

River Chess Association

Established 2009

Regional Member of the Association of Rivers Trusts

Chiltern District Council,
King George V Road,
Amersham,
Buckinghamshire.
HP6 5AW

21 April 2010

Dear Sirs,

Response to Draft Core Strategy for Chiltern District

We are a recently formed association including groups and individuals who are focussed on representing the interests of the River Chess. We intend to work closely with other groups in the area who are working on issues relating to the Chess, including the Chilterns Chalk Stream Project, Impress the Chess, the Chiltern Society and the Chesham Environmental Group.

The River Chess is a chalk stream that rises in Chesham, Buckinghamshire, and runs through the Chess Valley to Rickmansworth where it becomes a tributary of the Colne. For part of its length it forms the border between Buckinghamshire and Hertfordshire.

Chalk streams are a rare ecosystem. We have 85% of the worlds chalk steams in England. In the words of the World Wildlife Fund for Nature from their Rivers on the Edge initiative ***"Chalk Streams are our Rain Forest"***. We must take responsibility to ensure these fragile environments are protected and not lost.

The Chess Valley is part of the Chilterns Area of Outstanding Natural Beauty and the river is home to a variety of important species, such as water vole, kingfisher, brown trout and stream water crowfoot. Interesting visitors, such as osprey, also come to the river. The picturesque Chess is popular with walkers, thanks to the Chess Valley Walk, and is also home to a watercress farm at Sarratt and trout fisheries.

The Chess faces many threats, including low flows caused by abstraction for public water supply, invasive species such as mink and Japanese knotweed, and sewage discharges.

The Association aims to perform environmental monitoring, raise awareness of the issues facing the Chess, educate people about the importance of chalk streams, interact with educational institutions and lobby the appropriate authorities and provide a forum for the exchange of expertise and ideas.



Mission:

The River Chess Association seeks to protect and enhance the River Chess, a Chilterns chalk stream, for future generations.

Our key concerns with respect to the Draft Core Strategy for Chiltern relate to water flow rates and water quality in the River Chess. To put this in context it is best that we describe the existing problems before we discuss the additional pressures the Chess will come under as a result of the implementation of the Draft Core Strategy for Chiltern District.

Low Water Flows

The average per capita consumption of water in Chiltern District is 176lt per day on an un-metered basis and 160lt per day on a metered basis which compares with a national average of 148lt per day metered and un-metered and a best in class (Severn Trent) of 128lt per day. This shows that there is potential within Chiltern District for a minimum 8% reduction in demand just through the introduction of compulsory metering. The drinking water for Chiltern District is supplied by Three Valleys Water (Veolia) of which the majority is sourced from the chalk aquifer. This activity is covered by abstraction licences issued to Veolia by the Environment Agency. These licences dictate the volumes of water that can be abstracted from the aquifer on an annual basis. According to Veolia they currently operate very close to their maximum abstraction limits and in order to meet demand they import water to the Chess Catchment area. Veolia recognise that they face a challenge meeting existing demand and have include measures in their Water Resource Management Plan <https://central.veoliawater.co.uk/our-future-plans.aspx> submitted to OFWAT to manage this problem. They see as cornerstone to their plan as the management of demand through the increased use of water meters. OFWAT have instructed Veolia to amend their plan and remove the requirement for compulsory metering.

The Chess Catchment is already designated as an area of over abstraction according to the Environment Agency's Colne Catchment Abstraction Management Strategy so efforts are required to find alternative sources of water to meet demand and ways of reducing existing demand. The issue is referenced in the Draft Core Strategy for Chiltern District but we feel there is little evidence of concrete plans as to how this will be addressed.

Key areas we see that need to be included in the Draft Core Strategy for Chiltern District relating to water flow rates in the River Chess

- **Establish an Abstraction Working Group including Chiltern District, Veolia, Thames Water, and voluntary bodies such as the River Chess Association and others. This group should be tasked with establishing a plan to reduce requirements to abstract from the chalk aquifer in the Chilterns and specifically the Chess Catchment.**
- **For existing consumers we see that the areas to concentrate effort are the increased use of smart water meters and grey and rain water collection schemes.**
- **With regard to all new developments there should be an imperative that minimisation of water use is a key component of any plan.**

- All new developments should be sited in locations that minimise their impact on the River Chess.

