# Water Water Everywhere Conference

## 12th July 2023

**John Bolton - Anglian Water**
**Water Resources WINEP Programme Manager**

Utility of the year

Responsible business of the year

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# Contents

- Overview of the Anglian Water WINEP (Water Industry National Environment Programme) 2020 - 2025
- Plans for the Broughton Brook
- Long term plans and ambitions

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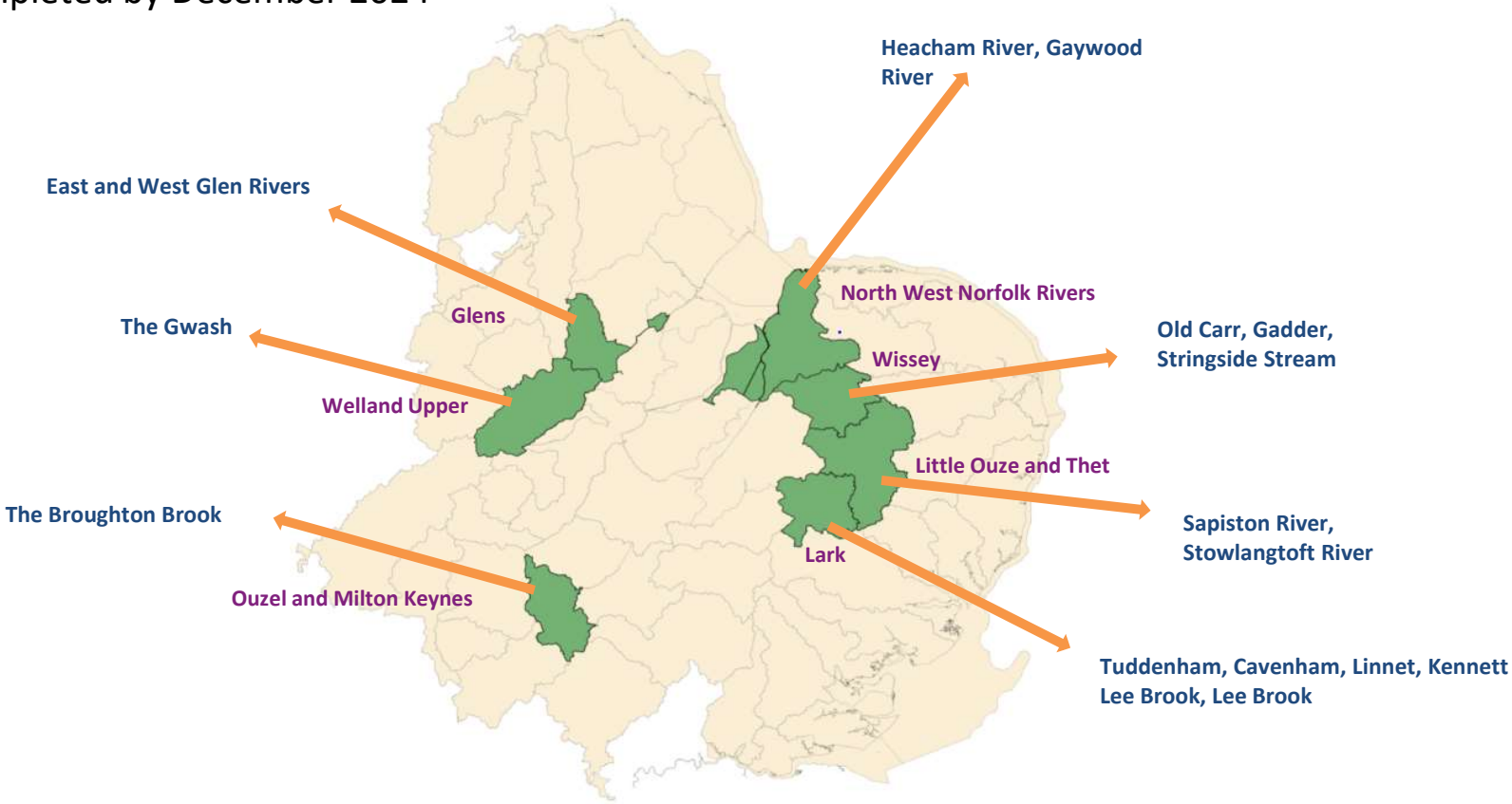
# WINEP (Water Industry National Environment Programme) Overview

- 2020 – 2025 will see Anglian Water's largest ever commitment to environmental improvement
- £800 million investment to protect and enhance the region's environment
- 200 water and 1500 water recycling obligations
- Works include water quality improvements, river restoration, river support, eel protection schemes and abstraction reductions

Ingoldisthorpe Wetland Creation

# Anglian Water - AMP7 WINEP River Restoration

- 16 WINEP River Restoration schemes across 6 Operational Catchments
- Circa £6million investment aimed at restoring unique river habitats and improving biodiversity
- To be completed by December 2024

