Wilder Wenhaston River Group

Survey of the Non-tidal Blyth

2023 – 2024

Contents

Summary

Over the past two years, the Wilder Wenhaston River Group has conducted surveys and analysis of the non-tidal stretch of the river Blyth to determine the extent of any pollution and its origin, and to establish baseline data on the flora and fauna of the river. The results have shown significant pollution by 'nutrient' pollutants, phosphate and nitrates, reduced plant diversity and low numbers of aquatic invertebrates. The effect of these pollutants is enhanced by the low flow-rate and volume of the river. The nutrient pollutants were predominantly from sewage treatment works effluent, rather than from agricultural run-off.

These results, together with data from the relevant sewage treatment plants, indicate that local waste treatment processes have a significant and deleterious impact on the quality of the Blyth and the flora and fauna it supports. We recommend that priority is given to reducing the impact of sewage effluent on the Blyth by (a) rapid investment and improvement of sewage treatment infrastructure and (b) changing public attitudes to reduce the amount and range of polluting chemicals in domestic effluent, (c) more robust monitoring and enforcement by the Environment Agency.

Introduction

For many years, Wenhaston has had strong community-led groups to care for the environment. By 2021 there were several different groups and it was agreed that an overarching 'umbrella' group be formed, drawing together the various environment groups under a single volunteer 'task force', Wilder Wenhaston (1). Its aim is to enhance the impact of the various groups by improving communication and work load, and in addition, when necessary, to provide specific sub-projects and establish action groups to restore and maintain the quality of specific aspects of the environment within the Parish.

In early 2023, Wilder Wenhaston agreed to set up a sub-group called the River Group in order to assess the state of our local river Blyth and its tributaries in terms of 'river health' i.e. the status of its cleanliness/pollution and its flora and fauna, and to press for restoration of the Blyth to its earlier condition in water quality and aquatic life. The reasons for doing this were two-fold: (a) a visible decline in the state of the Blyth, indicated by algal blooms, excessive duck-weed growth, plastic detritus, (*Fig 1 a,b,c,* respectively), and turbidity of the water;

Fig. 1 (a), (b) and (c) Pollution in the River Blyth

(b) the increasing public awareness (and indignation) of contamination of the UK's waterways from agricultural, industrial and sewage treatment sources. The relevance to East Anglia is illustrated dramatically by a large *Earthwatch* survey **(2)** showing that of the 14 regions of the UK, East Anglia has the most polluted waterways (14th out of 14) – see *Fig. 2*

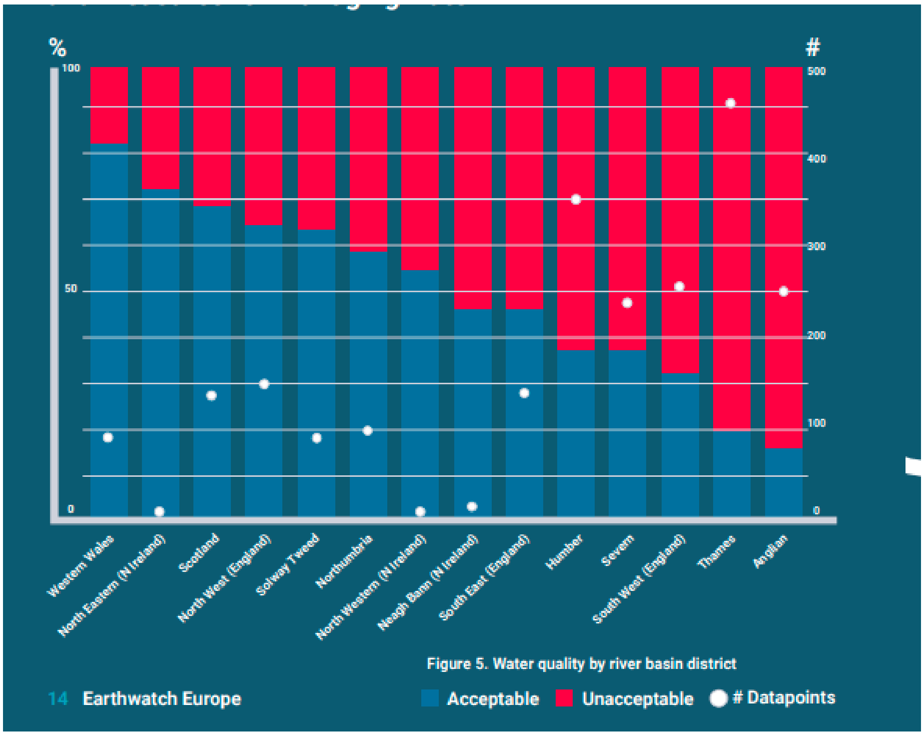


Fig. 2 Quality of UK waterways by region, Earthwatch report 2024 ***(2)***

These fears about potential pollution of the Blyth were confirmed by examination of the **Environment Agency's** (**EA**) analyses recorded over the last 20 years or so, e.g. **(3***)* and *Table 1*, which recorded *'poor'* or *'moderate'* status of many indicators of river health such as phosphate, dissolved oxygen, fish numbers and diversity, and – alarmingly – *'fail'* status for the toxic pollutants mercury, PFOS and PDBEs ('forever' chemicals, mainly fire-retardants). The **EA's** records also showed that their monitoring became very infrequent from 2016 onwards, making an assessment of the Blyth's current status even more important.

