

Written Representation

Summary

The Federation of Cambridge Residents Associations strongly objects to the proposed relocation of the sewage treatment works to Honey Hill, with our prime concern being the threat to the Cambridge Green Belt and the region's chalk streams. Residents say that rather than addressing the region's known water and sewage crisis these plans are enabling a very high level of unsustainable growth, driven by developers and Cambridge University and Colleges and their business partners.

The key points are:

1 – There is no operational need to move the treatment works, as Anglian Water have confirmed.

2 - No exceptional circumstances have been demonstrated for the loss of green spaces and the impact on openness and other purposes of Green Belt policy. Residents question how this complies with NPPF, South Cambs District Council Local Plan 2018 and Greater Cambridge Emerging Local plan 2018 and the aspirations of Greater Cambridge Shared Planning to protect and improve green spaces.

3 – This proposal would cause serious damage to the environment from over-abstraction of water. The Environment Act provides guidance on what constitutes 'serious damage'. The Cam fits the bill for 'serious damage' perfectly. In August 2020, the Environment Agency, in response to a query on the viability of water supply to Northstowe Phase 3A, wrote to Monica Hone of Friends of the Cam that *'current levels of abstraction are causing environmental damage. Any increase in use within existing licenced volumes will increase the pressure on a system that is already failing environmental targets'*, and *'many waterbodies did not have the flow to support the ecology.'*

On 1 July 2021, DEFRA announced that chalk streams would be given enhanced environmental protection, and published the Environment Agency document titled "Water stressed areas – final classification 2021" which included the fact that the supply areas of Cambridge Water and Anglian Water are areas of serious water stress (page 6). According to Appendix 3, Cambridge Water needed to reduce abstraction by 22 megalitres per day from levels current at 1st

July 2021 to restore flows and Anglian Water needed to reduce abstraction by 189 megalitres per day from levels current at 1st July 2021.

There is no operational need to move the treatment works.

Anglian Water have confirmed this. The relocation is taking place to enable unsustainable development within Cambridge of which the water company is a beneficiary as co-developer and for which it has received taxpayers' money. The existing treatment works at Milton is effective and has spare capacity. It was upgraded only recently, at a cost of £21 million in 2015, in order to support planned development in Cambridge and the surrounding area.

There are significant concerns about land ownership and conflicts of interest- reflecting concerns too about Anglian Water's connection with the Secretary of State for Environment that have been expressed in the national media.

Many residents question why the works are being moved, given the united opposition of local communities, the huge impact on attractive Green Belt, the odour, the loss of valuable farmland at a time when there is huge national concern about food security. Anglian Water confirms that the loss of agricultural land will be permanent and that this will impact navigation and river users of the Cam.

No exceptional circumstances have been demonstrated for the loss of green spaces and the impact on openness and other purposes of Green Belt policy. Residents question how this relocation which is only to enable development complies with NPPF, South Cambs District Council Local Plan 2018 and Greater Cambridge Emerging Local plan 2018 and the aspirations of Greater Cambridge Shared Planning to protect and improve green spaces and the reference to the Wicken Fen Vision in Natural Cambridgeshire, the local nature partnership that is a partner like Anglian Water of the new Centre for Landscape Regeneration area until 2050. We understand that the Milton Plant is currently only running at approximately 50% capacity. The CO2 cost embedded in the new structure and emitted in demolition and construction is sizable.

A retired consultant hydrologist, Dr Beeson, former Water Resources Specialist, Head of Evidence at Anglian Water, with expertise in groundwater supplies, in a letter published in 2020 by the Cambridge News wrote that this is the second attempt to relocate the treatment works despite the fact that the current site is the best site in terms of its geology being underlain by the gault clay, a rock type which is impermeable, which means that groundwater and its contaminants cannot flow within it.

Anglian Water were well aware of all the contamination issues as this was raised with them early on by Fen Ditton Parish Council (see minutes 4th August 2020). They were also aware of the conservation area concern.

