

# Water Friendly Farming in the Duckow



**Mersey**  
Rivers Trust



The  
Rivers  
Trust



**defra**  
Department for Environment  
Food and Rural Affairs



**United  
Utilities**  
Water for the North West

# Who are we?



Alt Crossens and  
Cheshire areas have  
farm focusses

- The Mersey Rivers Trust is a charity working in partnership with all those interested in improving our local rivers and waterways. It is the Rivers Trust for the River Mersey and its catchment.
- Our work covers the whole of the Mersey Basin
- We have three operational catchments, with different teams in each area,
  - Cheshire
  - Liverpool City
  - Greater Manchester

# Water Friendly Farming

- From 2019 – 2021 Mersey Rivers Trust worked with Severn Rivers Trust, United Utilities and DEFRA funding
  - Provided free advice and a farm plan, and a potential small grant to implement measures identified in the plan



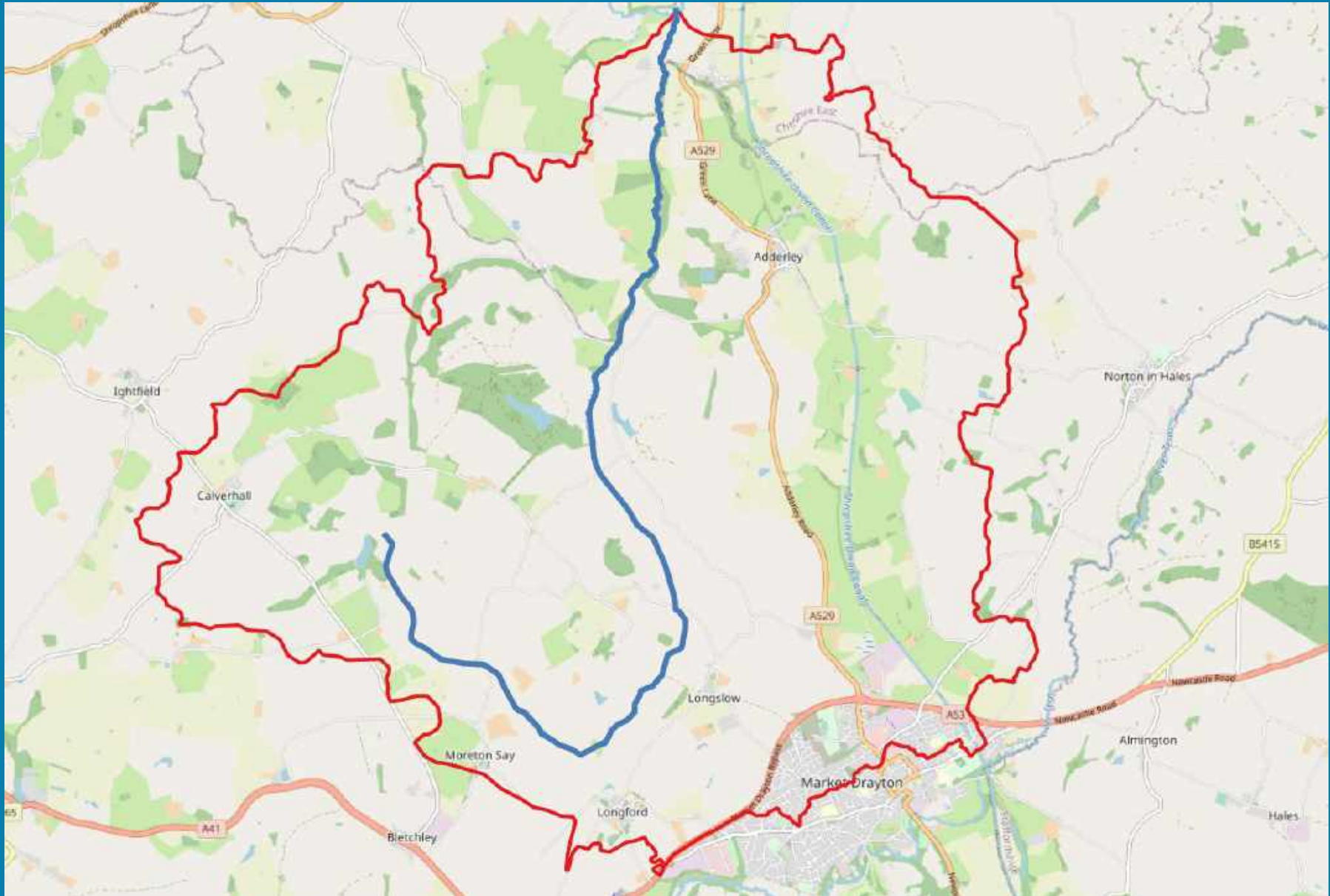
# Better Rivers Better Northwest

- United Utilities have committed to deliver **£230 million in environmental improvements from 1<sup>st</sup> Jan 2023 – 30<sup>th</sup> Nov 2025**
- Working with Rivers Trusts to hold events and create cluster groups where we can chat to farms about water friendly farming and other topics
- **AND FARM PLANS!!**

**Would you like to set up a farming group for the Duckow?**



# Catchment Map



# Why the Duckow?

## Poor ecological status

- Failing due to ammonia, nitrates, and phosphates as well as fish, macrophytes and phytobenthos

## 18 Reasons for Not Achieving Good Status

- 16 due to agricultural practices
  - Soil management
  - Nutrient management
  - Livestock
  - Pesticides
- 2 unknown source

A photograph of a wooden staircase leading up a hill, with a quote overlaid on the image. The quote is: "The secret of making progress is to get started." The author is Mark Twain. The background is a soft, hazy landscape.

The secret of making  
progress is to get started.

Mark Twain

 quotesonay

# Engagement...

## FREE Pie and Pint Evening!



**Thursday 25th April 2024**

**6pm - 8pm**

Calverhall Village Hall  
Calverhall Nr Whitchurch  
Shropshire  
SY13 4PE



Presentations from Mersey Rivers Trust  
and Soil Sense on soil and nutrient  
management. Plus a chance to speak to  
