies see the reservoir as principally to supply growth is evident from the Cambridge Water Company's own words in the initial pre-consultation Q and A... *"In the short and medium term, we believe we can meet the proposed growth in our area through the delivery of our proposed demand management options e.g. leakage, metering and water efficiency. This means we will not be increasing our abstractions from the chalk aquifers in order to meet this growth. However, in the longer term, we are unable to meet the growth through demand management options alone, and this is where new supply options, particularly the Fens Reservoir, will play a major role in ensuring we can deliver the additional demand due to growth, as well as achieve the reductions required to restore and protect the environment."* We still doubt that addressing leakage, metering and water efficiency will adequately address the gap between usage now and the reservoir coming on stream in the late 2030s though **we do heartily support all these company measures.** It is clear to us that water companies still do not, or are not able to, acknowledge the unsustainability of their long standing past and present operations. Cam Valley Forum made it very clear in May 2020, in our 'Let it Flow!' publication that we would want to see a 'Chalk streams first' policy and an accelerated reduction in the enduring abuse of our Chalk streams. We have made all these points before. Unrestrained growth could steal all the gains if it is allowed to happen.

5 The Chatteris Water treatment works (your Question 15)

We are very conscious of the fact that Cambridge Water and Anglia Water will be wanting to supply their customers with a source of drinking water that is as good as or indeed better than that already supplied in Cambridge. As you are starting from river water sources much of which will have a host of contaminants compared to a Chalk aquifer source the

Chatteris water treatment works will need to be 'state of the art' to say the least. Where some pollutants are at very small concentrations it will doubtless bring multiple challenges. The number of new pollutants emerging in our rivers is a nightmare for all of us. The range of new technologies that will be open to you will again be legion and will need enduring research. We would want your carbon footprint to be minimal and we would not want any eco-amplification of river borne pollutants (from the Nene or Bedford Ouse) or for them to by-pass thorough treatment and come from there on through effluent to the Cam.

Several well meaning people have suggested to us pumping dirty river water back up to the top of the Cambridge Chalk for re-filtration! We are glad that you are not doing anything like that as we have learned the hard way that innumerable contaminants such as nitrates (from agriculture), metaldehyde (from pesticides) and perfluoroalkyl and polyfluoroalkyl (from multiple PFAS sources) are very hard for you to get rid of once within the water recycling system.

6 The pipelines to Cambridge (your question 16)

Firstly, the alignment of the pipelines on the maps are seemingly sensible, but the width of the line is appalling! Surely a high volume pipeline with good flow does not need to be in a pipe more than a few metres in diameter. Laying this pipeline clearly relies on large earth excavating machinery alongside a narrow service road along individual lengths. It must surely aim to take up a minimal width.

Secondly, the pipeline corridor has picked an essentially rural route, but is planned clearly to pass through some very important wildlife sites. These need minimum disturbance at the right season and maximum restitution to former land use, whether agricultural or wildlife conservation sites are involved. We would guess that you will tunnel under the old West river (Ouse) at Swavesey. Could Anglian Water please consult fully with the Wildlife Trust, RSPB and Wildfowl & Wetlands Trust for when and where this is to be done?.

Lastly, as you will be aware there are historical sites of great archaeological and heritage importance that have been discovered in the Cambridgeshire Fens (e.g. Flag Fen). Full consultation will be needed with the County archaeological authorities. Cambridgeshire Historic Environment Record (CHER) is the most comprehensive source of information on undesignated heritage assets, archaeological sites and finds in Cambridgeshire. It will not have escaped you that the discovery of a new heritage site during this project might be a potential asset as well as a complication!

7. The Madingley Hill sub-terminal Reservoir. (your question 17)

Of the Bexwell, Bluntisham and Madingley connection points it is only the latter that we would wish to comment upon. Our understanding is that the pipeline delivery for Cambridge will be to a large closed reservoir storage system on top of Madingley Hill. I gather that the Madingley Parish Council are already aware of this. There has been much contention over the busway in this area close to Coton and Madingley, there are already new road ways and other infrastructural things like telecommunications in place on Madingley Hill.

Madingley Village and its associated buildings and scenery are highly treasured in the Cambridge area. Much local hostility will be generated if local people are not closely involved in your plans or if they do not see and welcome the benefits that come from them.

8. Final Comments & Other early-stage information (your Question 21)

Broadly, **Cam Valley Forum welcomes the two companies plans for the new reservoir** as, in the face of the longstanding abuse of the Chalk aquifer, it alone seems to offer some remission. If all the supply-side gains go on unfettered demand for those supplies then it will mean that this gain for Chalk streams may be lost.

Secondly we do welcome the potential here for **Biodiversity Net Gain**. Cam Valley Forum would like to beg you to consider this aspect with considerable ambition. Several local county wildlife conservancies:- like the Kingfishers Bridge Reserve, Wicken Fen NT, The Great Fen Project, the Wildfowl and Wetlands Trust at Welney and RSPB at several sites have all been regional pioneers in wetland regeneration. Their expertise should be fully called for and their advice and their involvement will be an essential for you to employ. Wildlife areas should be varied (with some drier woodland, wet alder-carr woodland, willow scrub, reedbeds, rank long herbage cattle grazing areas, as well as short turf Konik grazed wader meadows for lapwing etc. These do not need to be large but a variety of environments and good evidence-based management will help make it a special place of greater value. It could be a great lesson in BNG! Lastly, the open water will undoubtedly attract water fowl. From that may come unwelcome eutrophication of that water which you must also consider carefully.

We would not speak for our Cam Valley Forum members fairly unless we also expressed some other misgivings.

- **Genuine sustainability.** At present the degree of development highlights the unsustainability of contemporary UK life styles. This is most true of all with fresh water resources. Britain imports a huge amount of its food from other countries which **themselves are already running their own water resources down** to feed us. A bigger focus is needed on **our national water-footprint**. Growth beyond ecological limits is a folly that will be regretted in times to come. Climate change, with all that it may bring, is very pertinent indeed here and planning without recognition of the Precautionary Principle is a Government folly. Water Companies and WRE need to listen to and speak out on this as well if they are to be trusted.
- **Social and Environmental Impact.** We (in the Cam Valley :South Cambs and the City of Cambridge) do not know the feelings in Fenland and the Chatteris area about what is proposed, though you seem to have prepared the ground well in consultation. British history is replete with historical examples of communities being deeply scarred, for generations sometimes, on account of a more central government's imposition of such infrastructure projects. The County will need to provide adequate social support and environmental impact support for the people whose livelihoods will be affected. There may be gains in local employment but there will be losses too and these are often endured by the most vulnerable in our society. This must be a well funded County concern with the costs fully met by those profiting from it all.

Please keep us informed

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