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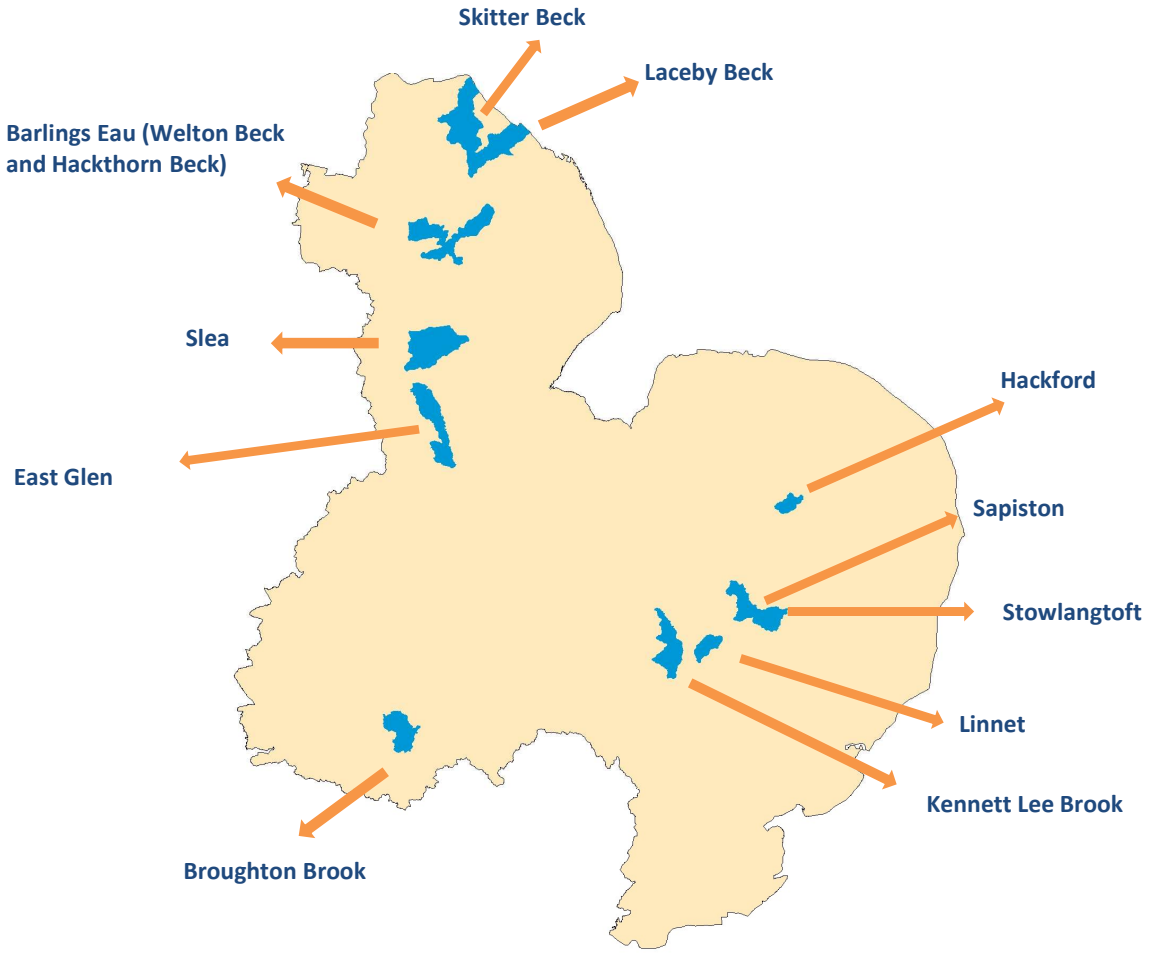
# Anglian Water - AMP7 WINEP River Support

- 12 WINEP River Support Schemes
- Aim is to support river flow during low flow periods in order to meet flow targets.
- To be completed by December 2024

