



Welcome to the April newsletter from the Wensum Catchment Partnership.

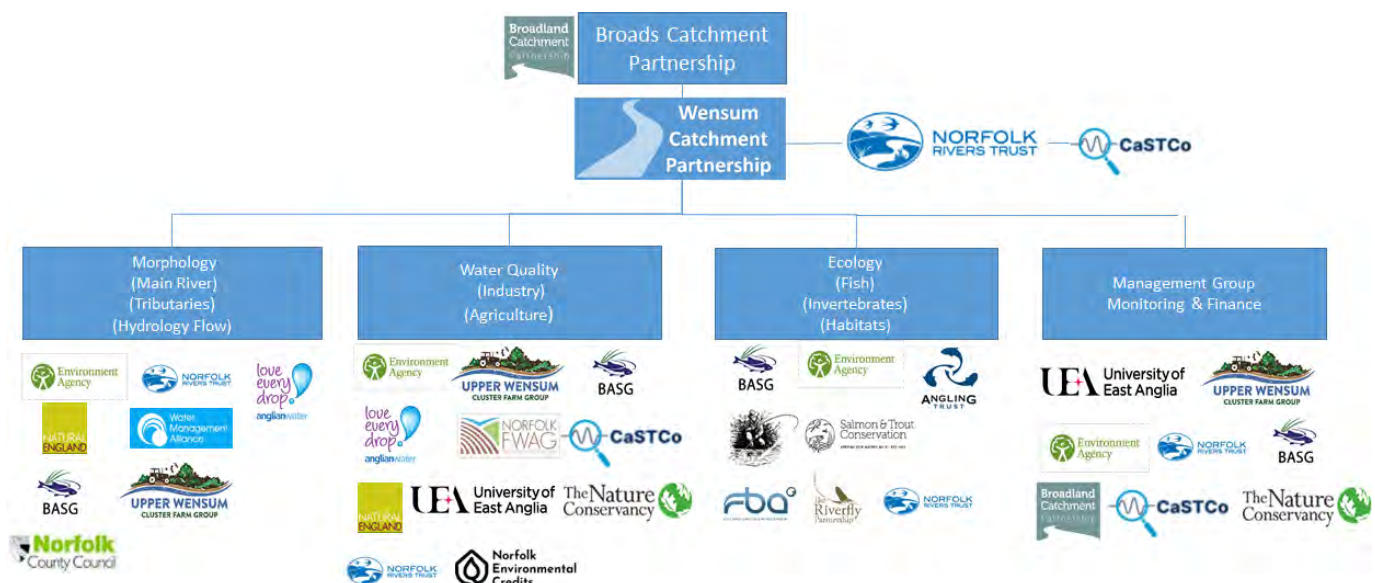
The Wensum Catchment Partnership aims to improve the health of the Wensum catchment through monitoring water quality, availability and ecological data to provide evidence to decide how and where to prioritize catchment-scale restoration and other interventions.

The Wensum Catchment Partnership (WCP) formed in 2019 as a sub-catchment of the Broads Catchment Partnership, under the catchment-based approach. Bringing members together under the WCP has established a more joined up and coordinated approach, with organisations working in partnership.

Our current structure and membership can be seen below. We are keen for new members and groups to get in contact if interested in taking part in this worthwhile work.

This briefing headlines.

ECOLOGY Defining its Status PhD studies Fishery Recovery Plan What's in our River Riverfly	WATER QUALITY Defining it's sources Volunteer Outcomes Nutrient Neutrality AWS on the Wensum	MORPHOLOGY River, Flow & Restoration Winter flows of 2023/24 Strategic Mill Management	ORGANISATION Making it Happen Our Structure & People Keeping You Informed
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CALUM PRESENTS HIS PhD OUTCOMES

Taking informed actions to sustain healthy Roach Densities

PhD student from Nottingham University completed his thesis based in the Wensum Catchment, on the relationship in fish and mammal tissue and the linkages to chemicals and pesticides. After 3 years of studies over, 1000 samples have been collected and frozen for analysis using the latest scientific research.

The results will be formally published in May 2024. We will be hosting a virtual presentation from Calum on the 21st May, when he will share the findings.

An invite will follow to all interested members.



Further PhD studies will be undertaken by the UEA School of Environment Science from 2024, building on the work from Calum's PhD which will be partly funded through a grant from the Broads Catchment Partnership.

