

Working with Producers and Landlords

AHDB Pork Event – Swaffham 1/07/19



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- Offering trusted and confidential farm advice in the Broadland, Cam and Ely Ouse (CamEO), North Norfolk and North West Norfolk catchments
- Focus is on Soil and Water management to improve the water environment
- Using flexible approach with range of different tools as every farm is different
- Bespoke grants and solutions to improve farm businesses and the water environment
- Promoting agri-environment schemes and partner initiatives.
- Funding through WWF and Coca Cola Freshwater's Partnership, Tesco, Asda and the Courtauld 2025 Initiative



WORKING
TOGETHER
TO CONSERVE
AND PROTECT
ENGLISH
LANDSCAPES



THE
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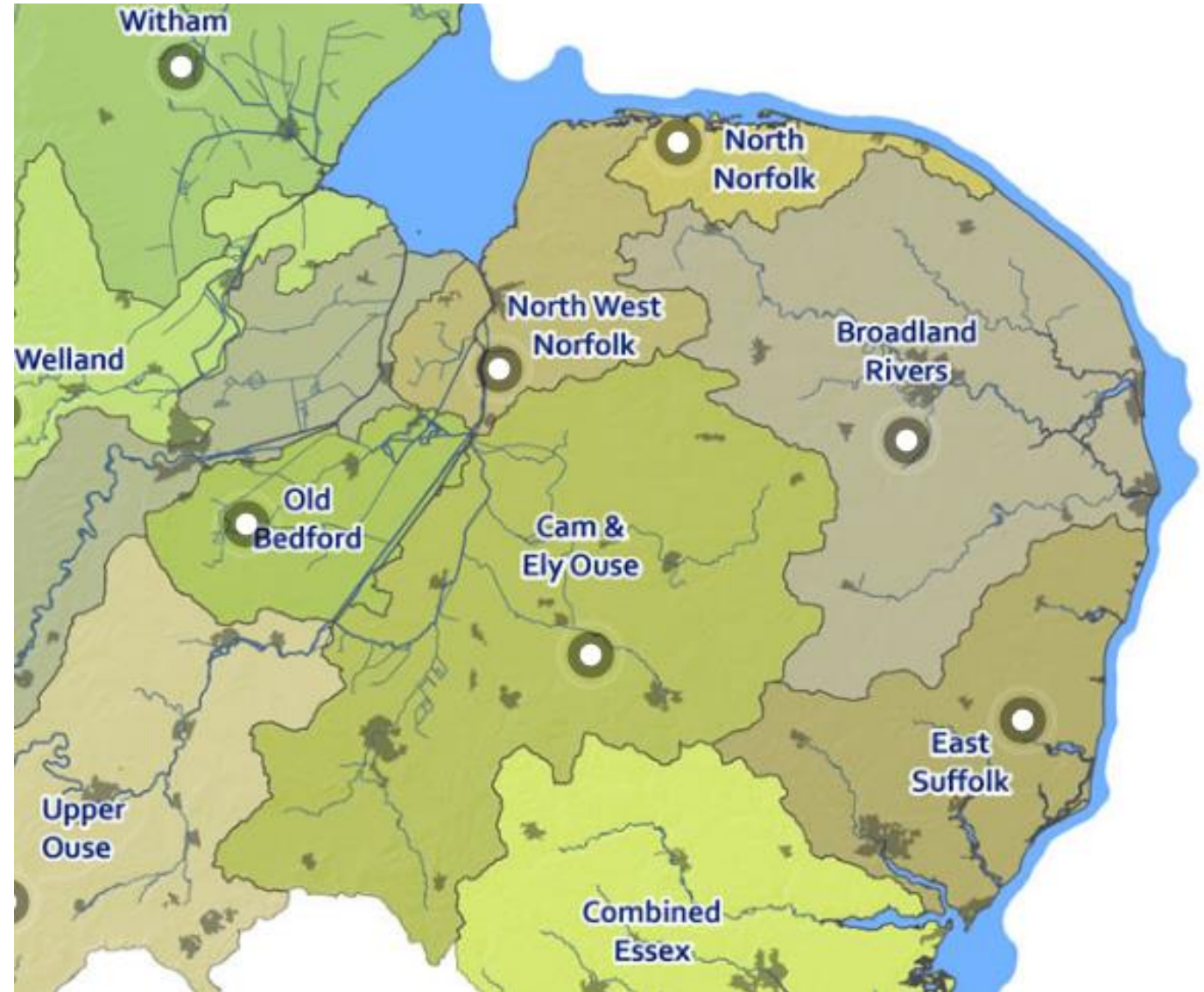
Broadland
Catchment
Partnership



