

Land Management Updates

Farm Advisor updates, news & events from the Wissey, Lark, Little Ouse & Thet

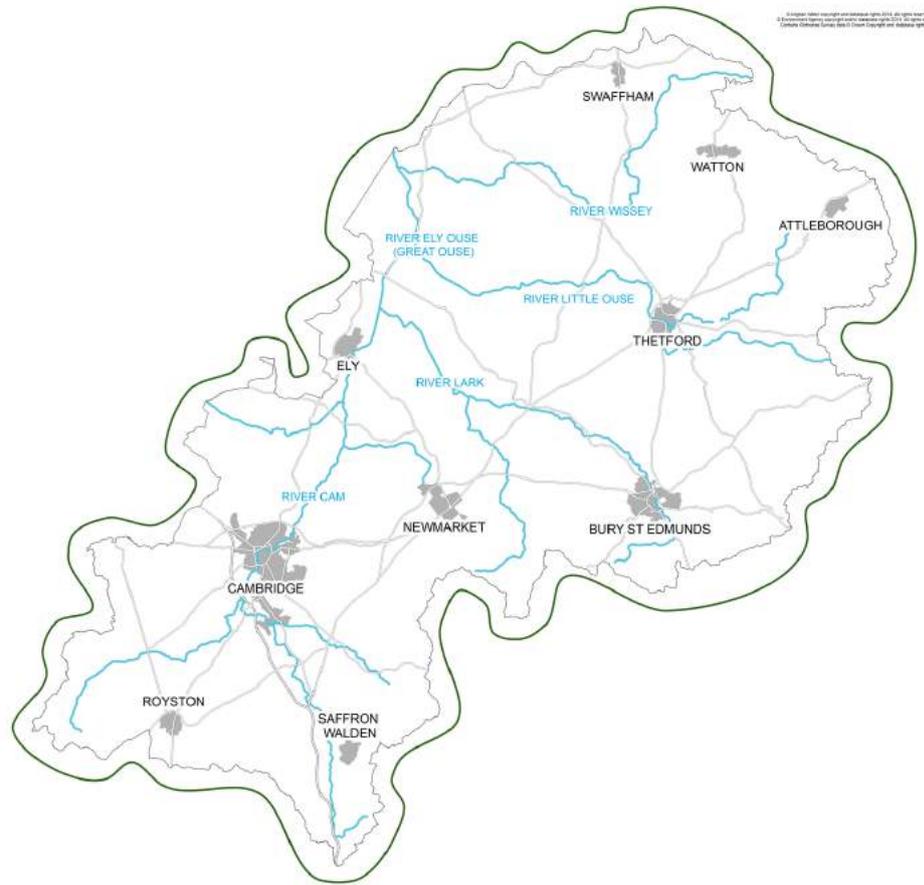


Who are we?

We are a group of organisations from the Wissey, Lark and Little Ouse & Thet sub-catchment partnerships that are particularly interested in improving water quality and increasing water availability. By working collaboratively, we seek to maximise our impact.

Key issues facing these sub-catchments include:

- * Excess siltation – from bank erosion, cattle poaching, road verges and land run-off etc.
- * Excess phosphate loading.
- * Channel modifications and reduced connectivity.
- * Over-abstraction of water.
- * High nitrate in groundwater.



Updates

1) Strategy update for the Wissey Steering Group

The wider steering group for the Wissey partnership met in June to discuss the priorities and opportunities in both the short (1-2 year) and medium term (5 year). Across the catchment, waterbodies were prioritised in the following way:

1-2yr priorities: Immediate action – Stringside Stream, Old Carr Stream and Upper Wissey

These areas all require similar interventions: nutrient reduction, landowner engagement, habitat enhancement and the creation of in-stream features to increase flows.

- With support from the EA, Norfolk Rivers Trust is working with partners this year to develop projects on these waterbodies. If you have any project ideas in these locations, contact the partnership team - cameo@anglianwater.co.uk
- Agri-advice will continue across the catchment in the immediate term, with actions and events coordinated through the Wissey Agri-Advice Group.

2-5yr priorities: Partnership engagement – Gadder, Watton Brook and Thompson Stream

- National Trust is leading on river restoration on the Gadder, whilst Norfolk Wildlife Trust will be delivering a WEG (Water Environment Grant) project to remove water soldier from Thompson Water. Anglian Water is currently developing a project on the Watton Brook to reduce the levels of nutrient entering the Brook, following EA-led work to tackle misconnections. There are further opportunities on the Watton Brook to reduce flooding. More generally, across the catchment, projects will come out of the Brecks Fen Edge and Rivers Landscape Partnership for partners to engage with.