Water Quality

Water quality is an important issue and here we identify some of the main concerns that need to be addressed in the Draft Core Strategy for Chiltern District. The quality of the water in the Chess is affected by a number of issues. The water that supplies the Chess comes mainly from the aquifer. This supply comes with the characteristics of water filtered through chalk. The water will be high in mineral content specifically calcium carbonate which creates the unique natural ecosystem and environment we find in chalk streams. However other sources of water also find their way into the watercourse. In the case of the River Chess this includes drainage runoff from roads and farmland and particularly the outflow from the Blackwell Hall Lane Sewage Treatment Plant run by Thames Water, which are detrimental to water quality.

We have had considerable correspondence with Thames Water over recent times on the issue of water quality and sewage discharges and would like to summarise their responses. During 2008 they discharged a mixture of untreated sewage with storm water runoff on 12 separate occasions, in 8 separate months and for a total of over 40 hours. During 2009 up to September there had been 3 separate incidents in February and June totalling 27 hours.

By their own admission they do not:

- Measure the quantity or content of the discharge;
- Report the discharges to the Environment Agency;
- Warn or inform other river users who rely on the river for recreation and their livelihoods of these discharges;
- Understand the health and safety issues arising from these discharges;
- Carry out environmental impact studies on the effect of this practice.

They are aware that the frequency of these incidents will increase due to greater throughput from existing and new customers but they have no current plans to mitigate this problem.

These discharges are made under the terms of consent conditions granted by the Environment Agency, which must be vague as there appears to be no requirement to measure, report or understand the impact of these discharges.

The duty of care applied to Thames Water falls well below that of all other landowners whose properties connect to the river. They have made it clear that they will not be taking action to correct this nuisance.

As you will see from **Table 1** below over recent years there has been a marked increase in both the frequency and duration of these incidents. We can only see this position worsening as more pressure is put on the facility at Blackwell Hall Lane. As yet we do not fully understand the effect this activity is having on the River Chess ecosystem and are instigating a programme to monitor this. We are adopting methods already operating on other chalk streams such as the River Wandle in South London. What we do know is that the practice of dumping untreated sewage in the Chess does place a considerable strain on the environment and puts at risk all the good work undertaken by local authorities, voluntary groups and landowners. From observations made by people who regularly visit the River Chess there is a belief that there has been a significant reduction in fly life in recent years, which matches the increase in Thames Water sewage discharges. This has a knock on effect

on the fish population and the creatures that predate them. **If we wake up one morning and find a river full of dead fish we will not be surprised.**

One argument put forward for allowing this practice is that these events only happen when there is heavy rain and therefore any discharge will be into a river flowing at higher levels, which should lead to greater dilution. This may be the case with spate rivers or some lowland watercourses but this does not apply to chalk streams where rain fall has a minimal immediate effect on flow rates. We can see that on occasions these discharges occur at times of very low flow rates. What is more disturbing is that we see a number discharges at times when there was no evidence of heavy rainfall and associated runoff see **Table 2**.