Water Sensitive Farming



Collaboration between organisations at a water catchment level to maximise the natural value of the environment



East Anglia's Rare and Special Chalk Streams



- 58 Chalk Streams are found in East Anglia – around a quarter of the world's total amount
- Fed from the Chalk aquifer, delivering clear and clean water
- Key corridors for wildlife and people
- Play a key role in flood management, water quality and quantity, drinking water, biodiversity, communities, leisure

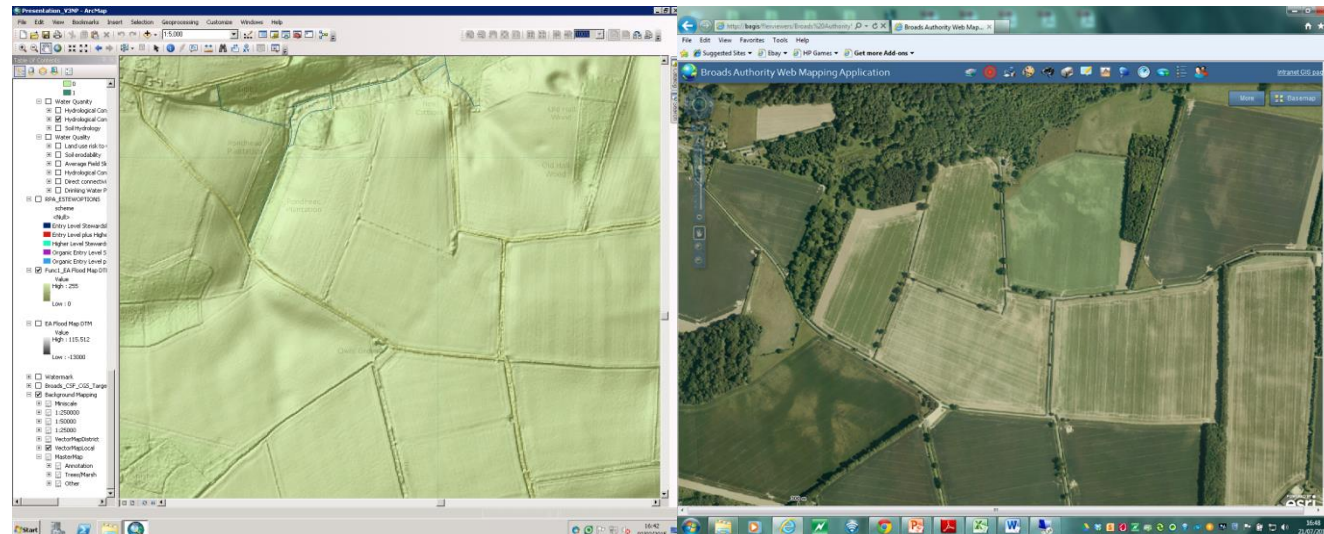
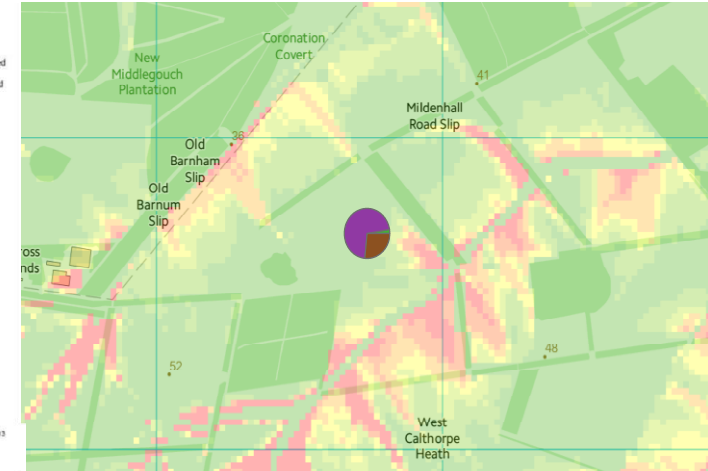
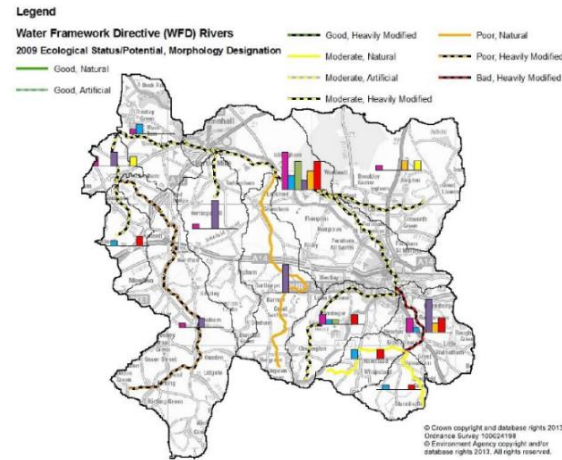
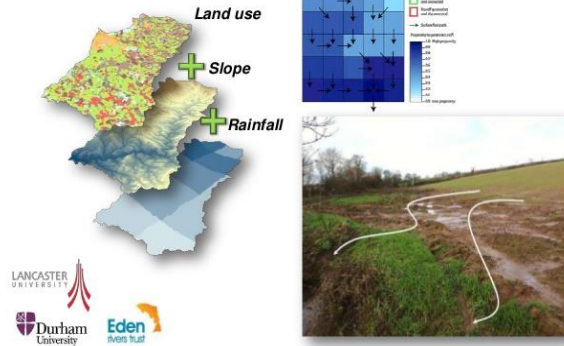