	2011	**2019**	**2022**
Dissolved oxygen	Poor	Poor	Poor
pH	High	High	High
Ammonia	High	High	High
Mercury		Fail	
PDBEs & PFOS		Fail	
Phosphate	Poor	Poor	Poor
Fish	Poor	Poor	Poor

Table 1 River Blyth status (Environment Agency ratings)

Human activity affects rivers in many ways – from the physical, such as re-routing and weir construction, to the addition of unwanted waste products, namely *pollution*. Table 2 below shows the range of potential pollutants from 'natural', such as defecation by farmed animals, to a plethora of chemicals disposed of into the environment.

Category	*Examples*
Natural	defecation, dead & decaying organisms
Agriculture	pesticides, fertiliser, manure
Transport	road run-off
Industrial	cleaning agents, process chemicals
Veterinary	pet flea treatments, animal dips
Domestic waste	Treated sewage effluent from STWs
Untreated sewage	Combined Storm Overflows (CSOs)

Table 2 – Potential sources of pollution

Aims of the Project

1. To assess the current status of water quality, flora and fauna of the non-tidal Blyth and local tributaries.
2. To identify strategies to regenerate these watercourses, as far as possible, to their state prior to human activities.

The Blyth

The Blyth (derived from the Old English *blithe* meaning gentle or pleasant) is approx. 20km in length, rising near Laxfield, flowing through Halesworth, and reaching an estuary at Blythburgh. The estuary mouth forms the main harbour area of Southwold. The non tidal stretch is fed by several small streams and two tributaries: the Wenhaston Watercourse flows from Bramfield into the Blyth at Blythburgh, and the New Reach which flows from Chediston, through Halesworth and into the Blyth at Millenium Green, see *Fig. 4.*

The river passes through predominantly agricultural land, and east of Halesworth the river is canalised in places and has a clear flood plain with land being used as grazing marsh. The demarcation between non-tidal and tidal is at Blyford bridge, where there is a sluice creating a weir.

The Blyth has changed in its use over the years. To allow trade from Halesworth to the sea at Southwold, the Blyth Navigation canal – 7 miles long with four locks – (Fig 3) was opened by
1761. In spite of a short-lived prosperity for the navigation in the 1830s, by the 1850s there was little trade on the Blyth, and the last wherry came in about 1906, and the locks were closed in 1934. Subsequently, the loss of navigation has led to a steady reduction in the maintenance of the river.

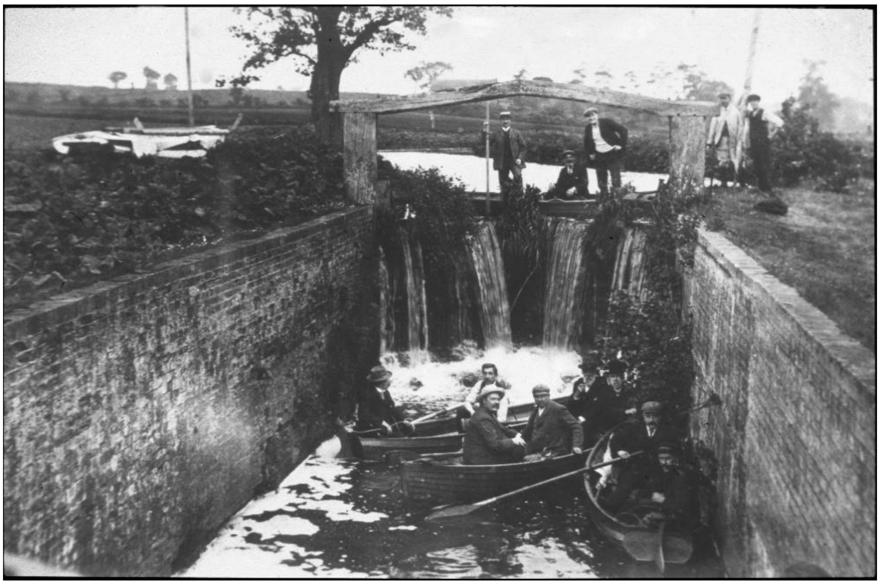


Fig. 3 Lock on the Blyth, early 1900s

Sampling & Analysis

In 2023 a sampling and analysis programme was initially established on a weekly basis to cover a full year, to provide an initial picture, and then reduced to bi-weekly once a database had been established to allow an assessment of seasonal factors if they became apparent. The results have been shared with Anglian Water during feedback meetings of us and other sponsored groups who have conducted similar analysis programmes in their local areas. The intention is for the results of this survey to be the basis of discussion with Anglian Water and others to inform future business plans for pollution management based on knowledge rather than anecdote.