Land ownership and conflicts of interest- reflecting concerns too about Anglian Water's connection with the Secretary of State for DEFRA that have been expressed in the national media

The Green Belt's primary purpose is to prevent urban sprawl. Given the significance of the Cambridge Green Belt to the River Cam, the region's desperate water shortage and the concerns about sewage many residents find it disturbing that the River Cam Green Belt with attractive medieval conservation area villages, famed for swans, geese and duck ponds and for its highly productive agricultural land has so little protection. This is despite a survey commissioned from the McKinsey owned consultancy Vivid Economics of River Cam natural capital, and despite the recent Cambridge University advertisement for Associate Director, Nature and Conservation in the Cambridge Conservation Initiative and workshops 'to develop a shared vision for Greater Cambridge "exploring the role cultural infrastructure plays in supporting strong places and the Cambridge / South Cambridge community"'.

Many Cambridge residents say there should be a River Cam landscape strategy that represents the river's wildlife and nature and involves all the communities that already live and work here. For instance, no one has been consulted about Anglian Water's proposal for an outfall in the Cam which impacts river users and Cam navigation; yet this is the world famous River Cam Bumps route.

Development proposals along the River Cam corridor should:

1. Include an assessment of views of the river and a demonstration that the proposed design of the development has taken account of these; we endorse all the detailed comments and questions that have been raised by the Honey Hill Group concerning views and design .
2. preserve and enhance the unique physical, natural, historically and culturally distinctive landscape of the River Cam;
3. raise, where possible, the quality of the river, adjacent open spaces and the integrity of the built environment in terms of its impact, location, scale, design and form;

4. propose, where possible and appropriate to context, enhancement of the natural resources of the River Cam and offer opportunities for re- naturalisation of the river.

But, this scheme is robbing Cambridgeshire villages of their Green Belt and medieval river landscape setting and the river of a world famous green belt that protects it from urban sprawl.

Concerns over stormwater control, pollution of the aquifer, historical setting of the River Cam

Residents are telling FeCRA that the timescales proposed for the delivery of the proposed solutions are far too long. The River Cam is already very severely depleted by many decades of over-extraction. Every additional year will make it harder for the aquifer and wildlife to recover. The chalk aquifer supplies over 60% of the drinking water across the south east of England , extending far beyond the chalk areas themselves into London.

With the very high levels of employment-led growth that planning policies are proposing to bring to East Anglia the demand for water and addressing wastewater issues will grow very quickly before plans for new infrastructure have even got under way.

There are several questions we feel need answering:

The Environment Act provides guidance on what constitutes ‘serious damage’. The Cam fits the bill for ‘serious damage’ perfectly. In August 2020, the Environment Agency, in response to a query on the viability of water supply to Northstowe Phase 3A, wrote to Monica Hone of Friends of the Cam that *‘current levels of abstraction are causing environmental damage. Any increase in use within existing licenced volumes will increase the pressure on a system that is already failing environmental targets’*, and *‘many waterbodies did not have the flow to support the ecology.’*

The key challenge is where is the water coming from as this relates to addressing sewage and wastewater plans and the loss of the green belt

As the former BBC journalist Mark R Williamson has reported on social media :

‘to give an idea of the scale - Cambridge Water currently supply water to about 138,000 homes and 8,000 businesses. Building up to 250k homes by 2040 requires a massive increase in supplies - in an area of ‘severe water stress’. Cambridge Water are currently drawing up plans for supplying water to the area, up to 2050. The government has also set up a local Water Scarcity Group, to look at how to

support their 'ambitions'. Cambridge 2040 growth proposals, including Cambridge Water and the Environment Agency. Cambridge Water's supply plans are based on a forecast population rise of 89k people by 2050, about 46k new homes - an increase of 32% in connected households. They say this presents 'significant challenges'. The 250k by 2040 are not part of their plans.

All the water supplied by Cambridge Water is extracted from the chalk aquifer. The Environment Agency has set targets for a substantial reduction in abstraction, because it is environmentally unsustainable. CW say this equates to about half the current supply.

So, alternatives are being looked at - at the centre of these future supply plans is the Fen reservoir, Cambridge Water say it will provide HALF of future local water need - based on growth of 46k homes by 2050. There is no excess for 'turbocharging' Cambridge.

On 1 July 2021, DEFRA announced that chalk streams would be given enhanced environmental protection, and published the Environment Agency document titled "Water stressed areas – final classification 2021" which included the fact that the supply areas of Cambridge Water and Anglian Water are areas of serious water stress (page 6).