WENSUM FISHERY RECOVERY PLAN

Taking informed actions to sustain healthy roach densities

The Ecology group has long discussed the issues relating to roach stocks in the Wensum.

We have agreed a plan (right) that has a number of milestones to ensure any future stocks can sustain themselves. The current density for roach following the EA electro fishing survey last Sept showed an average of 1.4 roach per 100m². Well below the national average, with one of the lowest reaches been between Swanton Morley falls and North Elmham.

We are working with the EA to introduce fry refuges in this area to enable fry recovery and discussing this with the respective landowners, to ensure a long-term sustainable solution can be created.

The team at Wensum Anglers Conservation Association undertook some studies this spring on whether roach actually spawned in the river. This identified 3 areas of roach aggregations around possible spawning material.

There is reluctance from Natural England to allow managed roach stocking within the Wensum, so we are working with the EA on other solutions.

- ✓ Define the area of focus
- ✓ Define current Density
- ✓ Understand the current health concerns
- ✓ EA Labs findings
- ✓ PhD Analysis
- ✓ Statutory bodies policy on stocking
 - Scope future Scientific Studies
 - WACA Roach Spawning report from 2023
 - Define the cause of these concerns
 - Understand pathology variances
 - What needs to be done to enable this
 - Define and improve the habitat
 - Reach agreement with Landowners
 - Define monitoring plan
 - Reach agreement on stocking protocol



Wensum Roach



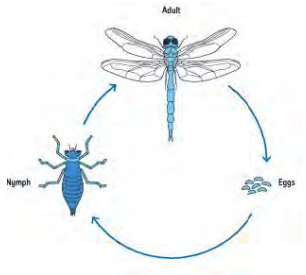
Wensum Chub

WHAT'S THAT IN OUR RIVER

Using Invertebrates to inform on river health - River fly

Most UK rivers now have some form of invertebrate assessment through a sampling, method called Riverfly. Riverfly uses a scoring metric to rank the health of a river in terms of invertebrates. This is known as the Anglers Riverfly Monitoring Initiative (ARMI) and all results are uploaded into its database.

We have now established 17 out of a potential 19 sites to undertake kick sampling and produce an ARMI score. We have also updated the organisation as shown below.



ARMI hub coordinator(s)

Dan Hoare & David Harper

- Maintains/expands monitoring groups
- Contact at catchment/regional level
- Coordinates training and on-going support, incl. funding

ARMI group coordinator

Dennis Willis & Chris Bone

- Contact for the group, statutory agency and Riverfly Partnership
- Maintains monitoring activity and ensures data sharing
- Verifies online data submissions

Ecology Contact

John Findlay at EA

- Liaison with the group coordinator
- Site registration & trigger levels
- Training support
- Ensures statutory response to incidents

Riverfly Partnership ARMI Coordinator

Trine at Riverflies Partnership

- Support, ongoing training & communication

If you are interested to explore this interesting aspect of nature, please contact Chis Bone or Dennis Willis.

chrisbone360@hotmail.com
den207willis@dsl.pipex.com

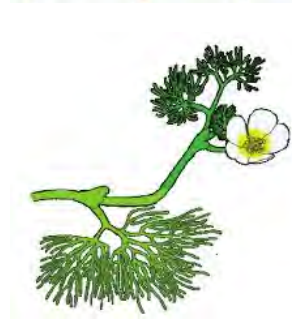
Dr Benoît Demars from the Norwegian institute for water research, has offered to undertake further research on aquatic plants within the Wensum. Benoit undertook his PhD studies on the Wensum back in 2002 mentored by our own Prof David Harper at Leicester University.

It is hoped that these studies can join up with the long-awaited Natural England and EA surveys on Wensum aquatic plants, like the ones shown below. It is planned that this work will be undertaken during July and August.

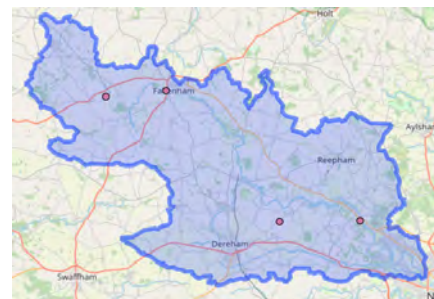


It will be interesting to see how the results compare to previous studies and the harm that Signal Crayfish have on aquatic plants.