Geographical Scope of Monitoring

We decided to monitor the non-tidal stretch of the Blyth from close to its source near Laxfield, to Blyford Bridge. The reason for this was partly practical – to cover the entire Blyth would exceed the capability of our resources – and secondly, that the condition of the river adjacent to Wenhaston would be governed by upstream factors. We also monitored two relevant tributaries, the Wenhaston Watercourse and the New Reach, see *Fig. 3*.

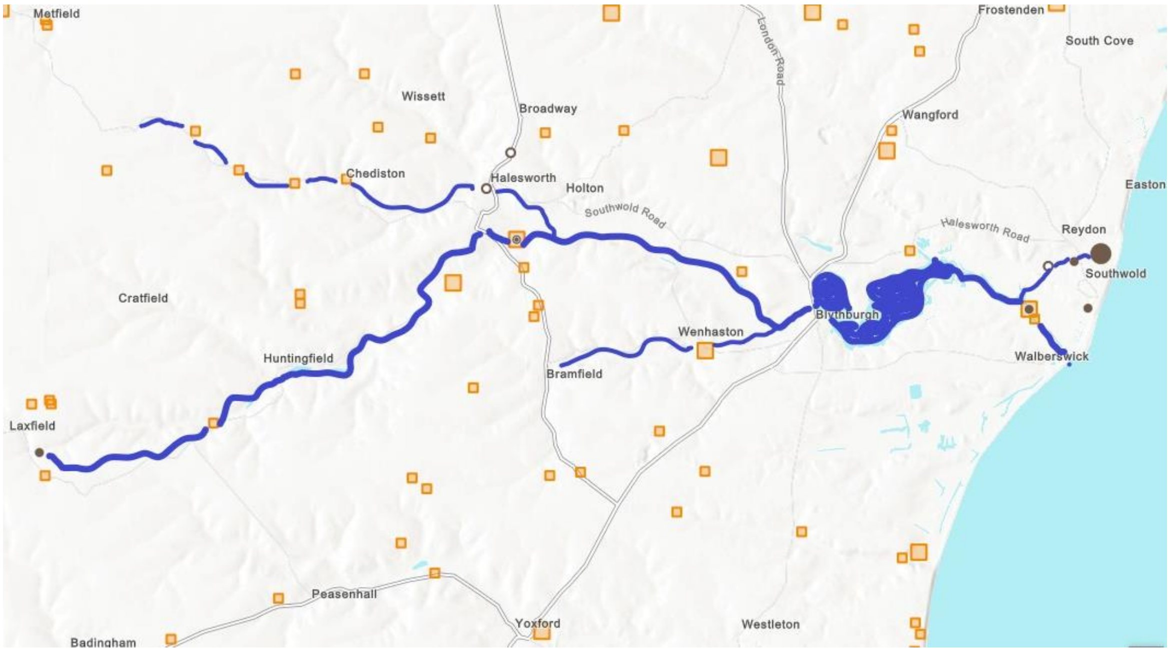


Fig. 4 The Blyth and tributaries

Orange squares indicate location of sewage treatment facilities

Resources

This Project has been sponsored by Anglian Water's Citizen Science 'Get River Positive' initiative, which provided water chemical analysis equipment. Further funding of equipment has been provided by Wilder Wenhaston and personal donations from the team.

Interest and support have also come from the Environment Agency (Eastern Region) and local conservation groups e.g. the Waveney River Trust, The Deben Climate Centre, the Blyth Valley Farm Cluster, and the Halesworth Area Sustainable Hub.

The River Project Team has a range of expertise pertinent to our activities, notably conservation management, plant, bird, mammal and invertebrate identification, analytical chemistry, biochemistry and microbiology.

The volunteers of Wenhaston River Group comprised: Alan Miller, Michael Gower, Tony Gow, Michael Gasper, Nick Amery, Wil Harvey, Roger Claxton, Ann Follows, Jonathan Alder. Further support for sampling and analysis was provided by Gabrielle Maughan, Nick Jarvis, Pauline Taylor, Peter Aiano, Ian Cockburn.

The Flora and Fauna surveys were carried out by the following teams:

1. *Mammals* Suzi Carberry, Ken Derham, Alan Miller and Cathy Wardale
2. *Plants* Anita Andrews, Kate Archibald, Bryn Raven, Neil Farrow, Jan Clements and Richard Atkins
3. *Invertebrates* Kate Archibald, Myles Archibald and Chris Pepper
4. *Birds* Richard Dwelly

Sampling Sites

Initial sample points (*Fig. 5 & Table 3*) were chosen on the stretch of Blyth from above Halesworth Sewage Treatment Works (STW), SP7, downstream to Blyford bridge (SP3). This allowed us to determine the relative contribution of the final effluent (FE, located between SP6 and SP7) to the concentrations of pollutants in the river.