farm advisors.

Contact - Sally Potts  
farming@merseyrivers.org  
07920095753

[www.merseyrivers.org](http://www.merseyrivers.org)

Contact us to book your  
place!





# How it works....

## Farm visit....

Ways to reduce phosphate in the water such as:

- Separation of clean and dirty water
- Rainwater harvesting
- Fencing
- Water troughs
- Concrete
- Livestock tracks
- Sward lifting
- Buffer strips
- Undersowing



# How it works....

Farm visit....

**We do not have any regulatory powers**



**Our visits are confidential**



**We want to work together to improve water quality**

# Farm Water Management Plan

## Water Management Plan

XXXX Farm

February 2023

This Water Management Plan was created through the Upper Weaver WEIF project by Mersey Rivers Trust and funded through local DEFRA sources. The items highlighted within this plan are those which were observed on the day of the farm walkover, and may not include additional water issues not observable on the day.

### Farm overview

XXXX Farm is an arable farm totalling approximately 90ha. This arable enterprise grows predominantly permanent winter wheat, winter barley and spring barley, with a small acreage of grass and cover crops rotated with the barley. In the 2023 season, two fields currently sown with a cover crop, will be grazed and then sown to produce a potato crop. In terms of livestock there are 25 horses on livery at the farm, and approximately 200 sheep on tack at the farm annually between the months of October and March. XXXX Farm has historically farmed pigs, and has retained the infrastructure needed to support this type of farming should they wish to undertake it again. The farm drains to the XXXX catchment, is 2.7km away from XXXX SSSI, and within a Countryside Stewardship Medium Priority Area for water quality. XXXX Farm is taking part in the Sustainable Farm Incentive (SFI) pilot scheme in the advanced tier, and so will be undertaking work to promote soil health as part of this three-year pilot scheme. Some of the land contains complex topography, sandy and clay areas, and moderate slopes. This increases the risk of surface water movement and therefore soil erosion in some places. Whether these risks are realised is dependent upon the management of the farm.

