

# Walkern Road Bridge River Restoration Project

Initial stakeholder meetings: November 2020

## Introduction

We met with a range of stakeholders including residents and local authority representatives, to introduce the river restoration project at Walkern Road Bridge and answer any questions.

A summary of the minutes from these meetings and the Q&A session is documented below.

## Meeting summary

### 1. Introductions

### 2. Presentation explaining rationale behind the wider river restoration scheme and local Walkern Road Bridge project

#### Background

- The Walkern Road project is part of a larger river restoration programme: Revitalising Chalk Streams – a partnership programme with the Environment Agency, Affinity Water, and other water companies to improve the ecological health of chalk streams.
- Affinity are committed to move towards a more balanced water supply, reducing ground water abstraction, increasing surface water supply, and moving water from surplus to shortfall areas.
- Affinity Water’s river restoration programme focuses on chalk streams across the Chilterns and Hertfordshire.
- Working to reduce groundwater abstraction (e.g. reduced Whitehall abstraction from 18 mega litres/day to 2 mega litres/day).
- Catchment management work involves working with farmers to reduce the amount of soil ending up in rivers. Also working with the Environment Agency and other water companies to reduce urban runoff and increase water quality in the Beane.

#### River restoration projects

- Detailed upcoming and completed river restoration projects across the Chilterns and Hertfordshire, with further details provided on the Woodhall Phase 1 and 2 projects.
- Water Framework Directive Status of the River Beane is poor and so more work is needed to restore this chalk stream.

#### Walkern Road Bridge

- The concrete lip of the weir under the grade II listed bridge is a barrier to fish passage
- Project objectives: to improve fish passage, reinstate geomorphological processes, localised bank repairs, scope additional up and down stream future works.
- The future works include looking at a section of the Beane downstream of Walkern Road Bridge next to the old mill. Here gabion baskets are present in the river and are restricting the flow. Jacobs are investigating who completed this previous work on the river to install the gabion baskets. No one in the meeting was aware of who installed these.
- Review of project timeline, which includes a town hall session on 19<sup>th</sup> November presenting the options and asking attendees for feedback. Invites to the town hall session went out on 11<sup>th</sup> November. Further opportunities for meetings with stakeholders in November, December 2020, and March 2021.

### 3. Question and answer session

- **Do you have any initial thoughts on how you plan to restore this section of river?**

We are currently looking at the potential options to restore the river and will be presenting these options in the town hall session on 19<sup>th</sup> November. The Grade II listing on the bridge may impact which option we can take forwards.

- **Is it just the area around the Walkern Road Bridge that you are focusing on?**

Yes, this is our focus at the moment. We are also looking at future works including a section of the Beane downstream of Walkern Road Bridge next to the old mill where the current weir structure is restricting the flow.

- **There are not any fish in the river at present. Are you planning to introduce trout and grayling to this section of river?**

Our ambition is to get Brown Trout and Grayling back into the river. We are hoping that a combination of factors will contribute to this including: reducing agricultural runoff and pollution from surface water into the river. We need to increase the ecological health of the river before plant and invertebrate's species increase to a level which will support brown trout.

- **There are non-native American Crayfish in the river. Will you tackle this?**

As part of our biodiversity programme we are looking at managing non-native species. We look to work with the River Beane Restoration Association to tackle non-native species in the river.

- **You said the Beane is of poor health, and that pollutant levels are high. Where do these pollutants come from?**

Not far from Walkern Road Bridge the Stevenage Brook joins the River Beane. The Brook takes the urban runoff from Stevenage, which contains diffuse pollutants or contaminants from roads and paved areas. The River Beane is surrounded by agricultural areas and so takes the runoff from the land. You may have noticed that after heavy rainfall the river goes brown due to soil being washed into the river. We are working with farmers to reduce run off, encouraging planting of winter crops to reduce the amount of sediment and/or pesticides ending up in the river.