According to Appendix 3, Cambridge Water needed to reduce abstraction by 22 megalitres per day from levels current at 1st July 2021 to restore flows and Anglian Water needed to reduce abstraction by 189 megalitres per day from levels current at 1st July 2021. A proposed 'solution' to this problem is to pump water from a reservoir in North Lincolnshire,

<https://www.gov.uk/government/consultations/determining-areas-of-water-stress-in-england>

The local Water Scarcity Group set up to support government ambitions say that the Gove Water Scarcity Group has had three meetings already. The first meeting was an introductory one where everyone gave views. The second one was where the WSG stated what they thought the problems were. The focus was on what can be done to get developments through, not on how to solve the region's water problems and members of the local Water Scarcity Group are finding it hard to get the information needed from the water companies.

One particular problem is that Affinity is not part of the WSG (although it has been invited to join). Affinity extracts water from the chalk streams that serve the greater Cambridge area further upstream, has higher water use figures for its customers.

Water environmentalists and river groups are aware of the adverse impact of Affinity on the chalk streams. But most Cambridge residents haven't heard of them. Affinity also extract from Grafham Water which is why the Environment Agency have stated that Cambridge Water can't do so unless Affinity can release that supply, which would require them to take water from the north of England via the Grand Union Canal.

At a recent Cambridge 105 Radio event a senior executive from Cambridge Water, Natalie Ackroyd, was on record stating 'while they [Cambridge Water] can have the pipework from Grafham ready by 2032 latest, they may not be allowed to take water until 2037'.

Additional preferred supply options also already include bulk water transfers from Anglian Water. Also, new abstraction from the Cam near Milton, which would be augmented by 'recycled' water from the wastewater treatment works. After that it's about increased efficiency - reducing leakages and demand, including a target of cutting domestic water use by 6% by 2020. Anglian Water is building new pipelines from the north, but again this is already being factored into future supply plans.

Even with all this, Cambridge Water say there is a 'short term supply issue' until new infrastructure like the Fen reservoir come on line (at the earliest 2035), which they say may mean deferring the reductions to (environmentally damaging) abstraction.

A proposed 'solution' to the region's water shortage includes pumping water from a new reservoir in North Lincolnshire. But North Lincolnshire is an area also classified by the Environment Agency as water-stressed. Moreover, the Lincolnshire reservoir will remove 4,500 acres of quality Lincolnshire farmland.

As for Cambridge Water's joint venture with Anglian Water, the Fenland Reservoir at Chatteris, experts from Cambridge's Antarctic Survey have asked: "What is the anticipated period of operation of the reservoir?" and "what assumptions have been made about relative sea-level change and development of flood defences over that period?"

Local experts with experience of building major earthworks have pointed out the dearth of technical information in the consultations for the two new reservoirs.

They ask why the estimated cost per cubic metre is so much higher than for Rutland Water or Havant Water. They are not clear why Anglian Water are selecting such an expensive solution. Is it to make the 'do nothing' option appear to be the only feasible one?

If soil moisture deficits are increased by higher summer temperatures and longer summer seasons, then the groundwater sourcing of chalk streams is affected, as eventually also will be the sourcing of public water supply. Cam Valley Forum investigations attribute part of the Cam's currently falling river flows to these increased soil moisture deficits. i.e. it takes more rain to wet the soil before any rain water percolates through to recharge ground water. As they point out, we live in a drought stressed area.

Both summer and winter rainfall vary widely, but it is only the latter that has a significant impact on ground water. Public water supply in our catchment is 97% ground water dependent. River groups report that rainfall has changed very little over the last century. Research suggests that winter rainfall may increase but the graph has a trend line showing only a tiny upward trend over the past 120 years. Anglian Water therefore should not expect any significant increase in winter recharge at present. If anything the inverse trend of drying is in the ascendant - as more ground-water is abstracted and hotter weather increases soil moisture deficits. There have been much greater droughts in the past than anything experienced recently. We are now close to crisis.

The Cambridge Water Company's plans for a Fenland Reservoir will not improve a dire situation before 2035. The reservoir provision alone will not be sufficient for the demand unless water neutrality is assured in all current properties and in all new developments.