Fig. 5 Sampling points on the Blyth

Sample Point	Location	GPS Northing	GPS Easting
SP3	Blyford Road bridge over Blyth	52.33247	1.55750
SP4	Blyth downstream of confluence of New Reach and Blyth	52.33771	1.51712
SP5	New Reach upstream of confluence of New Reach and Blyth	52.33838	1.51532
SP6	Downstream of Halesworth Sewage plant effluent outlet, upstream of confluence of Blyth and New Reach	52.33765	1.51562
SP7	Approx 50m upstream of Halesworth Sewage plant effluent at right hand side of footpath bridge	52.33544	1.51038
HSO Halesworth Sewage Final Effluent	Adjacent the railway bridge arch on left of path from Industrial Estate	52.33549	1.51043

Table 3 Location of sampling points

Chemical Analyses

Each sample was analysed for the following parameters:

1. pH
2. Temperature C
3. Conductivity uS
4. Total Dissolved Solids TDS mg/L
5. Nitrate (NO_3) mg/L
6. Ammonia (NH_4) mg/L
7. Phosphate (PO_4) mg/L
8. Dissolved Oxygen mg/L

Parameters 1 - 4 were measured using a HM Digital COM-80 TDS/EC/Temp monitor. Parameters 5 – 8 were measured colorimetrically using protocols for the Hach Surface Water Kit # 2559800, Hach Uk Ltd, Manchester.

Microbiological testing

Microbial health of UK waterways has tended to focus on those organisms indicative of pollution – particularly of sewage origin – which can represent a hazard to animal and human health. Most attention has been given to coliform bacteria. Coliforms are abundant in the environment, and form a significant part of the normal gut flora. *Escherichia coli* (*E. coli*) has attracted most attention as it is a useful marker of faecal contamination, and some variants are pathogenic. As an example, the guidelines for Bathing Water Safety stipulate a maximum concentration of E. coli in water samples.

Coliform and E. coli counts were performed using a 'dip-slide' technology where one side is coated with a nutrient agar for coliforms (Total Coliform Count, TTC) and the other side with an agar selective for E. coli: E. coli colonies show as blue, or fluoresce under UV light.

Two sources of dip-slide types were used and found to give comparable results: Camlab TTD005, and Dip-Slides.com Plate Count (PCA) + MacConkey 3 (with MUG).

The slides were immersed in the river samples, taken from approx. 20cm below the river surface, for 2 secs, drained, placed in an airtight tube, then incubated at 30 deg. C for 48h. Colony numbers on each surface were counted by eye, and these numbers extrapolated to give a count expressed as Colony Forming Units (CFU) per 100ml.

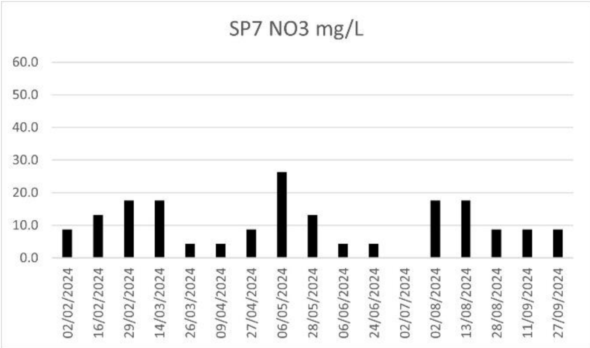
Results

Nitrates

Recent modelling undertaken by the Environment Agency estimates the national loading of nitrates to rivers from diffuse sources (predominantly agriculture) to be 75%, with point sources (predominantly sewage treatment works, STWs) contributing 25%. In the UK, nitrate concentrations are greatest in the drier, arable-dominated southern and eastern areas of England, so it might be expected that in Blyth's rural, agricultural geography would echo this trend.

However, the results of our nitrate analyses (*Fig. 6*) show that concentrations *upstream* from the Halesworth STW averaged 11mg/L whereas *downstream* from the STW this increased almost three-fold to 32mg/L.

This indicates clearly that the majority of nitrates in the non-tidal Blyth derive from sewage treatment. It is not possible to say what proportion of the *upstream* nitrates came from agricultural sources, since there are numerous small private STWs which may be contributing.



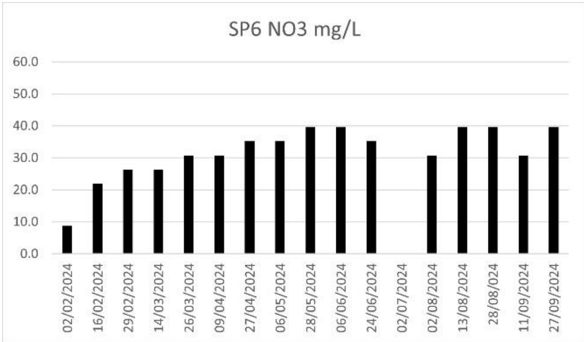


Fig. 6 (a) Upstream from sewage effluent *Fig 6 (b) Downstream from sewage effluent*

These nitrate concentrations in the Blyth are higher than the national river average of 5.5mg/L, (*Table 4*) and, for example, nitrate in the Thames averaging at approximately 7mg/L for the past 40 years (5).