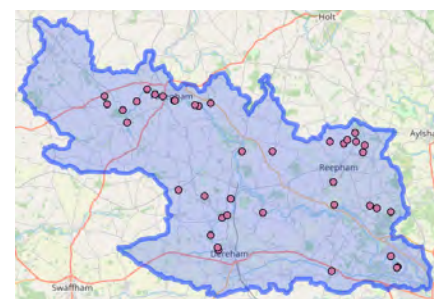
Left is an example of typical aquatic plants previously found in the Wensum.



The plant shown left is an example of a batrachian ranunculus (water crowfoot) species characteristic of chalk streams favored by species like roach for spawning.



According to the EA database, since 2020 to 2023 there was only 4 macrophyte sites surveyed.



Whilst in the previous decade 2010 to 2019 some 36 sites were surveyed.

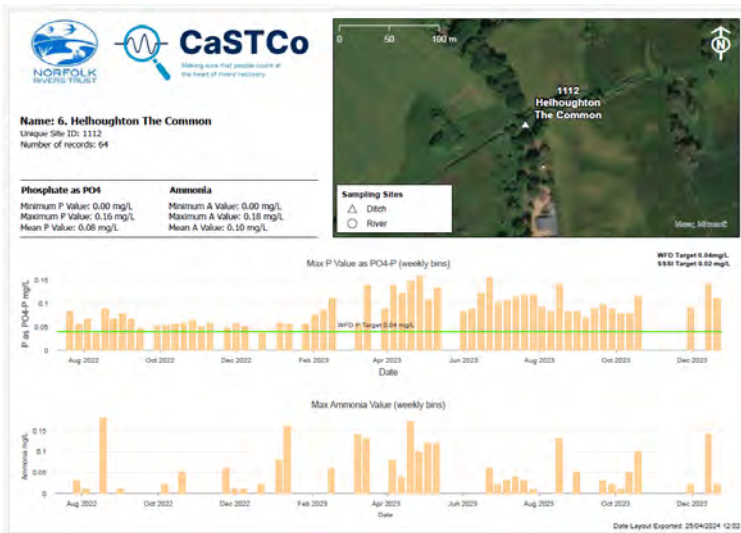
Data source EA Ecology & Fish Data Explorer

WATER QUALITY VOLUNTEERS

Citizen Scientists monitor the Wensum

We have working hard on delivering a visual form of data visualisation that meets the needs of all.

Below are a couple of draft examples of how this will be displayed at specific sampling locations over a timeline.



These views will become available in the next few weeks. They will be accessible from wensum.org

Get in Touch:
Project Delivery - Steve Lane:
Steve.Lane@therivertrust.org

Volunteer Coordinator - Elle Claiborn:
elle@norfolkrivertrust.org

So What have we learnt from all this effort?

In the headwaters, the 'Source Apportionment-GIS' model created for the EA and NE apportions responsibility according to the 'polluter pays principle' and attributes much of the phosphate pollution to agriculture. SAGIS was developed for UKWIR, with support from the Environment Agency, SEPA and Natural England, to analyse sources of chemicals at the river basin scale and identify measures to improve river, lake and estuary water quality.



SAGIS is a catchment water quality model. Diffuse inputs (septic tanks, urban and rural land run-off) are included in the model at a waterbody scale with loadings spread evenly along each modelled reach.

The availability of discharge flow and discharge quality monitoring data means that SAGIS modelling provides a robust framework for use in decision-making for wastewater investment planning. In general, estimates of loadings from diffuse sources from other sectors, within SAGIS, have a greater degree of uncertainty.

The EA has been running a comparison between SAGIS projections and citizen science and farm cluster data.

Following a discussion with senior colleagues John Findlay is now working with the OCS team, responsible for SAGIS to produce a presentation on the outcome of this work for the Wensum Catchment partnership.

NEUTRIENT NEUTRALITY

Nutrient Neutrality - Dealing with Your Waste

Many homes in rural Norfolk are not connected to the main sewerage and instead rely on septic tanks and package treatment plants to manage waste water. We have been analyzing the actual locations of these using a combination of Anglian Water Sewage catchment maps and properties from the various planning portals.

This has resulted in identifying an estimated 3984 properties not on mains sewage within the Wensum Catchment.