Residents are asking where is the overall vision of what Cambridge and the Cam and the regions' chalk streams will be like in the future? There are concerns that the precautionary principle is not being addressed by the water companies neither are the risks involved for the region being properly assessed and spelled out.

If more homes are to be built as government minister Michael Gove has suggested then it would seem that several more reservoirs will be needed.

Environmentalists and river experts across the region are also expressing serious concern about the accuracy of the Environment Agency's recordings, which they say does not tally with evidence they see on the ground about the seriousness of the situation. They are telling us that it is extraordinary

that the Environment Agency and water companies are not working on emergency measures right now, as it takes months to install and commission emergency drought infrastructure.

The existing water infrastructure and boreholes are only supplying the existing water supply needs by over-extracting the water from the aquifer at totally unsustainable rates, leading to a severe risk of our supplies failing. The risk of the 2022 drought extending remains very high. Environmentalists and local river groups question the latest drought update briefing from the Environment Agency detailing an 'improved situation and a return to 'Normal' status across all catchments in East Anglia. They say the situation has not returned to normal yet, as it is only surface water and infiltration into the upper layers of the sub-surface aquifer.

The deep aquifers will not start receiving recharge for many months to come.

Many residents are shocked at the level of growth that is being proposed for Cambridge and what they see as the failure to consider the overall environmental capacity and climate change impact and the effect on the historic environment (built and natural) in a holistic way.

There is no consideration or assessment of current growth in the pipeline or of the success or failure of current Local Plan policies, no assessment of the cumulative impact of current growth, especially in terms of delivering the claimed nature and quality of development.

They highlight that what constitutes serious environmental damage is happening already.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/82498/water-act-condoc1202.pdf

Leaking ancient pipes and wastewater infrastructure

Anglian Water is losing 180 million litres of water every day through leaky pipes, and thousands of gallons of raw sewage are continuously pumped into East Anglian waterways.

Anglian Water have stated state they are working with Ofwat to ensure water bills are kept as low as possible, whilst investing £720m to prepare our region to meet the challenges of a rapidly changing climate and a growing population.

However, there is no information about addressing leaks and ancient pipes. Nor is there any information about the status of Anglian Water's compliance with wastewater regulations. Yet

Anglian Water are consulting on compulsory meters and the chair of WRE, Paul Leinster, has previously told attendees at Water Resources East meetings that addressing wastewater is one of the biggest obstacles to growth in this region.

Have plans for the sewage works relocation and water and sewage been created in a fair, open and transparent way, involving the right stakeholders?

There are significant concerns about land ownership and conflicts of interest- reflecting concerns about Anglian Water's connection with the Secretary of State for DEFRA and who is benefitting from this development.

The consultations about the Lincs Reservoirs closed on December 21. The consultation about the Fenland Reservoir also closed on December 21. These two reservoirs are integral to the growth plans for the Cambridge Green Belt and to Water Resources East's plans for regional water management.

How many people in East Anglia knew about the two separate reservoir consultations? How many people knew about the Water Resources East consultation? Cambridge residents have asked how were the members of the new steering group for the Cam Ely Ouse (CamEO) Catchment Partnership selected? The steering group represents the Cam and its green spaces, but the CamEO partnership is run and funded by Anglian Water with the Rivers Trust. They highlight that Cambridge City Council has delegated powers over Cambridge City Centre and Cambridge green spaces to an unelected consortium that includes the Council officers and their business partners: Cambridge Bid, Cambridge University (via Fitzwilliam Enterprises) and King's College (who own Grantchester Meadows).

This is of national interest as decisions being taken about this development and the Cam impact other regions and have an impact on UK national funding for infrastructure.

There is an expectation that 'green' growth and nature tourism in East Anglian can fund a system of water management without addressing over-abstraction and sewage in the rivers.

Yet the local sewage system is currently inadequate. The inadequacy of the sewage system is evidenced by the number of sewage spills by smaller Anglian Water sewage works into the Cam Valley.

Many residents are asking what is the status of the criminal investigation into Anglian Water's non-compliance with wastewater regulation?