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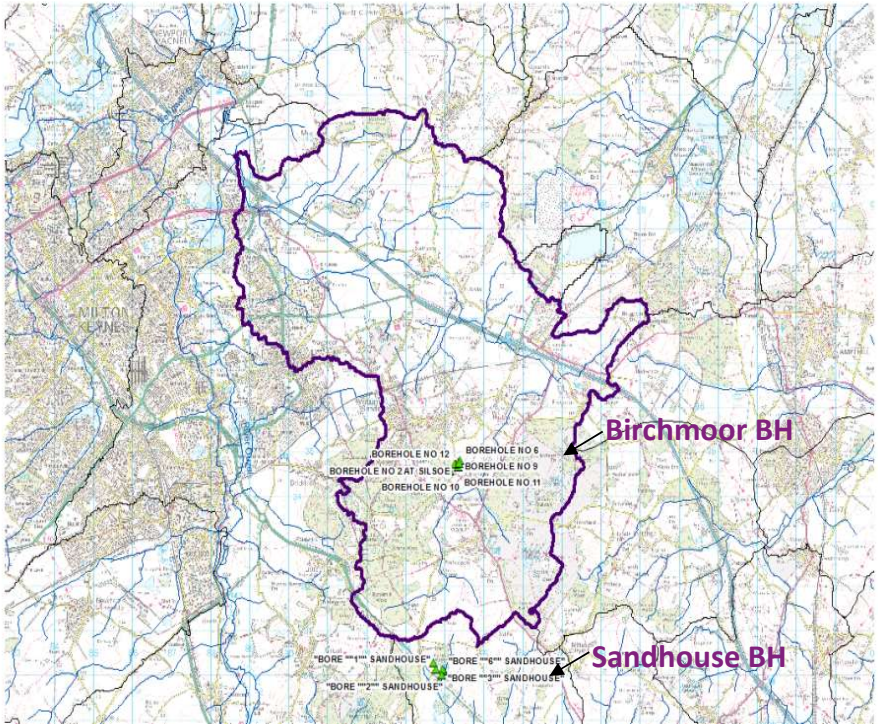
# Broughton Brook – Investigation and Options Appraisal

- Investigation and options appraisals were carried out in 2017/2018 on a number of waterbodies which were identified by the Environment Agency as being at risk from abstraction pressure on flow.
- The aim of the investigation was to understand the impact of abstraction on flow.
- The options appraisal then identified mitigation options which meet the relevant criteria for the waterbody and are cost beneficial.
- Anglian Water engaged the services of a consultant to carry out groundwater modelling focusing on the Broughton Brook waterbody.
- A comprehensive comparison of different abstraction scenarios was developed taking into account abstraction rates from sources at Birchmoor and Sandhouse.
- The model then simulated river flows based on these abstraction scenarios and compared to flow targets.

## Location Map

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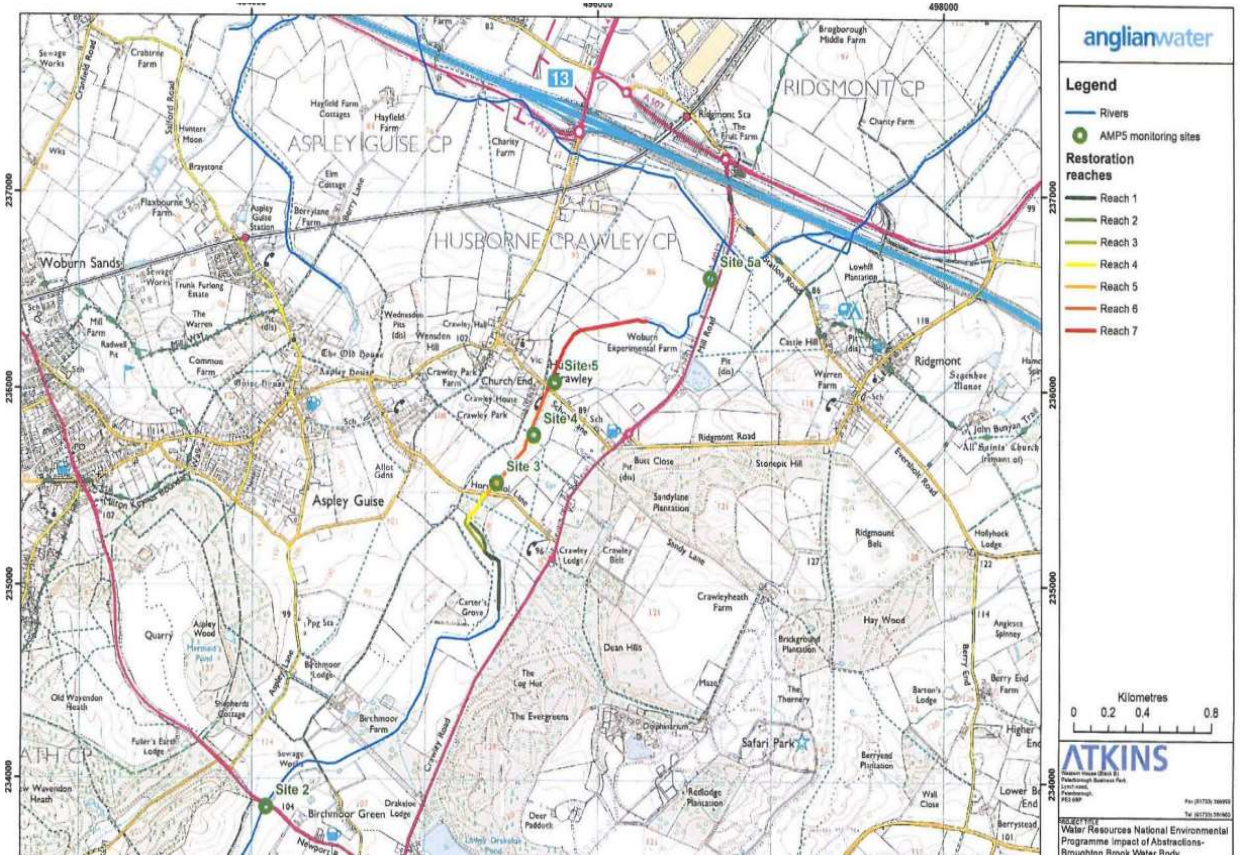
# Broughton Brook – Investigation and Options Appraisal