### Farm Information

Farm Name: XXXX Farm	Farm type: Predominantly arable cereals with small acreage of potatoes and cover crops
Central Grid Reference: X	
Size: 90 ha	Number of livestock: 25 horses on livery 200 sheep on tack
Rainfall: 140 mm/yr	Waterbodies: XXX River and XXX Brook
Farming systems: Arable cereal growing, and livery yard.	Water source: Mains
Nutrient application (including whether slurry or FYM application): Fertiliser applied to growing crops	Main water uses: Watering troughs in fields and stables
Nutrient Management Plan: Yes	Nutrient Management Plan used? As required
Details of Cropping (including bare soil): No bare soil on this farm. Permanent winter wheat, winter barley and spring barley grown in rotation with grass and cover crops. Small amount of potatoes to be grown.	

Outline of farm business type and farming processes

Farm information on farm type and water uses, rainfall, nutrient use and crop details

# Farm Water Management Plan

## Summary of interventions

Intervention	Priority	Reason	Cost to the Farmer	Cost to the Project	Regulatory Link	Likely source of Funding	Ecosystem Services
Increase size of pond in Field 6	High	Reduce the quantity of silt and pollutants entering XXX River from field runoff and land drains.	Cost unknown c. £5,000	Landowner intervention therefore project will pay 70% of costs	None	Mersey Rivers Trust Grant	Reduced silt entering main watercourse due to settling out and further filtration of water in pond. Offline water storage helps reduce flooding.
Plant land adjacent to pond in Field 6 with trees	Medium	To improve biodiversity of area adjacent to pond, and reduce flooding		£1.72 per tree £4.00 per tree guard x 25 trees = £118		Mersey Rivers Trust Grant Mersey Forest Farm Trees Grant	Reduced run-off into watercourses which benefits the biodiversity of the river, and increased biodiversity on land.
Sow buffer strips along XXX Brook in Field 11	High	Reduce the quantity of silt and nutrients entering the XXX Brook from field runoff.		£451/ha 0.24ha area = £90	You must take action to prevent erosion <a href="#">Farming Rules for Water</a>	Countryside Stewardship Mid-Tier Option Possible Mersey Rivers Trust Grant	Reduced run-off into watercourses which reduces silt entering the waterbody. Less silt in the system can alleviate flooding and benefits the biodiversity of the river, and increased biodiversity on land.
Reinforce riverbank in Field 10	Medium	Reduce in-field flooding and riverbank erosion, which		Trees £1.72 per tree	You must take action to prevent erosion <a href="#">Farming Rules for Water</a>	Mersey Rivers Trust Grant	Reduced bank erosion into watercourses which benefits the biodiversity of the river. Reduced silt

# What's in it for me?

- **FREE** farm business advice – it only costs your time
- Water Management Plan captures items that could be submitted into other schemes, support supplier schemes (e.g Tesco, Müller)
- Potential to be considered for future funding – but you need a water management plan



# Duckow Weir

- Mersey Rivers Trust has recently secured £52,000 to remove the Gas House weir on the Duckow
- Open Rivers also paid for feasibility study in 2022
- Will open up nearly 10km of river to fish passage
- Improve biodiversity and flow over 2km upstream of the weir – sediment will be managed
- Hope works will be completed this winter



**OPEN  
RIVERS  
PROGRAMME**

# Duckow Weir

Location of Gas House  
Weir on River Duckow



**OPEN  
RIVERS**  
PROGRAMME

# Water Restoration Grant

- Applying for funding to scope out other habitat improvement works that can be done along the River Duckow – study only at this stage
- Supports work to make flow and function of river better
- Will know outcome of this bid in July/August 2024





# Water Quality

- United Utilities have worked at Prees Road to put in new Fuji Clean package
- Are working with MRT to set out baseline water quality sampling sites – test run of sites being carried out in early May
- Water samples will be analysed in UU labs and test for
  - Phosphates
  - Nitrates
  - Ammonia
  - BOD and Dissolved O<sub>2</sub>



# Thank You

Email: [sally@merseyrivers.org](mailto:sally@merseyrivers.org)

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