This estimate is broken into the following per Local Planning Authority areas.

Breckland	1759
Broadland	1180
North Norfolk	738
KLWN	224
South Norfolk	83

Could improvements be linked to the current Nutrient Neutrality rules?

We, at WCP, have been engaged with much discussion on this subject over recent months. It is clearly seen that this level of Septic Tanks in the Catchment is a key source of Nutrient, with national models claiming each Septic Tank is worth 1kg of Phosphate annually. The potential nutrient credit value for this is approximately £130m if 100% of Tanks were to be upgraded, however the likely outcome is more represented by actually achieving a 66% overall volume reduction on this giving the complex rules on compliance, longevity needs, let alone community take up.

One of the most straightforward and cost-effective options is replacing septic tanks with Package Treatment Plants (PTPs) that remove nutrients through biological treatment. While the sale of credits to fund septic tank upgrades would not in itself reduce the overall load of phosphate to the SSSI, it does offer a route to generate investment to clean up sensitive headwaters while not undermining the overall obligation to achieve the SSSI favourable condition

But what are the benefits for homeowners?

First and foremost, nutrient neutrality investment could offer an opportunity to upgrade an inefficient septic tank at little cost and, given the scale of offsets produced, there should be scope to fund ongoing maintenance for a number of years. This would put home owners in a good position to comply with government 'General Binding Rules' for septic tanks and small sewage discharges. 'Refer to <https://www.gov.uk/guidance/general-binding-rules-small-sewage-discharge-to-the-ground>'.

What is the partnership doing?

As a partnership there is a significant role we can play in the overall delivery of this, with focus on 3 key areas.

- 1 - Community engagement
- 2 - Community WQ 3 monitoring
- 3 - Community Support Grants

To support this delivery, we have created a new CIC named the Wensum Community Organisation, who will work with Norfolk Environmental Credits Ltd and a host of national consultants in finding a robust solution to implementing a scalable solution.



Typical example of a modern advanced effluent packaged treatment plant and optional phosphorus filter.



Call of Nature

So look out for our call of nature campaign to reach out to home owners and engage in a free upgrade to their Septic Tanks..

ANGLIAN WATER ON THE WENSUM

Making choices on investment in our River

Anglian Water has announced that in line with the government's guidance on nutrient neutrality, they have proposed an £138m of investment in their business plan for 2025-30 to reduce nutrient levels at 19 water recycling sites across Norfolk.

These investments will protect wildlife and ecological quality in Norfolk's precious Broads and the River Wensum and mean developers need to find fewer credits to build much-needed housing.

Wastewater works on the Wensum are at Fakenham, Reepham, Bylaugh, Foulsham, Swanton Morley, Sculthorpe, Stibbard and Mattishal.

While other Broads works include Aylsham, Coltishall, Belaugh, Hindolveston and Wymondham are among those in line for improvement work.

These investments will take the maximum mean permitted Phosphate output from 1mg/l to 0.25 mg/l



The removal of excess Phosphate is an expensive process and requires significant investment by water companies. Its process is explained in the March 2023 newsletter from last year. It is managed as part of the rolling 5-year Water Investment National Environment Program (WINEP).

This shouldn't be confused with the extreme events we see in the press every day in terms of combined sewer overflows.

These investments are about the mean continuous levels of nutrient output and not the excess in time of flooding.



Most works within the Wensum have existing permits limiting the mean Phosphate to less than 1mg/l. However, Mattishall STW still has a permit of 8 mg/l and this can be clearly seen by our citizen scientists measuring water quality. This investment is long overdue.



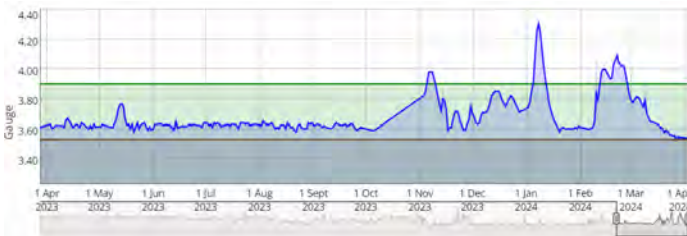
WATER FLOWS OF THE WINTER 2023/24

A look back at the impact of prolonged rainfall of the Winter.

Records have shown that the Wensum at Lyng received 1060mm of rainfall in 2023 and 226mm during Jan - Feb-24 alone. This is double the average for Norfolk.