- **The River Beane at Walkern Road Bridge is dry. I have seen photos of children playing in the river years ago. Will this recover now you have reduced ground water abstraction at Whitehall? Or is there another problem causing the river to be dry from Aston to Walkern? Are you looking to improve the flow in the river?**

The largest single abstraction reduction at Whitehall pumping station (reduced by 16 mega litres / day) has not led to the level of recovery that we had hoped to see.

Our hydrogeology colleagues presented to the RBRA on the interaction between the aquifer and the Beane, and how the impermeable layer between the two may be the reason why the levels in the Beane have not recovered as quickly as we hoped. Further work is on-going to improve our understanding of the relationship between the groundwater chalk and river flows.

Groundwater abstraction review for Public Water Supply is only part of the answer to improving the health and flow of chalk rivers which is why we are carrying out river restoration and wider catchment level interventions.

We are supporting the reduction in abstraction with other activities to promote stable flows throughout the year. We are looking at the wider river catchment area and reducing the flow in the higher reaches, so you do not get spikes in river levels after heavy rainfall.

For more information on what we are doing in our supply area, please see our Water Resource Management Plan:  
[https://www.affinitywater.co.uk/docs/Affinity\\_Water\\_Final\\_WRMP19\\_April\\_2020.pdf](https://www.affinitywater.co.uk/docs/Affinity_Water_Final_WRMP19_April_2020.pdf)

- **After heavy rainfall, the river level spikes very quickly. Will you be doing anything to address this?**

There are two approaches to this, keeping water in the catchment and slowing the flow down. These could include natural approaches to flood risk management upstream, including in channel planting, to slow the flow. With all of our projects we use modelling to look at ways to reduce flood risk.

- **Have you engaged with the River Beane Restoration Association?**

Yes. They accepted the invite to the introductory meeting. We will contact them after this meeting and forward on the minutes.

David Watts will also be attending the RBRA's annual meeting on 10<sup>th</sup> November.

- **Is a 2-month construction programme ambitious for the Walkern Road project?**

We are not planning to do works to the bridge itself and so may not need planning permission, subject to the outcome of the optioneering process.

We are already talking to the Environment Agency about the project, and so this early engagement will help with this process.

- **Will the works at Walkern Road cause any traffic disruption?**

We will work to minimise any disruption to traffic flows. We are looking into options for hosting our equipment and staff off the roadside. We may be able to utilise adjacent fields as a site compound and access the river via this site.

We will liaise with the Parish Council regarding the works.

- **Can the water from Whitehall be put back into the River Beane?**

We are working towards a long-term plan of balancing ground water and surface water abstraction.

We are aware that used water is treated and not put back to where it was abstracted from, and so treated water is being moved downstream. We are looking into ways to improve the water cycle with other water companies, Anglian and Thames Water.

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- **When will the Whitehall Farm project take place?**

This project will be split into two stages. 1. The in channel upstream improvements in early 2021, and 2. Work on the ford will be picked up in 18 months' time, in 2022.

- **There is listed parkland at the Woodhall Estate. How did you manage to do the works there given the heritage constraints?**

At Woodhall we made sure the broadwater was maintained at the current level. We installed sluice boards upstream to maintain the flows. We did not remove the horseshoe weir, and this is still a feature of the parkland.

There were many factors to balance and consider, such as land use and how subsidies and stewardship schemes impact on land use.

- **Would diverting the flow of the weir at Woodhall have an adverse impact on flood risk?**

When developing a project, we carry out hydraulic modelling to check the project will not increase flood risk. We look at how we can reduce flood risk as an additional benefit and designing in features to reduce flood risk.

- **Are you working on another project which involves removing a weir from under a bridge?**

Yes, this is the Water End Road bridge on the River Gade.

The upstream water levels have dropped here recently. Some alterations have been made to this section of river recently and we are investigating who is responsible.

We are looking to progress with our river restoration project in this area and deliver next summer 2021.

#### **4. AOB**

- We have sent out the invite to the optioneering town hall (19<sup>th</sup> November) following these initial stakeholder meetings.
- Minutes and slides will be circulated following the meeting.