- Once the modelling was complete an options appraisal was carried out
- An initial long list of options was produced and consulted on with Anglian Water and the EA.
- Feasible options were taken forward and a short list of options was produced.
- Short listed options were then further developed and refined using a multi criteria assessment (MCA) tool which assessed options in terms of:
  - Feasibility and Risk
  - Performance against WFD objectives
  - Wider Socio Environmental considerations
- Further river support modelling was then carried out along with a site based assessment of potential river restoration options
- The final option was then agreed with the Environment Agency

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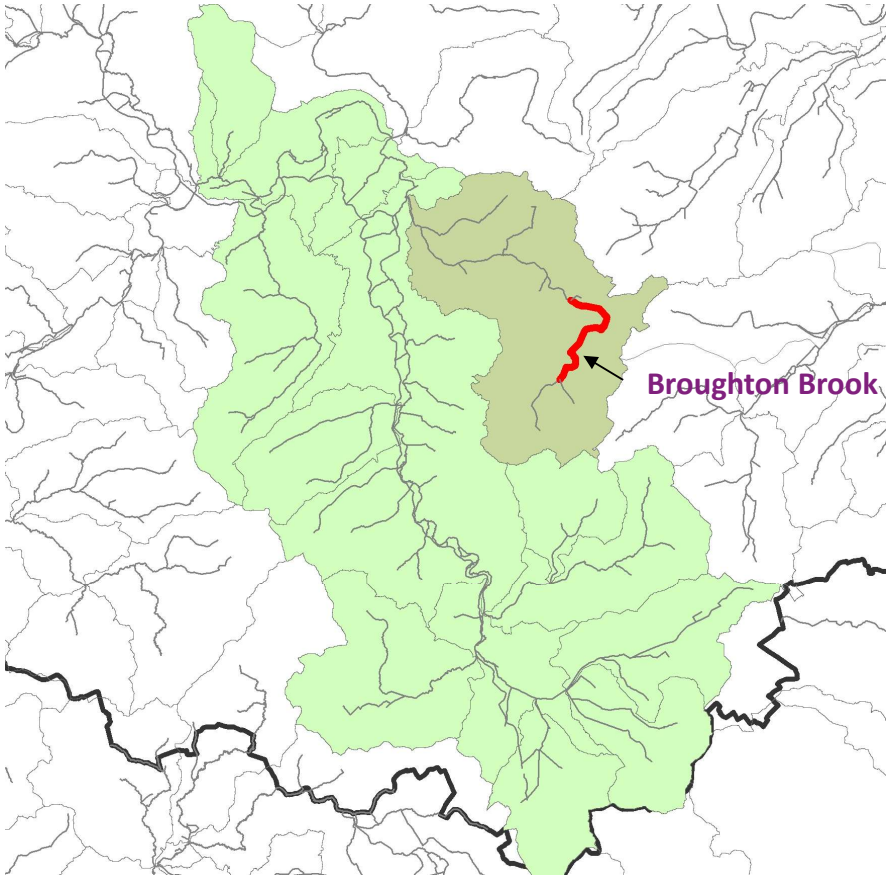
# Broughton Brook – WINEP Obligations




To further support flows in the Broughton Brook by 2025:

- Implement river restoration/enhancement works on the Broughton Brook by December 2024
- Implement a river support scheme for the Broughton Brook by December 2024
- Implement abstraction licence reductions by March 2025