Location	Nitrate (mg/L
Average in England's rivers	5.5
Blyth Upstream Halesworth STW	11.3
Blyth Downstream	32
Average in Blyth (Halesworth - Blyford)	18.5

Table 4 River nitrate concentrations (mg/L)

What effect does this have on the ecology? It is well documented that both phosphates and nitrates lead to **eutrophication** – the excessive growth of algae and plants which, in turn can deprive the water of oxygen. Although phosphate is generally regarded as the main nutrient involved in eutrophication of estuaries and coastal waters, recent studies have demonstrated that nitrate may play more of a role than was previously thought, alongside phosphates, in eutrophication of some freshwaters **(5).**

The Blyth shows clear signs of eutrophication: overgrowth of the more aggressive plants such as nettles and Himalayan Balsam on the banks, and duckweed and algal blooms in the water. A common sight was algal growth on submerged structures – stones, branches etc. – and evidence of 'Sewage fungus' which is actually stringy filaments of several bacterial species - a classic bioindicator of organic pollution in streams and rivers.
Efforts to reduce nitrates in rivers have centred around reduction and more precision in the application of nitrate fertilisers. To reduce nitrate in the Blyth, its removal from sewage effluent at STWs is clearly desirable, but hampered by the process being more complicated and costly than phosphate removal. In 2021, it was estimated the cost of a nitrate removal plant was at least £8million, with annual running costs of £250k **(5).**

Phosphates

Our findings in 2023 and the first 4 months of 2024 showed a high level of phosphates in the Halesworth STW final effluent and downstream.

In April 2024 Anglian Water commissioned phosphate removal equipment to treat the final effluent into the Blyth at Halesworth. *Fig. 7* shows the fall in phosphate concentrations measured in (a) final effluent and (b) river samples downstream from Halesworth sewage treatment works.

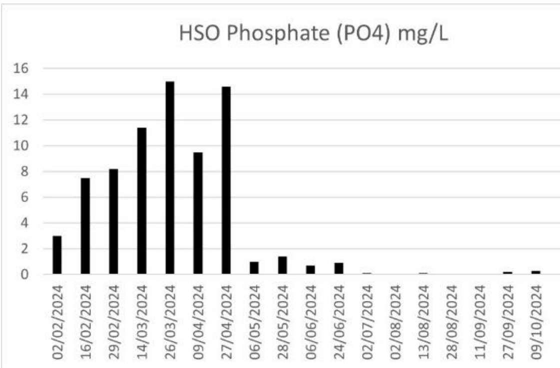


Fig. 7(a) Phosphate in final effluent

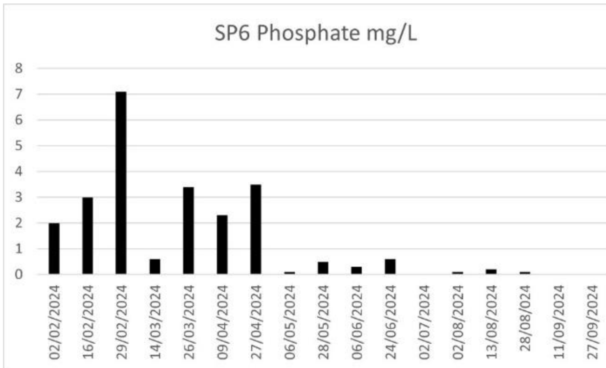


Fig. 7 (b) Phosphate downstream from sewage treatment works

Phosphates are prime 'nutrient pollutants' in waterways, leading to eutrophication, discussed above. Their main sources are run-off from agricultural fertilisers and sewage, where they pass through the treatment process to the final STW effluent unless specifically removed. It is too early to determine the ecological effects of this reduction in phosphate, but initial signs are that growth of duckweed has been significantly reduced.

Microbiology

Results of samples taken at Halesworth upstream (SP7), the STW final effluent and downstream (SP6) are shown in *Fig 8*.

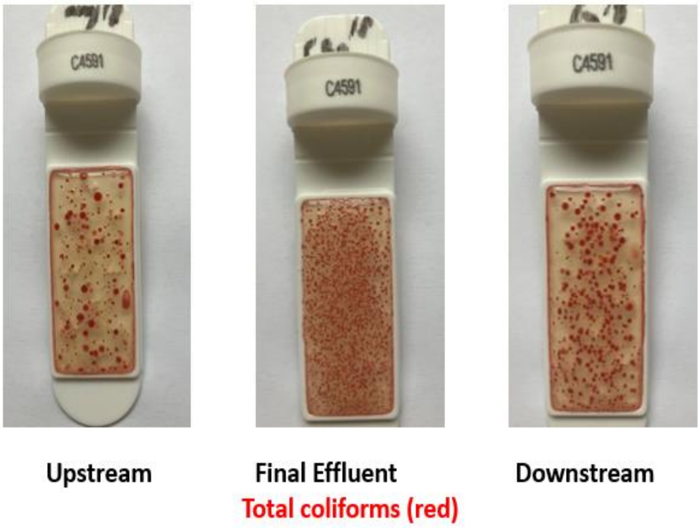


Fig. 8 (a) Total coliforms in river samples at Halesworth STW

Fig. 8 (b) E. coli in river samples at Halesworth STW

1. *Bramfield – Blythburgh tributary*

Similarly high concentrations of coliform bacteria were found at and below the Wenhaston STW on the Bramfield – Blythburgh tributary of the Blyth (Table 5)

Sample location	*E. coli (cfu/ml)*
Thorington	100
Wenhaston STW (Final Effluent)	5000
Wenhaston Brooke Farm (downstream from STW	500

Table 5 E. coli in river samples from the Bramfield – Blythburgh tributary

These results show very high pollution with faecal bacteria downstream from the STW effluent outflows at Halesworth and Wenhaston STWs.