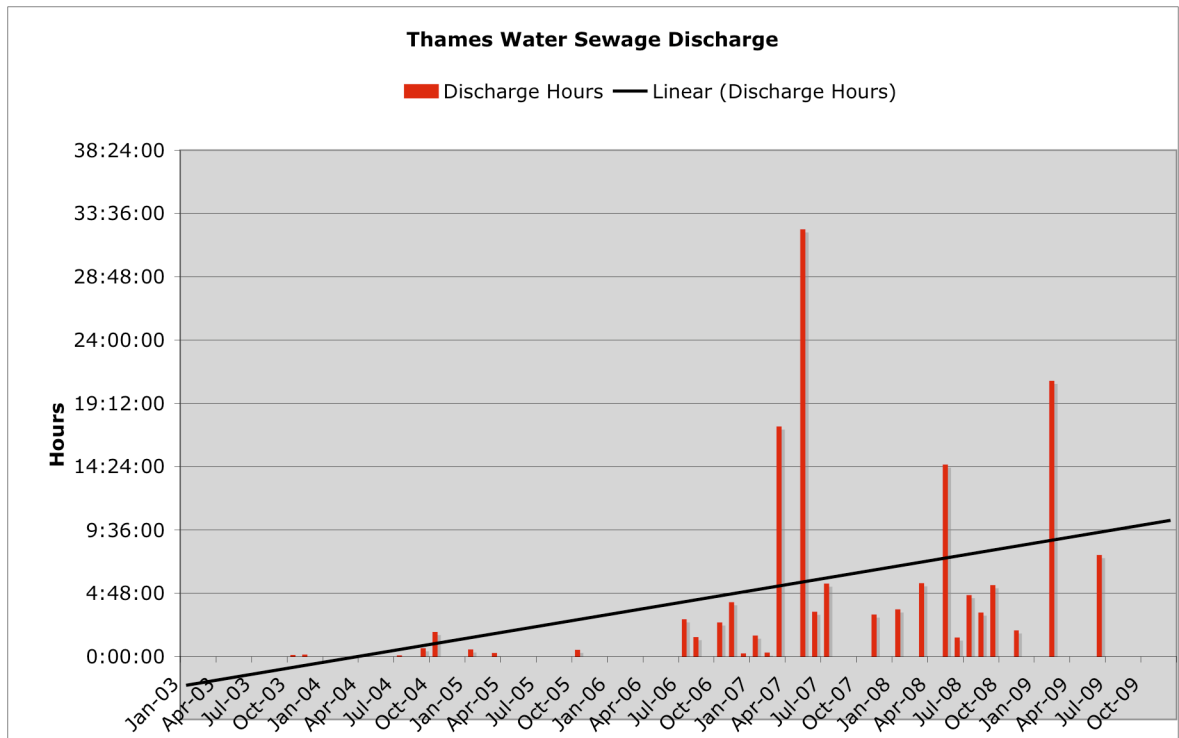
What we want to see from Thames Water and Chiltern District is a coordinated plan to address this issue of water quality in the Chess. We would wish that Thames Water would demonstrate respect for the fragile ecosystem of the Chess and instigate initiatives that will stop this appalling practice.

Key areas we see that need to be included in the Draft Core Strategy for Chiltern relating to water quality in the River Chess are

- **Acceptance that the River Chess chalk stream is a rare ecosystem that requires a greater duty of care from Thames Water.**
- **A detailed assessment of the additional sewage throughput expected at the Blackwell Hall Lane plant resulting from the implementation of Draft Core Strategy for Chiltern, specifically the new housing.**
- **A coordinated water monitoring plan working with the Environment Agency and voluntary bodies such as Impress the Chess, ourselves and others.**
- **The number of sewage discharges into the River Chess should be reported and recorded by Chiltern District Council as an indicator for measuring the success of infrastructure provision;**
- **A detailed plan of how the Blackwell Hall Lane plant can be upgraded and expanded to improve water quality and treatment capacity.**