5yr+ priorities: No immediate action – West Tofts and Lower Wissey

For more info on the objectives, priorities and actions, read the wider **CamEO Catchment Partnership Action Plan**.

EVENTS

2) An update from CSF

A new on-farm soil health visit will soon be available to farmers in priority areas across the region. The visit will look at overall soil health by examining the quality of organic matter, conducting an earthworm count, and taking samples from within the field and from under hedge/buffer strips within the same field to compare how the cropping and management of the field has impacted soil health. Recommendations for improvement will be made where necessary.

To find out which farms are in priority areas for CSF, use **Magic Maps** and enter your location or postcode in the search box at the top of the page. The toolbar at the side can be expanded to view certain layers such as 'Countryside Stewardship (CS). Targeting and Scoring'. Once selected, this layer can be used to identify water quality priority areas for CS.

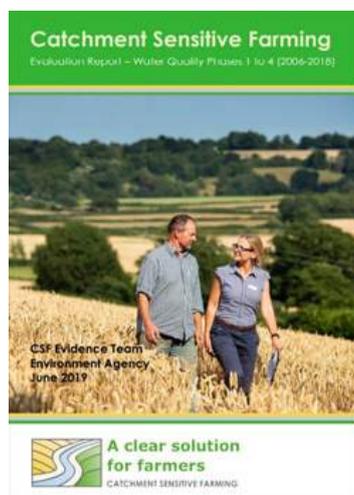
You can find out more information on the specific issues for your area/catchment by clicking on the little 'I' icon (on the top toolbar) and then clicking back on the map.



In other CSF news, there will be another 5 specialist visits available in the new year including: woodlands for water; air quality; nutrient management planning for livestock diets; and water resources, which will review abstraction requirements and advise on the use of water on-farm.

Find out who your local CSF officer is by clicking [here](#).

See how CSF is doing by viewing the **Catchment Sensitive Farming Evaluation Report – Water Quality**, covering phases 1 to 4 from (2006-2018).



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1) 6 Nov, REAP Conference 2019 – Innovating towards One Agriculture

The event will explore how agri-tech will enable farming to be part of the solution to grand challenges.

9.30am-5.30pm at Rowley Mile Conference Centre, Newmarket, Cambridgeshire, CB8 0TF. Book [here](#).

2) 7 Nov, Irrigation Workshop – principles, best practice and innovation in irrigation

The latest in best practice and agri- tech. 9am-1pm at The George Hotel, Swaffham, PE37 7LJ. Book [here](#).

3) 7 Nov, Agri-Tech in Action

The event will include an interactive workshop and field demos covering: Farming for the future with Vaderstad

seed eye; monitoring for livestock (including GPS); and crop nutrition without fungicide.

1pm-5.30pm at Easton & Otley College, Norwich, Norfolk NR9 5DX.

Book [here](#).

4) 7 Nov, Norfolk FWAG AGM and Farm Conservation Awards 2019

6pm-9pm at Easton College, Norwich, Norfolk, NR9 5DX. Book [here](#).

5) 14 Nov, Soils in Practice

Understanding the practical steps that can be taken to measure and promote soil management in a sustainable farm setting.

8.30am-4.30pm at Russell Smith Farms, College Farm, Duxford, CB22 4QF.

Book [here](#).

6) 15 Nov, Monitor Farm meeting – Soils and rooting

With a focus on biomass above ground, how much more can we learn about optimising rooting below ground? Hear the science behind the conversation in these important areas of soils and rooting.

9am-12.15pm at Duxford, Fowlmere Village Hall, Cambridgeshire, SG8 7RY. Book [here](#).

7) 2 Dec, Soil Health, No Till, Cover Cropping and Intercropping

A Championing the Farmed Environment (CFE) walk and talk.

10am-1pm at South Pickenham Estate Co Ltd, Home

Farm, South Pickenham, PE37 8DZ.

Book [here](#).

ADVISERS

Anglian Water

Rob Holland (Catchment Adviser)

rHolland2@anglianwater.co.uk / 07802856872

Focus: Working in Norfolk & Suffolk on pesticides, livestock and nutrients.

Fiona Wood (Catchment Adviser/Scientist)

fWood@anglianwater.co.uk / 07764164874

Focus: Working across the region on nutrients.

CLA

Rachel Brooks (East - Rural Adviser)

rachel.brooks@cla.org.uk / 01638 590429

Focus: Providing advice to CLA members on a range of rural issues including BPS, ELS/HLS, Countryside Stewardship and availability of grants.