The image right shows the level of flooding on the 8th Jan 2024 at Elsing, looking towards Lyng.

Below is the chart from the downstream EA gauging station at Hellesdon Mill, over the same period.



The gauging station at Swanton Morley shown in the image to the right, was swamped by flooding in the week 8th Jan 2024 and as such recordings were impacted. As a result of these excess volumes, the Wensum breached its banks in two places above Swanton Morley as shown in the bottom right image. The water is leaving the main channel and entering the drain but this drain does re-join the main river upstream of the gauging station. This means that the total flow volumes are still being recorded but the split of flow between the two gauges is now different.

Breaches like this are occurring more frequently along the river and in some cases it could be considered that the river is behaving naturally and finding its way to the lowest part of the floodplain. The river has been heavily engineered over the centuries to enable milling and land drainage, but the SSSI and SAC designations apply to this engineered main river channel.

This means that as well as impacts to flooding and the drainage network, careful consideration must be given as to whether reduced flows in the main channel could cause a deterioration to the designated site's condition.



In summary this needs careful consideration and must become part of the wider strategic approach to future river and land management.

STRATEGIC RIVER MANAGEMENT

The long term vision for the River - Mill ownership and water rights

The Environment Agency does not own all the mills or the water rights at control structures along the River Wensum SSSI. Where private mill rights exist, the Environment Agency has limited powers to control their operational regime and retention levels. However, during initial contact with stakeholders, some mill owners were supportive of the concept of river restoration and were prepared to consider options for altering the future water management regime on impounded river reaches.

None of the mills are now used for their original purpose and only at Lenwade, Bintree and Elsing have the undershot water wheels been retained. Whilst owners can vary the retained water levels within the old milling limits, the general practice is to hold the water at a relatively high level. This is largely for aesthetic reasons (to maintain an expanse of water upstream of the mills) but also due to increasing levels of siltation of the mill pools.

The fragmentary nature of mill ownership is highlighted during periods of high flow. Each mill owner operates their controls to evacuate floodwaters, often without reference to owners either upstream or downstream. This emphasizes the need for improved communication between mill owners/operators and riparian owners/residents.

Given the significance of mills to restoration plans on the River Wensum, a potential constraint relates to the willingness of mill owners/operators to accept/implement changes in water levels, structures and channel works.

Conversely, mill owners may regard the development of the River Wensum Restoration Strategy as an opportunity for funding to modify structures that might be regarded as a liability in terms of maintenance, operation and health and safety.



Image of Elsing Mill

The subject of mill management has been one of the biggest topics within the morphology working group. The group is looking to produce a guidance document during 2024 specifically for mill owners on the Wensum but we are awaiting the new 'Your Watercourse' guidance to be published by the EA to make sure we avoid any mixed messaging.

The guidance will clarify to owners and operators how best to manage water levels to avoid impacts to the environment and avoid any potential flooding. It is highly likely that some structures are in a poor condition however and can no longer be operated.

The guidance will also reintroduce the restoration strategy as a potential option but explain that a review of the 2010 strategy is underway to make sure it is still fit for purpose and right for the river.

The group is also exploring whether citizen science may be able to play a role in monitoring the upstream and downstream water levels at mills to help identify any issues and understand the impacts.

OUR STRUCTURE & PEOPLE

Our governance, structure and people

Partnership Chair

Morphology Group Chair
Water Quality Group Chair
Ecology Group Chair
Management Group Chair

Kelvin Allen

Amy Butcher

Richard Cooper

Kelvin Allen

Donna Dean

Management Team

Donna Dean

Kelvin Allen

Jonah Tosney

Steve Lane

Elle Claiborn

John Findlay

Richard Cooper

Amy Butcher

NRT

BASG

NRT

CaSTCo

CaSTCo

EA

UEA

EA

KEEPING YOU INFORMED

Monitoring and Management

Back in 2019 another vision was to have a dashboard of measures that replicated the status across the catchment ecology. We have come a long way since then and today have almost all the metrics defined and measured at a reasonable compartment scale and dashboard.