The government has ordered that water companies must show their blueprints for improving thousands of pipes spilling sewage into rivers and seas. Companies will be expected to provide the number of spills, how long they lasted and the cause. Questions about non compliance and the investigation were put to Daniel Johns, Managing Director of WRE, who was previously Anglian Water Director of Public Policy , and Chris Gerrard of Anglian Water by FeCRA at the December Natural Cambridgeshire Forum in December 2022. These questions were not addressed.

The Cam Valley upstream of Cambridge saw 622 hours of untreated wastewater enter the rivers in 2020, yet Anglian Water is proposing to move the main sewage works into the Green Belt and to spend at least £227 million of public money to do so, whilst so many other treatment works discharging into the Cam are either completely overloaded or are fast approaching overload as yet more housing developments add to the burden.

Residents say this is the subject of only a partial public inquiry because it has been submitted as a National Infrastructure project in order to minimise public scrutiny.

They say no one is asking the key question : How polluted are our rivers?

Combined Storm Overflows were intended to act as pressure release to enable the management of extreme periods of rainfall. Excess water is diverted into our waterways to protect homes and businesses from flooding. They were designed to cope with high levels of rainfall entering the system, but they are not a 21st century answer to the problem of sewer flooding.

Sewage overflows result from lack of infrastructure investment, research shows

<https://www.imperial.ac.uk/news/242831/sewage-overspills-result-from-lack-infrastructure/>

There are 14,346 CSOs in England and although they have been assessed for their environmental risk, their increasing use, even in dry spells, has led many to question their role in the country's wastewater systems. Raw sewage overflow from CSOs directly into rivers and the sea can pollute the water, especially when not used at times of high rainfall that could dilute the sewage.

These overflows can lead to environmental deterioration and present a human health hazard, for example through enteroviruses that cause gut infections, or the proliferation of antibiotic resistance. This has a knock-on effect on tourism and leisure activities like swimming and boating, as well as the consumption of seafood that can accumulate toxins and microplastics.

The failure of water companies to invest in sewage infrastructure means the plans for employment led homes will just add more sewage into treatment works that are at or beyond capacity, and increase pollution into rivers.

At the moment there isn't any serious plan nationally as to what we are going to do about this massive underinvestment by water companies in sewage treatment works.

To date there have been no upgrades at any of the smaller works in this area while more and more users are still being connected. The Environment Agency has already warned at least one Cambridgeshire local planning authority, East Cambs District Council, that they must stop looking at the sewage requirements of single planning applications and instead look at the cumulative effects.

Currently, there are no plans to improve failing combined sewer overflows (CSOs), just promises to monitor them more accurately. Residents say that one aspect that needs to be understood is the interaction between CSO excess and the inflow to the Fens Reservoir. It seems to them that one aspect (the CSO excess use) and various poorly performing local small sewage works that feed the Cam Ely Ouse need to be cleaned up before the Fens Reservoir is in use.

Fish Legal and the Pickering Fishery Association's legal victory against the Government and the Environment Agency in a landmark case has far-reaching implications for UK's polluted rivers. The High Court found that the Government made a fundamental 'error of law' in its decision-making.

As a result:

- The Environment Agency's Humber River Basin Management Plan published in December was unlawful;
- The Secretary of State's decision to sign it off was also unlawful;
- The Environment Agency's consultation on the draft Plan was unlawful because it didn't contain the information needed for anglers to understand exactly what actions would be taken to bring a Yorkshire beck back to health.

Fish Legal argued that as part of the last River Basin Management planning cycle, the Environment Agency should have reviewed the permits that supposedly control the sewage spills impacting the river, then updated and enforced them as necessary. The Court agreed. The Costa Beck is one river in one catchment in one River Basin Management district. 1 waterbody out of 4,929. Only 16% of

waterbodies – 14% of rivers – are currently at good ecological status or potential. The target is 100% by 2027. There is no chance of getting anywhere near that target unless the Government and Environment Agency get serious about protecting our waterways and act now.

By shining a light on one river, Fish Legal have shown what has been going on across England: that to a large extent the River Basin Management Plans have been no more than a bureaucratic ‘paper exercise’, with no real regulatory action behind them.

What is needed are River Basin Management Plans backed by meaningful action.

Wendy Blythe,

Chair, FeCRA