Natural England

Chloe Gordon (CSFO for Wissey)

chloe.gordon@naturalengland.org.uk / 07788 345649

Focus: Providing Catchment Sensitive Farming (CSF) advice, training and grant support in the Wissey sub-catchment.

Environment Agency

Helen Blower (EA Wissey Catchment

Officer)helen.blower@environment-agency.gov.uk / 02030 255223

Focus: Improving rivers in the Wissey catchment - working with water companies, landowners and the agricultural industry, holding events, river restoration projects and improving water quality.

Norfolk FWAG

Charlie Ennals (Lower Wissey Facilitation Group

Coordinator) charlie@norfolkfwag.co.uk / 07557200212

Focus: Conservation advice, facilitation coordination and countryside stewardship.

Norfolk Rivers Trust

Ed Bramham-Jones (CamEO WSF)

ed@norfolkriverstrust.org / 07788377617

Focus: Water Sensitive Farming (WSF) advice on soil erosion & cultivation, with grants available for mitigation works such as silt traps.

Sam Hurst (CamEO WSF Adviser)

sam@norfolkriverstrust.org / 07944443652

Focus: Water Sensitive Farming (WSF) advice on soil erosion & cultivation, with grants available for mitigation works such as silt traps.

3) New tramline disruptor kit to trail for free

Studies have shown that compacted wheelings and tramlines can be a major pathway for soil and nutrient run-off from arable and vegetable fields, with as much as 80% of run-off originating from these compacted areas of land (Silgrim, 2013).

Through the **Water Sensitive Farming Initiative** (WSF), 3 types of tramline disruption equipment are available to trial in the Broadland, CamEO and Norfolk catchments for free –

with thanks to the Broads Authority for purchasing all of these:

- **Bye Engineering's Wonder Wheel** - for use in vegetable and potato fields
 - The machine has been used across the Broadland Rivers Catchment by several growers on potato fields across North and East Norfolk in the last two summers.
 - Leading tines generate a suitable route for wheeling water, as well as heaving the edge of the bed to increase water infiltration. Secondary tines generate free soil ready for moulding and the moulding wheels shape and consolidate the soil in the wheeling. The profiles generated are "heaps and hollows" which continuously catch and dam running water in small quantities.
 - The profile also directs the water from the centre of the wheeling's to the edges where it then infiltrates into the crop rooting zone.
 - With thanks to Tesco for funding the purchase of this kit.
- **The Creyke Wheel Track Combi** – for use in Cereals/Sugar Beet/Maize/Potatoes and Vegetables
 - The Wheel Track Roller reduces water run-off in crop tramlines by holding water in mini reservoirs. Infiltration takes place down drainage channels directed under the adjoining crop. The centre of the tramline remains compacted to maintain trafficability.
 - The machine is adaptable for operation in combinable crops (cereals) AND ridge / bed grown crops (potatoes / vegetables).
 - Has already been used near Thelveton in potato and cereal crops, where it delivered successful results through the wetter winter months on light soils prone to runoff.



Bye Engineering's Wonder Wheel



Creyke Wheel Track Combi

Catchment Contact - Anglian Water

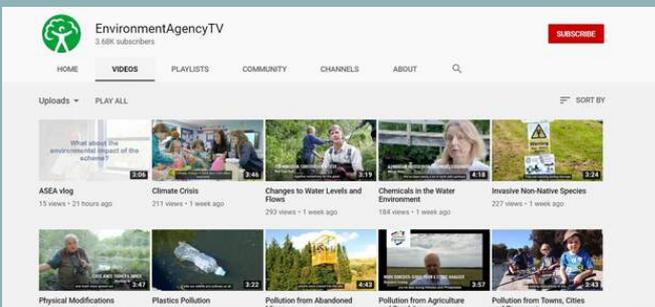
Martin Bowes (CaBA Project Manager)

mBowes@anglianwater.co.uk / 07725608593

Focus: Steering the CamEO Catchment Partnership.

Environment Agency TV

The Environment Agency has recently added a wide selection of films to their YouTube channel covering topics such as the climate crisis, changes to water levels and flow, chemicals in the water environment, invasive non-native species, physical modifications, plastics, rural and agricultural pollution and managing water in the environment. View the channel [here](#).



£3.3m funding award for the Brecks Fen Edge & Rivers Landscape Partnership Scheme

The ambitious Brecks Fen Edge & Rivers Landscape Partnership scheme has been given the greenlight after securing a £2m National Lottery Heritage Fund grant. This has unlocked a further £1.3 in match-funding from members of the partnership including The Environment Agency, West Suffolk Council, Thetford Town Council, Norfolk Rivers Trust and lead partner Suffolk County Council.