Compartment	SSSI Unit Number	Reach Number	Section	Length	River Restoration	Fishing Rights	Target Fishery	Invasive														Fish Habitat		Fish Passage	Geomorphology Restoration	Macrophytes	NNIS	SAC Design White Crayfish	SAC Design Desmoulin's snail	SAC Design Lamprey	SAC Design Bullhead
								Plant Species	Fish Roach Density 100m ²	Fish Dace Density 100m ²	Fish Chub Density 100m ²	Fish Pike Density 100m ²	Fish Trout Density 100m ²	Inverts Score	Chem P	Chem A	Chem N	Chem Solids mg/l	Flow % HOF	Metres											
1	N/A	N/A	Measure Definition	4.39																											
2	N/A	N/A	Yare - New Mills	4.23		4.23	Coarse	100	2.4	0.52	2.07	0.17	0.02		0.06	0.04	5.92	5.73	47		50%	0%	14			0.00	0.09				
3	54	RWRS 01	Hellesdon Mill - Mount Farm	1.65			Coarse	100	2.4	0.52	2.07	0.17	0.02		0.06	0.04	5.92	5.73	47		75%	0%	14		100%	100%	0.00	0.09			
3	54	RWRS 02	Mount Farm - Costessey Mill	3.16	0.72	1.4	Coarse	100	2.4	0.52	2.07	0.17	0.02		0.06	0.04	5.92	5.73	47		50%	23%	14		100%	100%	0.00	0.09			
4	54	RWRS 03	Costessey Mill - Taverham Mill	3.91	1.5	1.03	Coarse	100	2.12	2.58	5.98	0.39	0.00		0.06	0.04	5.92	5.73	47		50%	38%	14		100%	100%	0.00	0.09			
5	53	RWRS 04	Taverham Mill - Northfields	1.49		0.8		25	2.12	2.58	5.98	0.39	0.00		0.06	0.04	5.92	5.73	47		50%	0%	14		100%	100%	0.07	0.19			
5	53	RWRS 05	Northfields - Downstream Ringland	2.56				25	2.12	2.58	5.98	0.39	0.00		0.06	0.04	5.92	5.73	47		50%	0%	14		100%	100%	0.07	0.19			
5	53	RWRS 06	Downstream Ringland - Ringland Road	0.23	0.23			25	2.12	2.58	5.98	0.39	0.00	9	0.06	0.04	5.92	5.73	47		100%	100%	14		100%	0%	0.07	0.19			
5	53	RWRS 07	Ringland Road - Attlebridge Hall	3.62	0.41			25	2.12	2.58	5.98	0.39	0.00	9	0.06	0.04	5.92	5.73	47		100%	11%	14		100%	0%	0.07	0.19			
6	53	RWRS 08	Attlebridge Hall - Morton Bridge	1.25	1.25			100	2.12	2.58	5.98	0.39	0.00		0.06	0.04	5.92	5.73	47	100	100%	100%	14		100%	0%	0.07	0.19			
6	53	RWRS 09	Morton Bridge - Slade Plantation	1.11	0.34			100	2.12	2.58	5.98	0.39	0.00		0.06	0.04	5.92	5.73	47		100%	31%			100%	0%	0.07	0.19			
7	52	RWRS 10	Slade Plantation - Lenwade Mill	2.94		2.358		100	2.12	2.58	5.98	0.39	0.00	10	0.06	0.04	5.92	5.73	47		100%	0%			100%	0%	0.07	0.19			
7	52	RWRS 11	Lenwade Mill - Walsley Hill	2.43		1.458	Coarse	0	0.7	1.97	3.7	0.42	0.03	10	0.06	0.04	6.14	5.65	47		0%	0%			100%	0%	0.42	0.24			
7	52	RWRS 12	Walsley Hill - Lyng Mill	2.15	2.15	2.15	Coarse	0	0.7	1.97	3.7	0.42	0.03	9	0.06	0.04	6.14	5.65	47	1800	0%	100%			100%	0%	0.42	0.24			
8	52	RWRS 13	Lyng Mill - Elsing Mill	3.74		4.13	Coarse	0	1.91	3.21	2.01	1.49	0	9	0.06	0.04	6.67	5.17	47		0%	0%			100%	0%	0.00	0.00			