Localised flooding and diffuse pollution



Using innovation and mapping to focus priority areas

SCIMAP: A diffuse pollution risk modelling framework



Examples of Silt Trap Interventions





Wayland Farms – Grass Ley after Maize



20% Strong Creeping Red Fescue, 15% Intermediate Perennial Ryegrass (T), 28%,
Late Perennial Ryegrass, 37% Late Perennial Ryegrass (T)



Producer and Landlord working together Wayland Farms



LSB Pigs – Working with the Rotation



- AB15 Two Year Sown Legume Fallow
- Stewardship and EFA Catch Crops and Cover Crops options
- Enhanced Buffers next to Stewardship providing extra habitat
- Cattle in the rotation – Haylage and Silage a possibility

Soil Health and Management

- Improving Infiltration
- Increasing Water Holding Capacity
- Green Covers
- Reducing Trafficking and Cultivations



Engagement with different sectors and the community

Knowledge Exchange, Specialist one to one visits and Training Events for landowners, farmers, land agents and the wider community have led to positive discussions



1. Introduction

Run-off had been occurring from damaged road verges, eroded field entrances and agricultural topsoil from a sugar beet pad, at the Salle Estate located in the River Wensum catchment (Figure 1). The suspended sediment was running along a metalled road and flowing into the Blackwater Drain (Figure 2), which feeds the River Wensum and ultimately the Broads National Park.

The farmer had been aware of run-off issues occurring, and had already carried out important steps to trap the sediment and associated phosphorus and nitrogen on the farmland e.g. hedge improvement, rainwater harvesting and gateway relocation. However, since run-off had continued to occur, it was clear that intervention on a larger scale was required to intercept and reduce suspended sediment inputs to surface waters.