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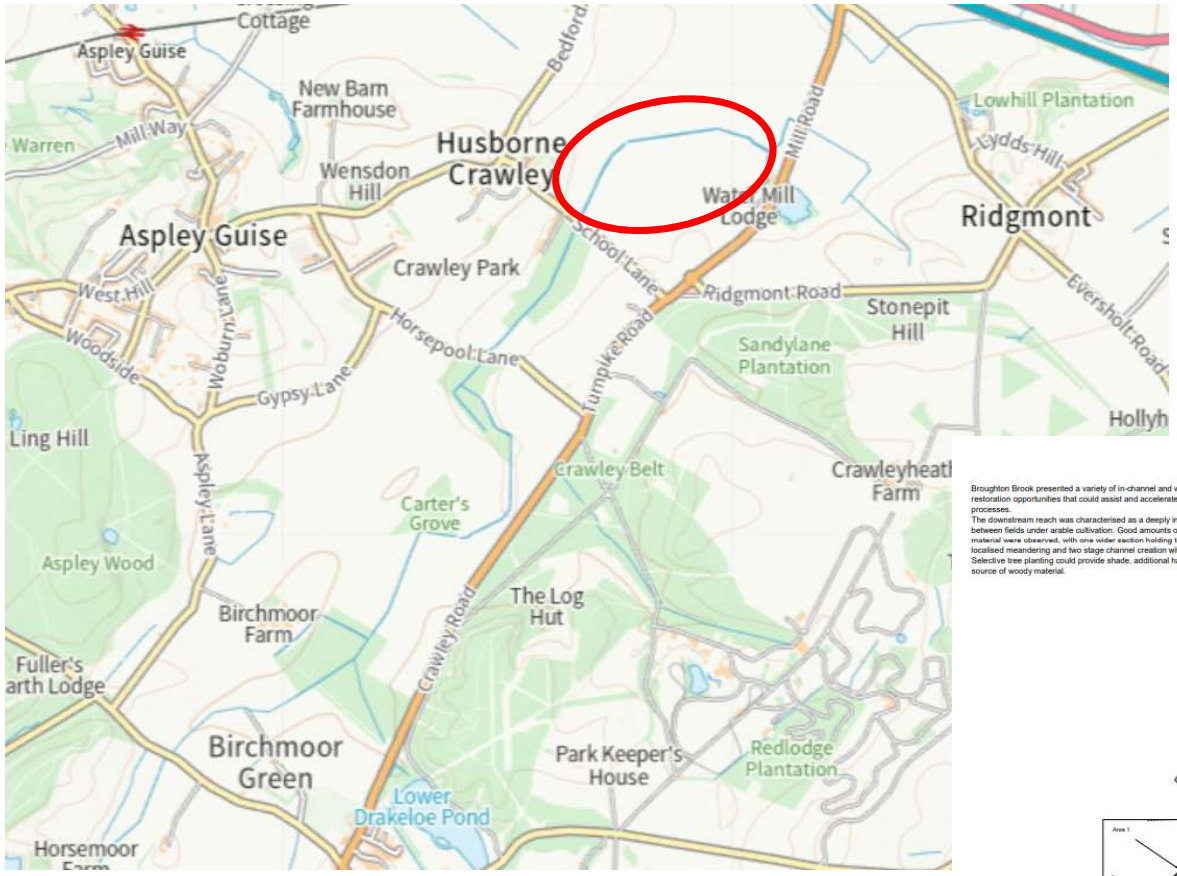
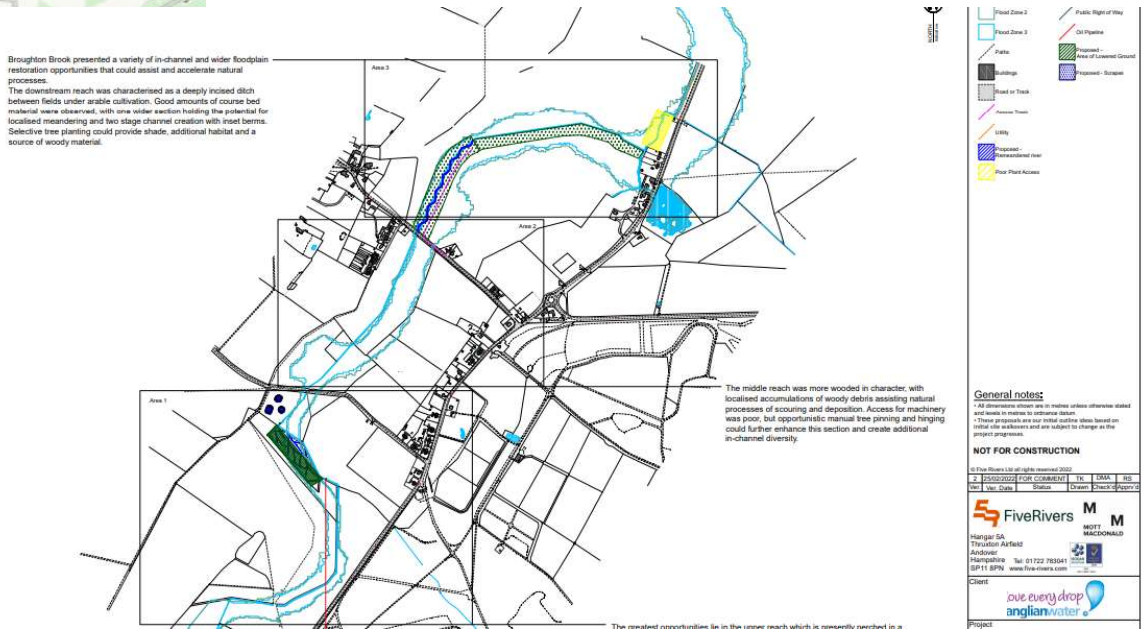
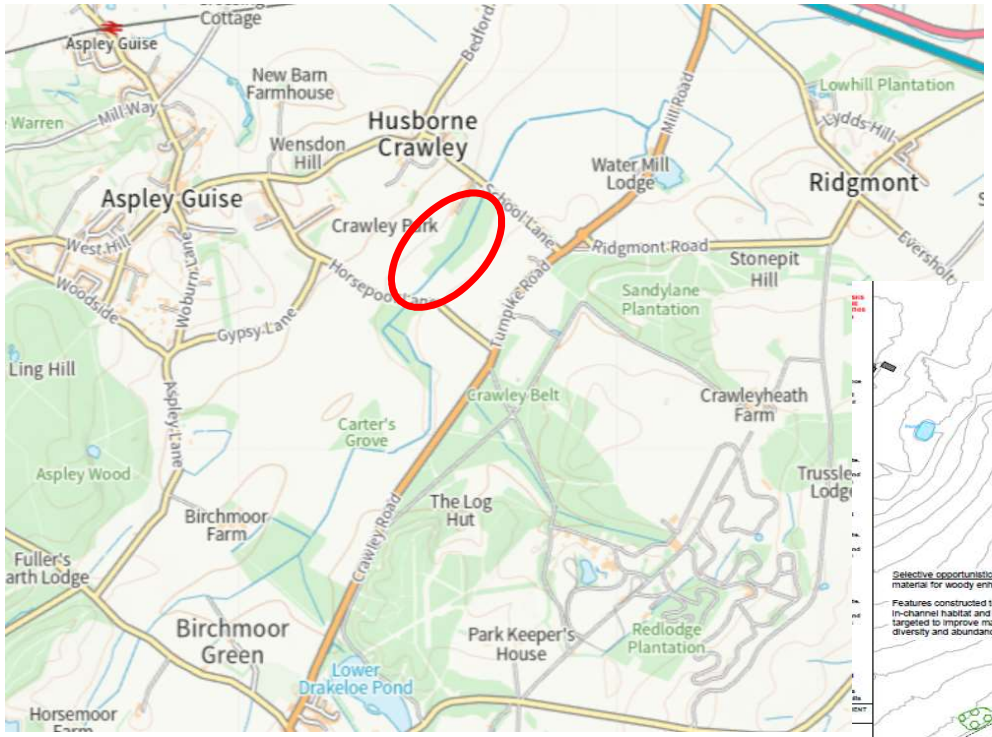
# Broughton Brook – Planned River Restoration works – D/S of School Lane