This high bacterial load, predominantly from sewage origin, is unacceptable for two main reasons:

1. The immorality of polluting our waterways with our waste faecal constituents

2. The very real threat to public and animal health posed by pathogenic bacteria notably *E. coli*, but also other species such as *Cryptosporidia*.

Currently, limits on bacterial contamination apply only to designated bathing water areas. There are no such areas on the Blyth, although *E. coli* contamination of the sea at the Denes bathing beach adjacent to Southwold Harbour has led to the installation of tertiary screening with UV at Southwold STW to reduce contamination to unacceptable level. Such screening should be a requirement for all sewage treatment effluents.

We have a responsibility to the environment, both aesthetic (visual and odours) and moral to restore and preserve biodiversity, setting an example by our activities and results which may hopefully encourage more responsibility towards our natural surroundings.

Where does this responsibility fall?

- Ourselves and how we treat our river – superficially (litter) and what we put into our sewage system, e.g. by using less; careful disposal/recycling; changing choices towards 'Eco' products.
- Industry – waste (as above)
- The farming community - to reduce fertiliser and pesticides leaching into the water courses (there has been an encouraging start by the Blyth Valley Farm Cluster)
- Sewage treatment – private and water companies (in our case Anglian Water) by (a) improving infrastructure to eliminate CSO spillages and increasing the capacity of STW's to process efficiently the increased volumes of sewage and run-off which is accompanying climate change and housing development; (b) improving sewage treatment technology to remove harmful components of sewage: nitrates (nitrate removal plant), synthetic chemicals (detergents, surfactants, optical brighteners, pesticides, micro plastics, pharmaceutical metabolites etc); (c) reducing bacterial load (e.g. by tertiary UV screening of final effluent at STWs).

Some of this can be encouraged by publicity and education and increasing the availability and knowledge of eco-friendly products. Where there is little public influence – notably the sewage treatment industry (and less so the farming community), government intervention is critical.

This is where pressure to improve practices can be influenced through local and national politicians. Wilder Wenhaston will be following all these avenues in our quest to improve the ecology of the river Blyth.

Combined Sewage Overflows (CSOs)

Much public criticism of river and lake pollution has been focused on the 'spillage' of untreated sewage via CSOs into the nation's waterways. The Blyth, sadly, is no exception: there are several CSOs from source (Laxfield), Halesworth and Southwold STW's, all of which have seen been notably active (*Table 6*). Although the water companies claim this represents only a small percentage of total sewage, and is diluted by rainfall run-off during rainy periods, the continuation of CSO spillages is unacceptable from an ethical and ecological view.

2020	2021	2022	2023
170,325	**194,594**	**89,514**	**273,163**

Table 6 Total duration of CSO 'spill' hours (Anglian Water data)

The addition of remote monitors on CSOs by the end of 2023 and the availability of near real time spillage data online improves public scrutiny of the extent of the problem. However, this is limited by an absence of data on the volumes of the spillages, i.e. the spillages are recorded as the duration of the spill, not the quantity.

Anglian Water's current target of reducing CSOs by 17% percent by 2030 (one third of the way to the Government's target for 2050) (**6**) is inadequate and we will lobby for an accelerated program of infrastructure replacement.

An example of the failure of our local sewage treatment infrastructure occurred recently when 34mm and 11mm rain fell on October 1st and 2nd 2024, respectively, leading to extended spillages from Combined Sewage Overflows (CSOs) into the Blyth (and other local rivers such as the Waveney) for well over 12 hours. This reflects a lack of resilience in treatment capacity, which is only likely to be exacerbated by housing expansion and heavier rainfall driven by climate change.

River Flow at Sewage Treatment Locations

To determine the relative contribution of STW Final Effluent outflows into the river, two methods were used:

1. Calculation by measurement of river sample conductivity above and below the sewage outfall (i.e. a 'dilution' factor)
2. Direct measurement of river flow rate above and below the outfall by a float method **(4)**: River width (W) and depth (D) were measured by digital infra-red (iPad) and calibrated dip-stick, respectively, and the time (T, sec)) recorded for a float to move 10m downstream. Flow rate = W x D x (10 / T) x 0.85 (correction factor for surface flow disparity).

The mean contribution of the Halesworth FE outflow was 13.1% of the river volume, (range 2.2 – 28.5%) over a 5-month period, August – December 2023.