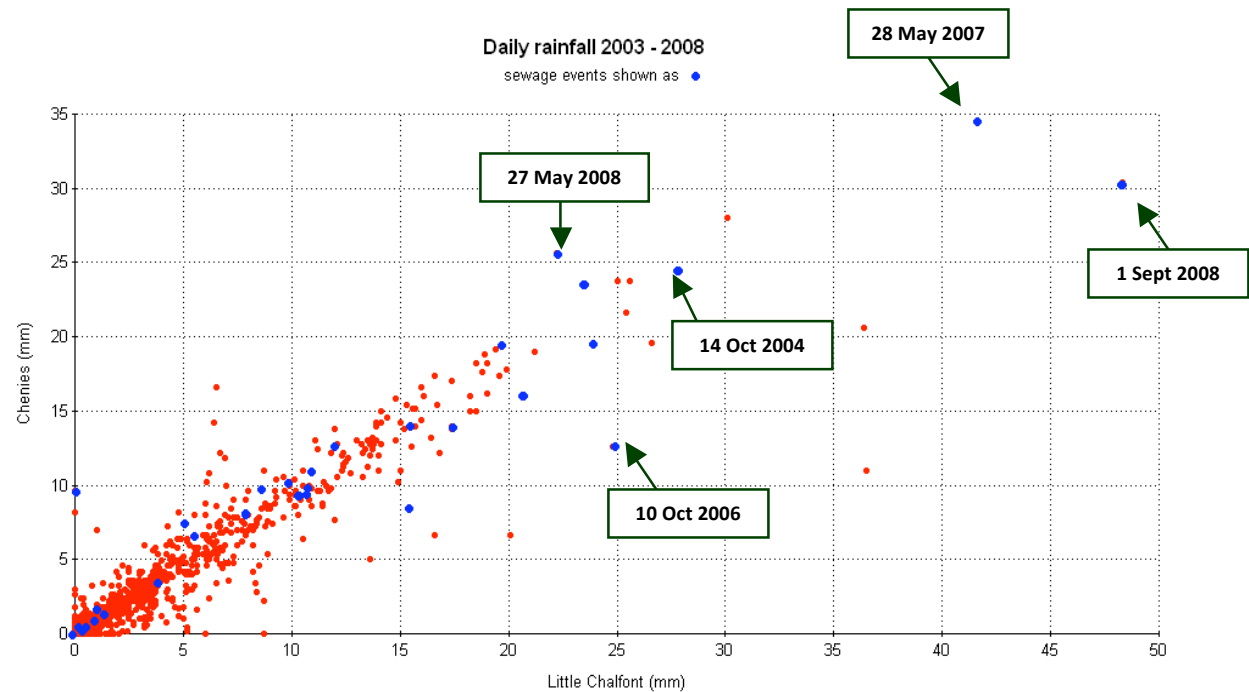
We do fully understand the need for the Blackwell Hall Lane plant and oddly it does have a beneficial side effect - without the plant the flow rates in the lower Chess would be significantly lower.

Table 1



Source Thames Water

Table 2



Source Thames Water and John Norris

Specific Response to Draft Core Strategy for Chiltern District

The following are the main extracts from the Draft Core Strategy for Chiltern District document relating specifically to drainage, water supply and environmental issues. Our general view is the document is long on sentiment but short on detail of how the sentiment will be achieved.

3. Portrait of Chiltern and its Communities

3.1 Location and Physical Character

'The AONB encompasses *inter alia* chalk streams'

Our comment: we should stress the rarity of the ecosystem and extra duty of care required.

4.3 The Sustainable Community Strategies and Local Area Agreement

- Reducing our impact on the environment in terms of emissions...**and consumption of natural resources**

Our comment: we should reference how this will be achieved.

4.4 Key Spatial Issues

- How to maintain and improve the **high quality environment** of our towns, villages and countryside

Our comment: here there should be mention of the many voluntary groups already working to this end.

5.4 The Vision for Chiltern

- A place with a clean and green environment where recycling, waste minimisation and **resource conservation** are an established part of everyday life

Our comment: what are the recommendations to achieve this?

5.5 The Vision for Individual Communities

The Vision for the Chilterns Area of Outstanding Beauty

- Healthy Chalk Rivers and streams which provide a healthy environment for their specialised wildlife

Our comment: How do we protect them? What needs to be put in place to achieve this?

6 Objectives

6.1

- A sustainable environment, protecting our future by **reducing use of natural resources; conserving and enhance the natural..... environment**

Our comment: Excellent sentiment but we need to know how it is to be realised.

6.2

- the overall objective of this strategy ... to provide sustainable development..... whilst protecting and improving the high quality environment and the naturalassets of the District. Proposed objectives are

- III. Steer development to the most sustainable locations and ensure that... maximises efficiency in use of ... water.... minimises pollution.....

Our comment: What steering activity is required and how will it be structured?

7.9 Policy CS1

- a) the size of the existing settlements – broadly the larger the towns are now, the greater the likelihood of finding sites within the urban area and the greater the **prospect of services** and facilities being available locally

Our comment: As we have already demonstrated the sewage treatment infrastructure is not meeting publicly acceptable standards and the Chiltern District is already an over abstracted area. We would say that even in towns these services are not currently available.