A total of 24 innovative projects are planned for the 5-year conservation scheme, which is set to start in January 2020. The projects will engage schools, landowners and communities, and will include a variety of restoration works and heritage activities such as 'pingo' restoration, tree planting schemes, museum exhibitions, farmer knowledge-exchange and land management advice. View the full action [plan](#).



- **Llando Earthwake** – for use in Cereals, Sugar Beet and Maize
 - The Earthwake has corkscrew blades, drawn along the ground like a roller, which cut diagonal drainage channels across the tramlines every two metres, dispersing the accumulation of water into areas where it can drain more freely.
 - Has been trialled in winter cereals and plans for this autumn involve trialling at 3 farms in the Broadland Rivers Catchment on differing soils drilled with winter cereals.

To find out more or to book the kit, click [here](#) and contact one of Norfolk Rivers Trust's WSF advisers.

With thanks to the Broads Authority for enabling these 3 pieces of kit to be trialled for free.



4) Courtauld 2025 Water Ambition – new page launched to provide useful resources

As a key delivery partner of the **Courtauld 2025 Water Ambition**, Norfolk Rivers Trust have launched a new webpage to direct key business signatories to.



As well as outlining the aims of the Ambition itself, the page will serve as a site for updating on progress and project highlights, with their existing **Water Sensitive Farming Initiative** acting as the main delivery mechanism for delivering water quality and quantity improvements in East Anglia.

The site contains various helpful resources including: interactive catchment mapping for identifying risks and opportunities, which can then be used as a guide for prioritising activities that protect the water environment; a one-page summary of current grant and funding opportunities; and a best practice guide. View the new webpage [here](#).

5) Observations from a farm adviser

Following the recent rainfall event, I had an interesting couple of hours driving the back roads and lanes of the Bure Catchment to see the impact of such an intense storm. My little home rain gauge indicated that approximately 40mm had fallen in just a few hours on that Sunday morning, but I've since been told some areas of Norfolk received up to 85mm. By the following morning, most of the flood water had receded, just leaving the silt evidence on roads, in ponds and in field corners. Interestingly, it wasn't always the most obvious places where water had clearly left a field - often it had come through hedges, although gateways were by far the most common field-exit pathway.

I traced silt for many miles up roads until I reached an obvious source, and in 90% of cases the source was a potato field, mostly coming out of gateways. The second most common were tracks and property gateways, with a couple of areas of maize also contributing to run-off. I saw no obvious evidence of water coming off cereal crops, except for one field where a very compacted headland tramline ran directly from a gateway up a slope.

We often hear 'but that was a one-off storm, it doesn't normally run-off like that'. The second part of that statement may well be true; however, the first part is now no longer the case. We must re-assess our farms and growing practices with that in mind. What this rain event highlighted was that potatoes are a vulnerable crop **every** year. At this time of year, there is no top growth for protection, soil is often capped after a summer of irrigation, and compaction is often an issue too.

So, here are some thoughts on how to start mitigating some of the risks of soil loss from growing potatoes and other bed crops:

- Fields where potatoes will be grown at some point need **wide** (10m min but wider depending on the length of slope), **rough** grass margins along all field edges at the bottom of any slope and **no** driving or parking on buffers, not even occasionally.
- Thought should be given **if** a field is vulnerable due to slope or gateways - **should** bed crops be grown on that field?
- Gateways must all be properly assessed, and those at risk of creating pathways for soil and water to leave a field should be moved. If an alternative gateway is not possible, then existing levels should be raised to prevent water in extreme weather events leaving the field.
- Create in-field grass buffers, particularly in fields with 'multiple facing' slopes, to block pathways and reduce the energy of water within the field.
- Make use of machinery such as the Briggs Tied Ridger, Bye Engineering Wonder Wheel and Creyke Wheel Track Roller to mitigate compacted wheelings and re-direct water flow back into the crop, away from the tramline and bed pathways. Repeat passes later in the season and after canopy destruction, when bare soils are particularly vulnerable.
- Continue to work on improving soil organic matter, extending crop rotations, minimising trafficking, incorporating grass leys into rotations, using trees and hedges to break slopes and changing headland tramline direction. In addition, the use of double headland tramlines on particularly vulnerable locations is also important.



There is currently grant funding and support available from Water Sensitive Farming and CSF for interventions like these.



If you would like to join one of the partnerships, have any queries, or wish to unsubscribe from this bulletin, please email georgia@norfolkriverstrust.org