At Wenhaston STW (on the Thorington – Blythburgh tributary) the FE contribution (sample of 3, November 2023) was 16%.9

Flora and Fauna Surveys

In 2024 a group of volunteers undertook basic baseline surveys of the various plants and organisms that inhabit the river from its source at Laxfield to where it becomes tidal at Blyford. Teams were divided into various interest groups and given instruction on how and what to record. The aim was to give a snapshot as to the ecological status of the river with a view to expanding on the surveys depending on initial results. The surveys all worked 50-100 metres up or down stream of the 14 bridges that cross the river depending on accessibility.

Aquatic invertebrates were surveyed using the ‘kick sample’ system at six bridge locations, and rated using a Biotic scoring system, below, which grades tolerance to pollution.

Animal name	Score	Animal name	Score
Flatworms	4	Other Damselfly nymphs	6
True Worms	1	Dragonfly nymphs	8
Leeches	3	Stonefly nymphs	10
Snails	3	Water Measurer	5
Pea Cockles	3	Pond Skaters	5
Swan Mussels	6	Water Scorpion	5
Freshwater Limpet	8	Greater Water Boatmen	5
Freshwater Crayfish	10	Lesser Water Boatmen	5
Water Hoglouse	3	Alderfly larvae	4
Freshwater Shrimps	6	Cased Caddis larvae	7
Water Mites	4	Caseless Caddis larvae	5
Burrowing Mayfly nymph	10	Water Beetles	5
Flattened Mayfly nymphs	10	Cranefly larvae	5
Swimming Mayfly nymphs	6	Rat-tailed Maggots	3
Demoiselle nymphs	8	Blackfly larvae	5
		Non-biting Midge larvae	2

Biotic scoring: 1 = tolerant to pollution   10 = intolerant to pollution

Plants

With the exception of Heveningham Park every bridge site downstream of Heveningham recorded Himalayan Balsam *Impatiens glandulifera* an alien plant that dominates the riverbanks throughout the summer and smothers native plants. Common nettle *Urtica dioca* was the other most frequently encountered plant on the bank sides, this species indicating nutrient rich conditions. Common reed *Phragmites australis* was found throughout the catchment with stands growing across the river at the Blyford Bridge section. The majority of plant species recorded were common and capable of thriving in a variety of high nutrient wetland habitats. The rarest plants found were Marsh pennywort *Hydrocotyle vulgaris* and Water soldier *Stratiotes aloides* at Walpole, the latter probably the result of introduction from a garden pond.

Duckweed

‘Sewage fungus’

River Blyth choked with Himalayan Balsam

Birds

The survey was limited to areas where birds were easy to observe however, most species expected to inhabit an East Suffolk river were recorded. Mallard were the only duck species seen and there were no breeding records as was the case with mute swan. Grey heron and little egret were frequently encountered and also kingfisher, indicating there is a fish population in the river. Moorhen did breed with young being recorded and the areas with dense stands of reed held reed, sedge and cetti's warblers and reed buntings albeit in small numbers.

Reed warbler

Sedge warbler

Mammals

Two techniques were used: a physical survey walking 100m in either direction from each of the road bridges and using records from trail cameras belonging to the Blyth Otter Group.

Even after such a wet winter the river course from Laxfield to Heveningham was for most of the distance dry; the amount of bank erosion indicated the flashiness of the water the system carries at that point and with increasing storminess this is likely to become the norm. Also, the ever-present Himalayan balsam, which leave banks bare in winter and more susceptible to erosion, is the other major factor. This also results in a lack of diverse vegetation, which mammals use for food and cover. This lack of vegetation cover and lack of water meant the upstream stretch is totally unsuitable for otters and water voles. However, from Heveningham to Blyford there was evidence of otters and water voles at each bridge section. Otters were tracked either through video footage or the presence of field signs footprints, spraint etc. Water voles were identified by field signs either latrines or feeding stations. Interestingly the area adjacent to Blyford bridge was flooded for most of the winter and the first surveys drew a blank; however, voles were found in adjacent ditches some distance from the river and by the time of the last survey they were found to have moved back to the river.

Brown rats as to be expected were recorded at most trail camera locations and a single stoat appeared on one video clip.

Water vole

European otter

Aquatic invertebrates & Fish

Aquatic invertebrates were sampled at six bridge locations and only 14 different species were found and identified, many to just a family. However, only freshwater shrimps, pea cockles and non-biting midge larvae were found in any numbers. Only freshwater shrimps and a single caddis fly larvae were found in the vicinity of the sewage outfall. Fig. 9 shows the Biotic scores at the sample sites at three time points through the year. These clearly show that the specious range is limited compared with Biotic scores associated with cleaner rivers.