9	51	RWRS 14	Elsing Mill - Swanton Morley Mill	4.71	0.88	2.08	Coarse	0	1.91	3.21	2.01	1.49	0	13	0.06	0.04	6.67	5.17	47	2200	0%	19%			0%	0%	0.00	0.00			
10	51	RWRS 15	Swanton Morley Mill - Riverside Farm	2.52		2.212	Coarse	0	1.02	0.20	0.08	0.59	0.05	13	0.05	0.03	9.09	6.00	99		25%	0%			0%	0%	0.05	0.05			
10	51	RWRS 16	Riverside Farm - North Elmham Mill	1.17		0.867	Coarse	0	1.02	0.20	0.08	0.59	0.05	13	0.05	0.03	9.09	6.00	99	500	0%	0%			0%	0%	0.05	0.05			
11	50	RWRS 17	North Elmham Mill - Bintree Woods	2.6				0	0.42	0.00	0.00	0.43	0.43	12	0.05	0.03	9.09	6.00	99		0%	0%			100%	0%	1.83	1.75			
11	50	RWRS 18	Bintree Woods - Dell View Farm	0.86				0	0.42	0.00	0.00	0.43	0.43	12	0.05	0.03	9.09	6.00	99		100%	0%			100%	0%	1.83	1.75			
12	50	RWRS 19	Dell View Farm - Bintree Mill	2.67	2.67	0.405	Coarse	0	0.42	0.00	0.00	0.43	0.43	12	0.05	0.03	9.09	6.00	99		100%	100%			100%	0%	0.00	1.00			
13	49	RWRS 20	Bintree Mill - Guist Common	2.01		0.93	Game	100	0.42	0.00	0.00	0.43	0.43	12	0.05	0.03	9.09	6.00	99		100%	0%			100%	100%	1.83	1.75			
13	49	RWRS 21	Guist Common - Great Ryburgh Mill	3.31	1.32			100	0.42	0.00	0.00	0.43	0.43	12	0.05	0.03	9.09	6.00	99		25%	40%			100%	100%	1.83	1.75			
14	48	RWRS 22	Great Ryburgh Mill - Penshorpe Wildfowl Park	2.38		0.362	Mixed	25	0.42	0.00	0.00	0.43	0.43	9	0.05	0.03	9.09	6.00	99		25%	0%			100%	100%	1.83	1.75			
14	48	RWRS 23	Penshorpe Wildfowl Park - Great Ryburgh Common	1.98	1.98		Mixed	25	0.42	0.00	0.00	0.43	0.43	9	0.05	0.03	9.09	6.00	99		100%	100%			100%	100%	1.83	1.75			
14	48	RWRS 24	Great Ryburgh Common	0.18	0.175		Mixed	0	0.42	0.00	0.00	0.43	0.43	9	0.05	0.03	9.09	6.00	99		100%	97%			100%	100%	1.83	1.75			
14	48	RWRS 25	Great Ryburgh Common - Fakenham Mill	1.96		1.914	Mixed	25	0.42	0.00	0.00	0.43	0.43	9	0.05	0.03	9.09	6.00	99		25%	0%			100%	100%	1.83	1.75			
15	47	RWRS 26	Fakenham Mill - Hempton	0.46		0.46		100	12	0.05	0.03	9.09	6.00	74		12	0.05	0.03	9.09	6.00	74		25%	0%		100%	100%	0.00	0.00		
15	47	RWRS 27	Hempton - Sculthorpe Moor	1.72	1.72	1.72	Mixed	0	11	0.05	0.03	9.09	6.00	74		12	0.05	0.03	9.09	6.00	74		0%	100%		100%	100%	0.00	0.00		
15	47	RWRS 28	Sculthorpe Moor - Sculthorpe Mill	1.25	0.405		Mixed	0	11	0.05	0.03	9.44	4.8	74		11	0.05	0.03	9.44	4.8	74		50%	32%		100%	100%	0.00	0.00		
16	47	RWRS 29	Sculthorpe Mill - South Mill Farm	2.63	0.85		Mixed	0	11	0.05	0.04	7.8	4.84	74		13	0.05	0.04	7.8	4.84	74		50%	37%		100%	100%	0.00	0.00		
17	47	RWRS 30	South Mill Farm - River Tat confluence	0.67	0.65			0	13	0.05	0.04	7.8	4.84	74		13	0.05	0.04	7.8	4.84	74		100%	97%		100%	100%	0.00	5.00		
17	46	RWRS 31	Tat confluence	0.48				0	13	0.05	0.04	7.8	4.84	74		13	0.05	0.04	7.8	4.84	74		100%	0%		100%	0%	0.00	5.00		