8 Developing and living Sustainability

8.1 It is now universally acknowledged that measures need to be taken to protect our natural environment and resources

- living within environmental limits

Our comment: This should reference Policy CF3.

Policy CS3

Ensuring that Development is Sustainable

- d) Minimal disruption in terms of water..... pollution
- h) Use of water efficiency measures to reduce consumption and no detrimental impact on water quality
- i) Consideration of surface water drainage impacts and the inclusion of SuDS
- j) Preservation and enhancement.....important features of the natural environment such as rivers, streams, river corridors.....

Our comment: Needs more details of the actions to be taken and how they will be measured.

14 Shaping the Chilterns Area of Outstanding Natural Beauty

Policy CS22.....

We will measure success with the assistance of the following indicators:

- Improved quality of water in rivers
- A reduction in the lengths of main rivers affected by low flows

Our comment: What indicators? and who will do the measuring? The Environment Agency are already struggling to meet this requirement. We are establishing a fly monitoring project that will allow us to assess water quality. This will form part of an integrated monitoring programme that will look at water and foaming analysis. We understand that as part of the indicators section of Policy CS22 it is stated that it is expected that Chilterns AONB team will measure these indicators at a District level. Unless this is appropriately resourced this seems unrealistic. Information at a district level will not help to look at specific issues relating to the Chess or the Misbourne, it is important to differentiate between the two because they experience different problems.

15 Shaping the Character of Chiltern District

15.1we will apply the principles set out in PPS3

- Development **must maintain and improve** local character and **the natural environment**

19.4 Policy CS37 talks about abstraction without acknowledging that the Chess is over-abstracted.

Our comment: The indicator suggested for monitoring would suggest that CDC is only interested in developments looking to directly abstract water, rather than all the developments that will require a supply of water from Veolia. We would suggest that there also needs to be monitoring of the level of water usage by individual households, and by settlements as a whole, and the number of properties with water meters should also be recorded.

19.8There are two chalk rivers; the Misbourne and the River Chess. Chalk Streams are a priority in the UK Biodiversity Action Plan. These rivers and the other chalk rivers within the AONB are a characteristic feature of the landscape and provide an important habitat.....it is essential to carefully manage the use of water. Excessive use of water particularly at times of low rainfall will have a direct impact on water flows and river environment

Our comment: This demonstrates an understanding of the issues but no explanation on how the issues are to be managed.

Policy CS35: Biodiversity

The Council will aim to conserve and enhance biodiversity within the District. In particular

- where development proposals are permitted, provision will be made to safeguard and where possible enhance any ecological interest

We will measure success with the assistance of the following indicators

- Quality of the chalk rivers

Our comment: See our earlier comments, how will it be measured?

22 Delivering Chiltern's Infrastructure

22.1 The term infrastructure incorporates not only all components of community infrastructure, but also physical infrastructure such as water provision, sewage and drainage systems.....The Buckinghamshire Infrastructure Study states that the scale of development proposed in Chiltern District is in itself "unlikely to directly generate substantial infrastructure investment requirements"..... the report also suggests that future demand is likely to be met in some cases by upgrading or extending existing facilities rather than completely new facilities

Our comment: We would contend that the provision of water and sewage treatment is not providing a publicly acceptable service. We would also want to see a detailed plan for investment both in sewage treatment and water supply. We need to see a route to achieving this plan.

22.4.1 The advice from Thames Water is that it has no objection in principle to any of the sites or zones in the Core Strategy..... however developers should carry out detailed assessment of sites in relation to capacity issues in liaison with Thames Water. TW advises that before dwellings could be occupied, the sewage network and / or treatment capacity in the relevant area needs to be improved to meet the additional demand.....

Our comment: We see this as the key issue regarding water quality in the River Chess. We argue that upgrading and enhancement is needed now because the Thames Water facility is already failing to meet acceptable standards for discharges into a chalk stream.

Yours faithfully

Paul Jennings
Chairman
On behalf of the River Chess Association