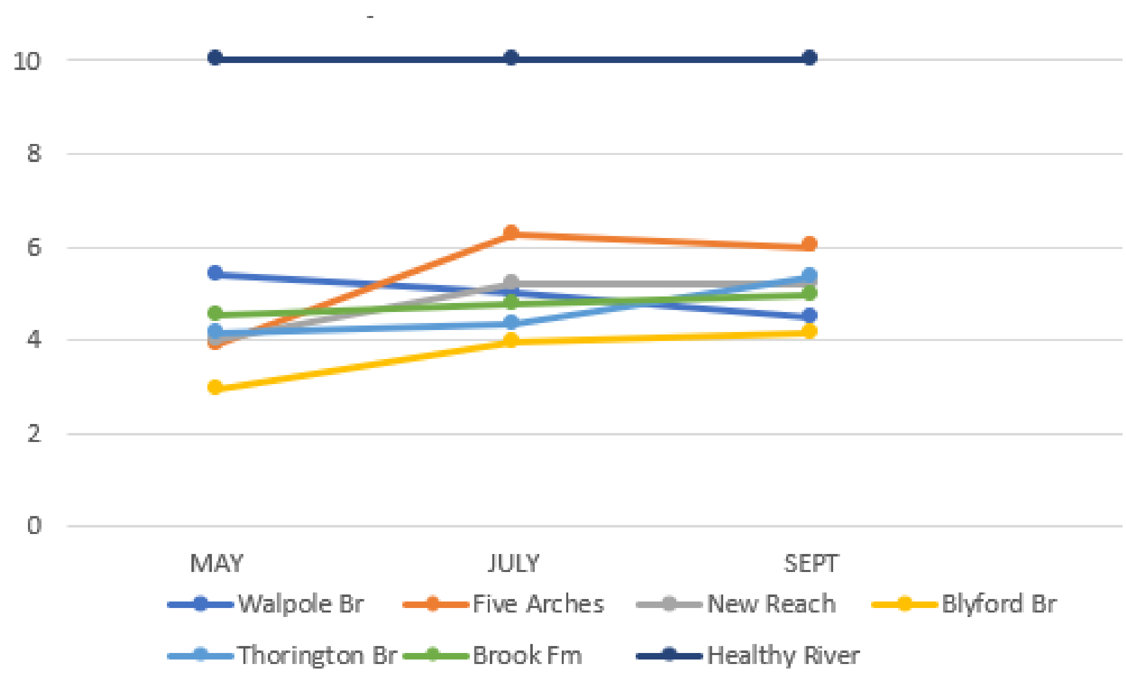


Fig. 9 Biotic scores of invertebrates in the Blyth

No fish were caught for identification, however recent Environmental DNA (eDNA) carried out by LionLInk downstream of the Blyford Bridge recorded 6 species of freshwater fish, common bleak, roach, rudd, gudgeon and 3 and 9-spined sticklebacks.

Freshwater shrimp

Ramshorn snail

The Blyth is a small river with, for most of the year very low flow, but with increased sporadic heavy rainfall during winter it suffers from bank erosion particularly in the upstream sections. The infestation of Himalayan balsam for most of its length is another cause of erosion. The high concentrations of nutrients in the water course from sewage outfalls and agriculture greatly reduce the plant diversity and the low numbers of aquatic invertebrates also points to problems within the river.

The majority of the surveyors were not trained ecologists; however, the exercise was for many an enjoyable learning experience and one which will further their enjoyment and appreciation of the countryside.

Conclusion and Recommendations

In some ways the Blyth is a victim of its own geography – a slow flowing, small, lowland river. This makes it much more vulnerable to pollutants than faster flowing rivers: the dilution of pollutants and their removal by natural flow to the sea are inevitably impaired and will cause increased pollution levels.

The message from this basic fact is that we must be much more careful about what we dispose of into the river Blyth.

In summary, the Blyth is a slow-flowing river which suffers from significant pollution of which sewage treatment effluent is a major factor, with contribution from agriculture much less so. Stress on the river ecosystem from pollutants is likely to increase with the additional housing and light industry. Unless there are major improvements to our waste management infrastructure, and a reduction in the nature and amounts of domestic chemicals disposed of into sewage, there will be increased stress on the Blyth and its tributaries – especially with a rapidly expanding local population and house-building programme.

Wilder Wenhaston will therefore be aiming for:

Practical action

- Continued pollutant testing & wildlife surveys plus add turbidity testing (the river is heavily silt laden and this is from run off from fields)
- Himalayan Balsam control along whole catchment – project (have started volunteer list of people willing to help)
- Distribute report to all 95 Wilder Wenhaston supporters, parish councils, local councils, local councillors and MPs plus the farming community
- Collaborate with joint Deben/Blyth/Waveney 3 Rivers Project with Suffolk University
- Increase public awareness of these issues through local press and village newsletters

Political action

- Campaign for tighter EA and OFWAT regulation
- Campaign for infrastructure improvement by Anglian Water
- Pressure MP’s and local councillors

References

(1) https://wenhastonmells-pc.gov.uk/village-life/environmental-groups/wilder-wenhaston/wilder-wenhaston
(2) https://earthwatch.org.uk/wp-content/uploads/2024/10/Great-UK-WaterBlitz-report-Sept24_WEB.pdf
(3) https://environment.data.gov.uk/catchment-planning/WaterBody/GB105035046290
(4) http://azdeq.gov/CitizenScience
(5) 'Nitrates: Challenges for the water environment'. Environment Agency, 2021
(6) 'Action on Storm Overflows: Our plan to 2050' Anglian Water, www.anglianwater.com/

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https://wenhastonmells-pc.gov.uk/village-life/environmental-groups/wilder-wenhaston/wilder-wenhaston