River Chess Association Public Meeting No. 5

24th May 2011, 7.30 pm Loudwater Farm, Rickmansworth

In attendance:

Paul Jennings (Chairman)

Roger Wotton

Kathryn Graves

Stephen Webster

David Le Neve Foster

Rob Sage (Veolia Water)

Keith Hoffmeister Phil Folly

Ken Austin Norman Bennet Terry Tyler Kate Heppell

Richard Berry Andre Galley (Thames Water)

Chris Stanners Phil Nixon
Tina Owen Mike Owen
Nicholas Owen C. Plank
Richard Kent Jane Archer
Richard Bird Paul Wright

Janet Murphey

Apologies for Absence

Apologies were received from Allen Beechey, Angela & Anthony Colman, David Gauke MP, Angela Barrett, David & Annabel Briggs, David Hyde and Andrea Polden.

1. Approval of Previous Minutes

The minutes of the meeting held on the 27th October 2010 were approved as a correct record. Paul Jennings explained that the minutes of all the public meetings are available on the web site, www.riverchessassociation.org, and that the committee would welcome any feedback about the site.

2. Chess Catchment Water Balance

Rob Sage, Asset Specialist (specialising in water resources) at Veolia Water, gave a presentation on the factors influencing the water balance in the Chess catchment. This includes the natural, annual cycle in water levels and abstraction for public water supply. Abstraction takes water that is pumped via boreholes from the aquifer, intercepting water that would otherwise have flowed into the river.

Veolia supplies water to Chesham from two groundwater sources (Chesham, which is operating at 98.5% of its abstraction licence and Chartridge, which is operating at 78%) and also imports water from outside the catchment. On a typical day, it is necessary to import approximately 1.3 megalitres to meet demand, which can rise to nearly 2 megalitres at peak water usage times. Water is imported from the Bovingdon reservoir, which takes water from chalk sources in other valleys. Therefore, water consumption in Chesham also affects other Chilterns chalk streams besides the Chess, which also suffer from low flows.

In an overview of the current water resources position, Rob explained that only 75% of normal rainfall occurred during winter, resulting in c.50% of the normal groundwater recharge. The recovery in groundwater levels was delayed until

December-January (compared with the normal October-November) allowing only three months of recovery until the groundwater levels started to decline again in mid-April. Groundwater levels have fallen below the long-term average for the first time in three years and are predicted to decline to quite low levels this autumn, resulting in low river flows. Good rainfall levels are essential this autumn/winter to avoid very low groundwater levels occurring in 2012.

The Water and Floods Bill has given water companies new powers to restrict customer water usage. As a result, Veolia will be consulting on a revised drought management plan later this year. Veolia customers have the highest per capita water consumption in Britain, which is thought to be linked to the comparative affluence of the customer base. Veolia encourage water meter installation to reduce usage, but Offwat have prevented Veolia from compulsory metering, even in water stressed areas.

3. Looking Closely at Chalk Streams

Professor Roger Wotton of University College London took a look at some of the familiar and not-so-familiar organisms that inhabit chalk streams. By looking at the flow of energy in a chalk stream, Roger showed that micro-organisms are an important facet of the stream ecosystem. Micro-organisms can attach themselves to surfaces and produce a sticky material that binds them irreversibly to the surface. A biofilm develops as the micro-organisms reproduce and as other organisms become stuck to the sticky exopolymer. Almost all surfaces in a chalk stream can develop a biofilm and many small organisms, such as *Gammarus* and *Baetis* (two of our riverfly monitoring groups), feed on biofilms. Without micro-organisms there would be no cycling of nutrients and little plant or animal growth in chalk streams.

Questions were asked as to what factors could have a negative impact on a chalk stream's microbial population. Roger explained that microbes can be tolerant of very extreme conditions. For example, when a chalk stream dries up, the micro-organisms in the biofilm are protected by the water-rich surface matrix of exopolymers. Whilst the surface dries out, the organisms inside can survive.

4. No HS2 Across the Chilterns

Keith Hoffmeister introduced a short film about the potential damaging impact of High Speed Rail 2 upon the Chilterns Area of Outstanding Natural Beauty. The film can be viewed on YouTube and via the RCA's facebook page.

5. Riverfly Monitoring Update

Paul explained that the purpose of riverfly monitoring at points along the Chess is to monitor for pollution events and to gather long-term data to assess the health of the river. The results of the monthly monitoring, conducted by trained monitors, are provided to the Environment Agency (EA). If a result falls below a "trigger level" set by the EA, the EA will investigate whether a pollution incident has occurred. Following discussions with Thames Water, the RCA will be notified by text when a stormwater discharge event occurs from the Chesham Sewage Treatment Works.

This will allow the RCA to monitor the immediate impact of the discharge on the riverfly life.

6. Wild Trout Trust Masterclass

The committee have identified a public stretch of the Chess upstream of Scotsbridge Mill in Rickmansworth as a suitable location for a masterclass. The stretch is popular with the public, but currently has little fish life due to the lack of suitable habitat. The masterclass would be a means of demonstrating to volunteers techniques to improve the river habitat for fish and other wildlife.

7. Invasive Species

The time of year is approaching for implementing manual control of the highly invasive plant, Himalayan balsam. Paul explained the detrimental impact that this plant has on the native riparian flora and the damage it causes to the riverbanks. Paul asked people to look out for infestations of this plant along the Chess and to report it to the RCA.

Mink have been seen in the catchment this year. Paul asked riparian landowners with mink rafts to be vigilant in checking for the presence of mink.

8. Chiltern District Council's Planning Core Strategy

The Core Strategy outlines the future of planning in the Chiltern District until 2026. Paul attended the recent public enquiry into the strategy to convey the RCA's concern over the impact of new development on abstraction and the sewage infrastructure. The Inspector has suggested that limits of 105 I/d consumption should be be included for new domestic residences. The RCA is committed to continuing to lobby for river issues to become a high priority in the Core Strategy.

9. Chesham Sewage Treatment Works

Members of the RCA committee were invited by Thames Water to a site visit of the sewage treatment works. RCA members were able to raise their concerns over the frequent presence of sanitary items, such as sanitary towels and nappy liners, in the Chess just downstream of the sewage treatment works. It is not clear at this stage where these items are coming from.

10. Any Other Business

(i) Education

The RCA helped to support this year's Trout in the Classroom project, which ran in schools in Chesham and Rickmansworth and resulted in the release of trout into the Chess. Follow-up school visits to the river, hosted by the RCA, are planned for later in the year.

The RCA is also liaising with a number of higher education students to assist with their research, and Angela Bartlett of Queen Mary University has joined the committee as a student representative.

(ii) Fundraising

The Committee has conducted no fundraising to date, but is now making River Chess Association car stickers available for £7 to help raise funds and awareness.

(iii) River Management

A question was asked as to why the Chess does not have its riverbed dredged by heavy horses with chain harrows as a traditional system of river management. Paul explained that, whilst this technique would produce clean, loose gravel to encourage trout spawning, he would be concerned about its impact on other aspects of the river environment and that it is important to manage the river holistically.

(iv) Water Voles

An update was asked for on the current status of the Chess water vole population. Paul said that the next water vole survey was due to be conducted in June, but that he had regular sightings of water voles on a stretch of the river between Latimer and Chenies.

(v) Birds

A brief discussion was held on birds observed along the river, including kingfishers, green sandpipers, egrets, red kites and parakeets.

(vi) Communications

Paul reminded attendees that they could keep up to date with RCA news and activities on the RCA web site (www.riverchessassociation.org), the Facebook page and on Twitter (@RiverChess).

The meeting closed at 9.37 pm.