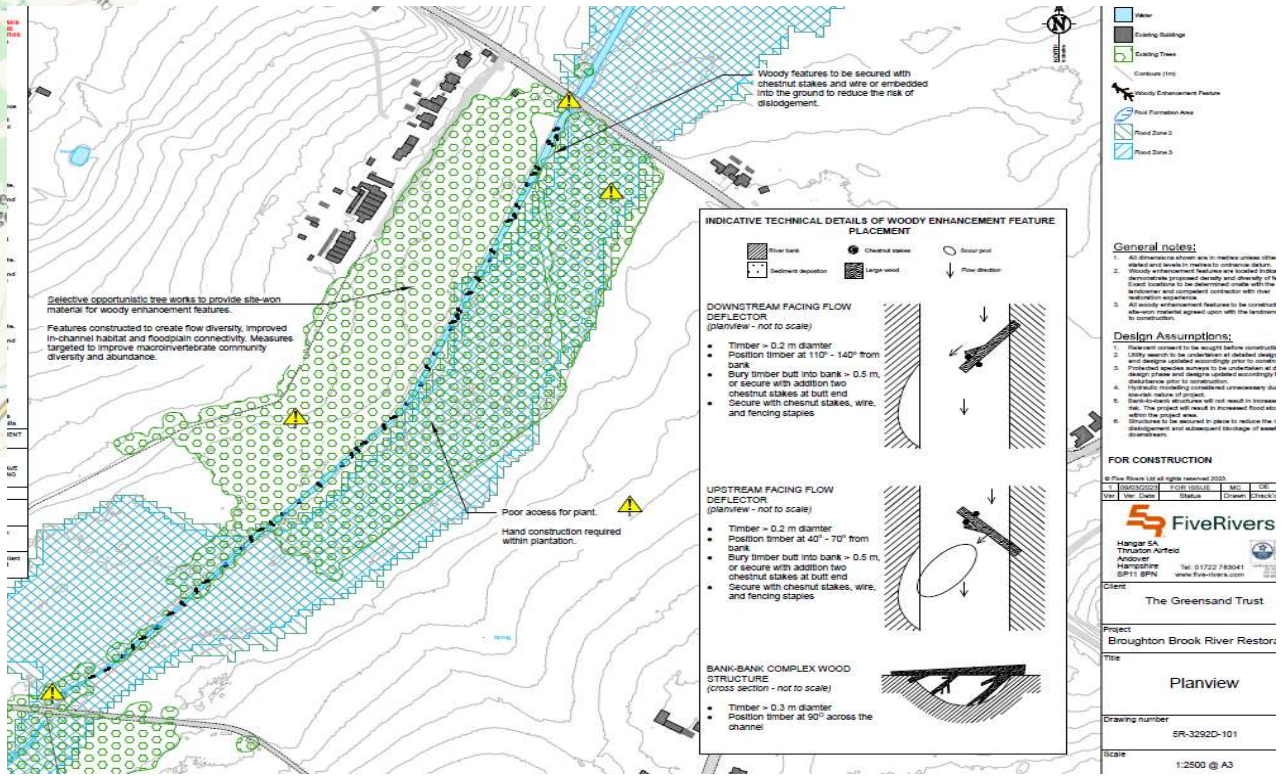

- River Restoration downstream of School Lane.
- Initial site walkover and concept drawings produced.
- Further engagement, outline and detailed designs to follow
- Work to be carried out in 2024