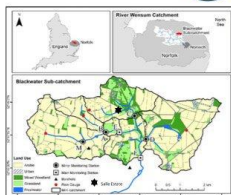


Figure 1. River Wensum catchment and Salle Estate location.

Salle Estate, Norfolk
Size: 2,000 hectares
Crops: Combination of winter and spring-sown cereals, oilseed rape, sugar beet and peas/beans grown on a seven-year rotation
Catchment: Wensum
Sub-catchment: Blackwater
Topography: Some long, gentle slopes
Soil: Varies from light sandy loam to boulder clay

The Wensum catchment and Blackwater sub-catchment
The River Wensum is a lowland chalk-fed river in Norfolk, which has been designated as a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). The river provides a habitat for rare and diverse wildlife such as brook lamprey, brown trout, whorl snail and white-clawed crayfish. In total, the Wensum drains a catchment area of 593km².

The organic carbon content of arable field soils in the Blackwater, a 20km² agricultural sub-catchment of the Wensum, is very low (median 1.0% soil organic carbon (SOC) content, Rowles et al., 2013). Therefore, the stability of the soil structure is impaired, which can result in a high level of soil erosion and a susceptibility to weathering.

Additionally, the wider catchment has been designated as a Water Sequestration Zone (WSZ) due to the importance of underlying aquifers for supplying drinking water to local communities (Collins et al., 2013). As a result of these circumstances, reducing diffuse agricultural pollution is vital within this catchment.



Figure 2. Blackwater Drain.



Courtauld Commitment 2025

Cutting the “cost” of food and drink. An ambitious voluntary agreement bringing together organisations across the food system to make food & drink production and **consumption more sustainable**.

A ten-year commitment to identify priorities, develop solutions and implement changes to cut the carbon, water and waste associated with food & drink by at least one-fifth in 10 years.

The Water Ambition aims to achieve the following by 2025:

1. Business signatories are monitoring water use in their own operations and have improved efficiency.
2. Business signatories are participating in collective action to improve the quality and availability of water in key sourcing areas.

The Projects : selection criteria

- Stressed & vulnerable catchments
- Key sourcing areas
- Mature partnerships able to address known issues
- Align with existing initiatives
- Build on best practice
- Demonstrate benefits of collective action



Broadland Rivers and Cam and Ely Ouse (CamEO) catchments Courtauld 2025 Attendees





Courtauld Actions 2025

- Form a **pilot long-term rotation integration across sectors and suppliers**. This will be based on shared objectives such as enhancing soil health, alongside short-term needs to grow crops.
- Provide **training opportunities** for retailer procurement teams and directors through farm site visits.
- Investigate ways in which we can **reach out and engage with landlords** about the pitfalls of short-term tenancies, and how engagement between the landlord and tenant can be increased.
- Publish **risk and opportunity maps for Broadland and CamEO catchments** (on respective websites). This will help identify risk areas and support farm business and infrastructure plans.
- Provide **best practice advice** for agri-students, agronomists, land agents, landlords and contractors.

Enhancing Buffers

- Where you have a buffer or resource protection strip, adding Wildflowers or birdfood will provide multi benefits to many species



Agroforestry



Lots of potential benefits from shading for pigs, breaking pathways of runoff, taking up nutrients and providing habitat and soil improvements

Monitoring and Evaluation

- Soil Mineral Nitrogen Testing
- Worm Counts and Soil VESS
- Organic Matter Testing
- Infiltration Tests
- Water Quality Testing
- Walkovers and local knowledge
- Farm Biodiversity



Grant Options Available

- Silt Traps, Wetlands, Cross drains and moving High Risk Gateways
- Cover Crop and Grass ley Trials
- Undersowing Maize Trials – Before Pigs
- Fencing off Watercourses
- Planting Trees and Hedges for Water Quality



Opportunities available this year

- Free Visits and Grants Options
- Engagement with Landlords/Land Agents/Agronomists
- Courtauld 2025 work with mixed rotations
- Working with the AD sector to look at grass in the rotation
- Creating Case Studies
- ELMS Trials and engagement with Defra



Thank you

Any Questions?

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