17	46	RWRS 33	Tatterford Common - Helhoughton Common	0.72				0	12	0.05	0.04	5.00	5.29	74		12	0.05	0.04	5.00	5.29	74		100%	0%		100%	0%	0.00	8.00		
17	45	RWRS 34	Helhoughton Common - Brickkiln Plantation	1.57	1.57			0	13	0.05	0.04	5.00	5.29	74		13	0.05	0.04	5.00	5.29	74		100%	100%		0%	0%	0.00	8.00		
18	45	RWRS 35	Brickkiln Plantation - West Raynham	0.71	0.71			0	15	0.05	0.03	5.00	5.29	74		15	0.05	0.03	5.00	5.29	74		100%	100%		0%	0%	0.00	8.00		
18	45	RWRS 36	West Raynham - South Raynham Bridge	1.41	1.41			0	11	0.05	0.03	5.00	5.29	74		11	0.05	0.03	5.00	5.29	74		100%	100%		0%	0%	0.00	8.00		
18	45	RWRS 37	South Raynham Bridge - Normans Burrow Wood	0.72	0.72			0	8	0.05	0.03	5.00	5.29	74		8	0.05	0.03	5.00	5.29	74		100%	100%		0%	0%	0.00	8.00		
18	45	RWRS 38	Normans Burrow Wood - Pear Tree Corner	0.85	0.85			100	4	0.14	0.04	8.60	4.00	5.29	74		100%	100%			100%	100%		0%	0%	0.00	8.00				
19	46	RWRS 32	Tat Tatterford Common	3.28	2.19			0	0.00	0.00	0	0.00	3.28	9	0.12	0.11	5.00	4.84	74		100%	67%			100%	0%	0.00	5.00			
20		RWRS Tat River Tat	Cosford - Sculthorpe	3.25				0	0.00	0.00	0	0.00	5.31	2	0.11	0.11	5.00	3			100%	0%			100%	0%	0.00	5.00			
20A		RWRS Tat River Tat	East Rudham	3.53				0	0.00	0.00	0	0.00	5.31	2	0.11	0.11	5.00	3			100%	0%			100%	0%	0.00	5.00			
21		RWRS	Langor Drain	1.98				0	0.08	0.09	5.00	5			0.2	0.05	6.00	4.8			100%	0%			100%	0%	0.00	5.00			
22		RWRS	Guist Drain	2.01				0	0.2	0.05	6.00	4.8			0.2	0.05	6.00	4.8			100%	0%			100%	0%	0.00	5.00			
23		RWRS	Foulsham Drain	12.4	3			25	0.2	0.05	6.00	4.8			0.2	0.05	6.00	4.8			100%	24%			100%	0%	0.00	8.00			
24		RWRS	Blackwater Drain	10.8				25	0.3	0.085	5.00	8.00			0.2	0.085	5.00	8.00			100%	0%			100%	0%	0.00	8.00			
25		RWRS	Blackwater Drain Trib	5.93				25	0.2	0.085	5.00	8.00			0.2	0.085	5.00	8.00			100%	0%			100%	0%	0.00	8.00			
26		RWRS	Kerdiston Drain	5.06				25	0.2	0.085	5.00	8.00			0.2	0.085	5.00	8.00			100%	0%			100%	0%	0.00	8.00			
27		RWRS	Swannington Drain	5				25	0.4	0.03	5.00	8.00			0.2	0.085	5.00	8.00			100%	0%			100%	0%	0.00	8.00			
28		RWRS	Wending Beck - Dillington - Worthing	6.90				0	0.08	0.04	5.00	8.00		12	0.08	0.04	5.00	8.00			100%	0%			100%	0%	0.00	8.00			
29		RWRS	Wending Beck - Gr Farnham - Dillington	10.00				100	0.11	0.11	8.50	6.00			0.11	0.11	8.50	6.00			100%	0%			100%	0%	0.00	8.00			
30		RWRS	River Tud - Source - Hockering	13.5				25	0.75	2.10	1	0.00	8		0.58	0.19	8.00	8.00			100%	0%			100%	0%	0.00	8.00			
31		RWRS	River Tud - Hockering - New Costessey	10.7				25	0.75	2.10	1	0.00	8	10	0.62	0.28	6.50	8.00			100%	0%			100%	0%	0.00	8.00			