# Broughton Brook – Planned River Restoration works – U/S of School Lane

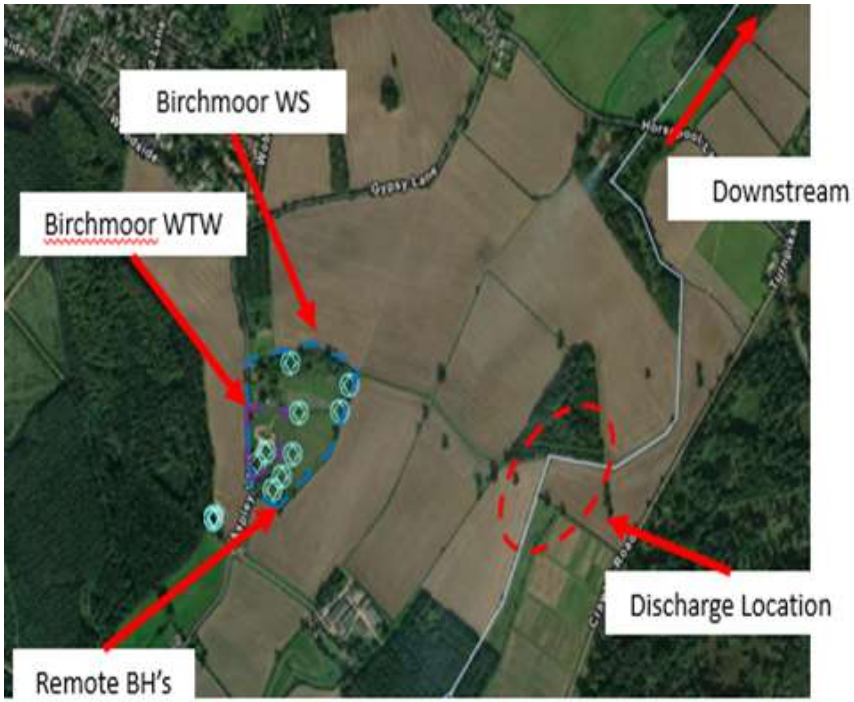


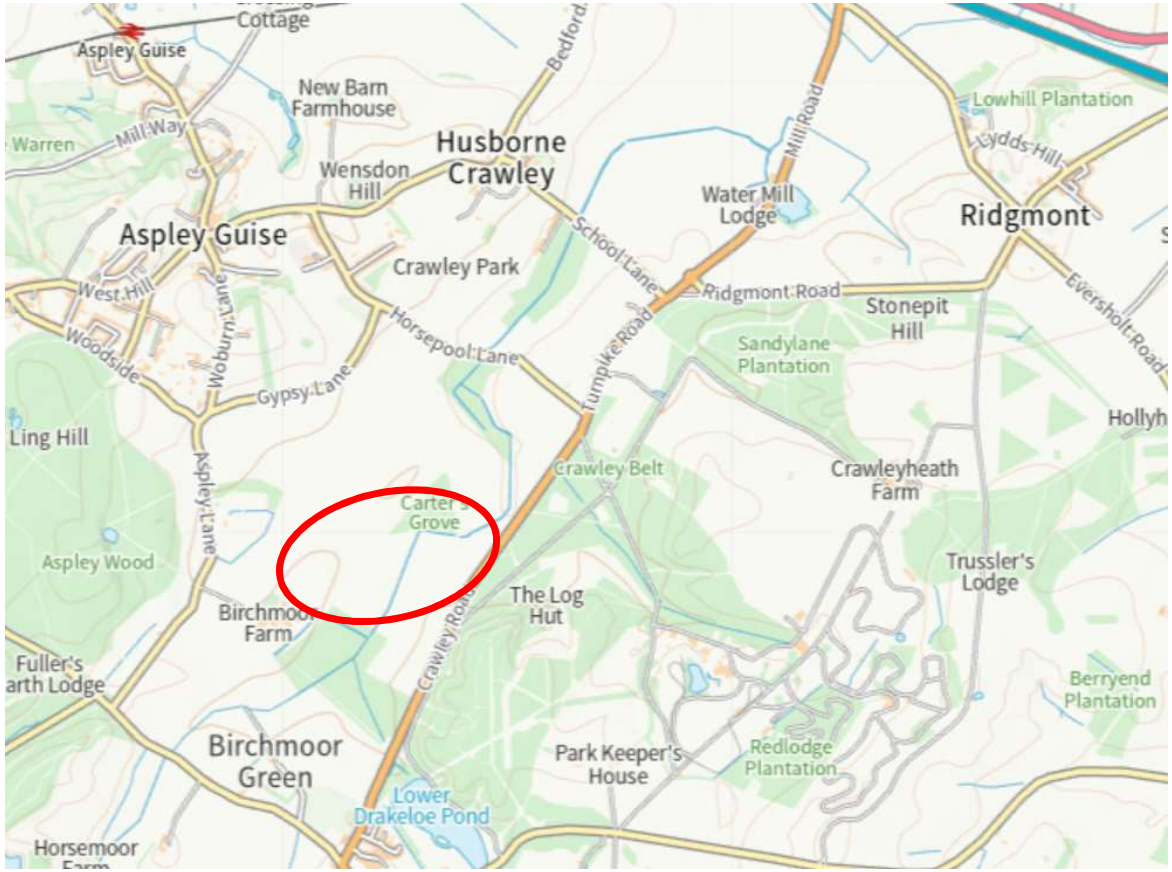

- Initial design work funded by the Upper and Bedford Ouse CP
- Working with Bedford Estates as the major landowner
- Anticipated delivery in 2023/24



# Broughton Brook – Planned River Support works

- River support discharge from Birchmoor Groundwater Abstraction Borehole
- River support requirement is 1.5Ml/d during low flow conditions
- Work to be carried out in 2023/2024

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# Our long-term ambitions for Water Resources and Rivers

As laid out in our Strategic Direction Statement 2020-2045

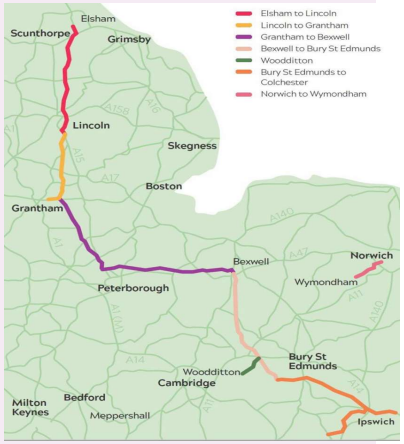
**Make the East of England resilient to the risks of drought and flooding**

## Water resources Management plan

- Sets out how we will manage water supplies against all challenges over the next 25 years.
- Published every 5 years. We are currently finalising our draft WRMP24, the report will be published in 2025.
- The draft strategy focusses on demand management (through smart metering), new reservoirs and utilising other sources of water.

## Strategic Pipeline Alliance

- We are building hundreds of kilometres of pipes to move water from the wettest parts of our region to the driest.
- This was a key part of our last WRMP.
- It is one of Europe's biggest environmental projects and the largest infrastructure project Anglian Water has ever undertaken.




## Reservoirs

- We are building two new reservoirs, in the Fens and Lincolnshire, that will supply water to around 625,000 homes.
- We carried out public consultations last year and are now reviewing our proposals based on the feedback we received.

## Demand management

- We have developed an ambitious, integrated, cost beneficial demand management strategy which will be based upon 3 broad groups of activities:

1) Smart metering – for leakage and consumption
2) Leakage reduction – already sector leading, but looking to innovate further to reduce leaks in our distribution system and supply pipes
3) Water efficiency measures – promoting careful use of water by both our domestic and commercial customers.

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# Our long-term ambitions for Water Resources and Rivers

As laid out in our Strategic Direction Statement 2020-2045

**Work with others to achieve significant improvement in ecological quality across our catchments**

**Get River Positive**

- Launched last year with Severn Trent.
- We are striving to do no harm to UK rivers and do everything we can to ensure they can thrive, to deliver this we have 5 commitments:

- Collaborative working to deliver projects, such as 26 new treatment wetlands and bathing water status applications.

**Water Industry National Environment Programme**

- Set of actions requested by the Environment Agency to be completed between 2020-2025 to enhance the environment and restore river water quality.
- Largest investment of any water company - £800 million in 1200 projects.
- Partnership working to deliver (rivers trusts, land-owners and environmental groups).
- River restoration is one way that we are delivering WINEP.

**Abstraction reductions**

- We are working with the Environment Agency to reduce our abstraction licences year-on-year. We are the only water company to voluntarily cap our licences by 2025.
- In 2022 alone we invested £68.1 million in capital schemes to reduce the amount of water we need to abstract.

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# Thank you for listening



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