



# Partnering on river health in the Deben – Get River Positive

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Director of Quality and Environment, Anglian Water Services

24<sup>th</sup> April 2024

















## Our strategic goals and ambitions



#### **Our Strategic Direction Statement**

Our 25-year strategic ambitions are shaped to deliver on our purpose and drive us to achieve more, for everyone.



By 2030, be a net zero carbon business and reduce the carbon in building and maintaining our assets by 70%.



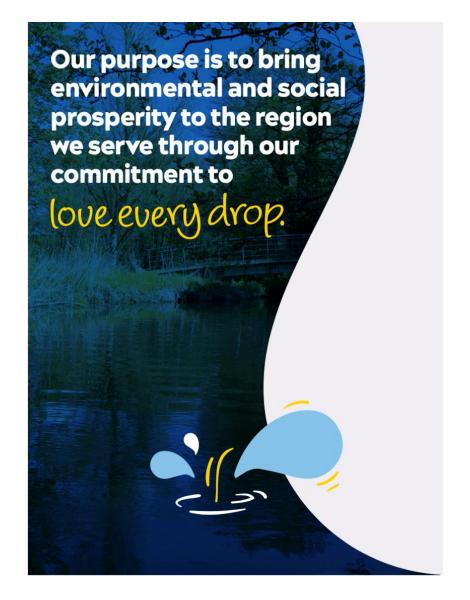
Work with others to achieve significant improvement in ecological quality across our catchments.



Make the **East of England resilient** to the risks of drought and flooding.



Enable sustainable economic and housing growth in the UK's fastest growing region.



## **Our Get River Positive pledges**



Anglian Water and Severn
Trent have jointly
committed to five key
pledges which form
the Get River Positive plan

We have both committed to...

Ensure storm overflows and sewage treatment works and abstraction do not harm rivers

Support others to improve and care for rivers

Create more opportunities for everyone to enjoy our regions rivers

Enhance our rivers and create new habitats for wildlife to thrive

Be open and transparent about our performance and plans Business driven
delivery through strategic
plans such as WRMP,
WINEP and other AW
projects and activities

Community and partnership driven delivery through GRP grants





# Investing in the environment





£31 million invested in WINEP schemes in 2023. Our WINEP is the largest in our industry – worth £811 million.

100%

Event Duration Monitors fitted across storm overflows across our region.

118

storm overflow permits were surrendered in 2023.

#### £50 million

additional investment announced to reach our less than 20 spills per overflow by 2025 commitment.

On track for the biggest percentage reduction in abstraction in the sector by 2025.



3 new bathing waters designated in our region in 2023 with a further three in consideration.

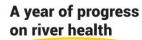


#### £7 million

of investment from shareholders enabled us to achieve over £8.5 million in match funding

We're investing in 53 projects, with 44 primary beneficiaries.





2023







# More than 550km of river improved since 2020

with an expected 1,900km forecast for 2025 through a programme of work including over 100 catchment investigations, surface and groundwater quality restorations and phosphorus removal.

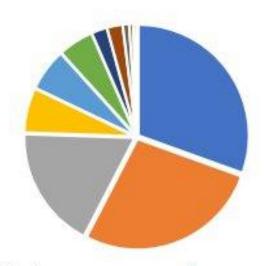


World's first ecological digital twin is live with partners Microsoft and Avanade.

## What's the problem we're trying to solve?



RNAGs by Sector



- Agriculture and rural land management
- Water Industry
- Urban and transport
- Industry
- Domestic General Public
- Navigation

- No sector responsible
- Sector under investigation
- Local and Central Government
- Other
- Recreation
- Mining and quarrying





















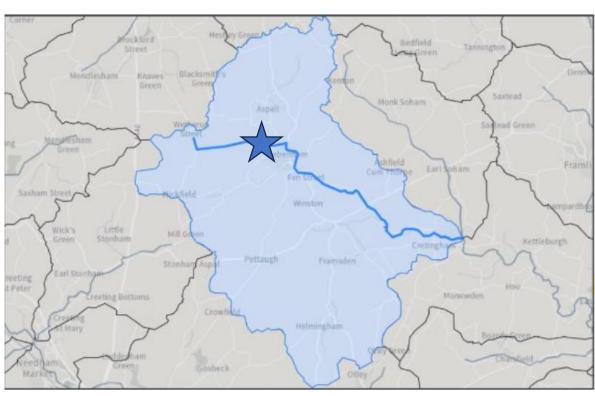












# Reasons for not achieving good (RNAG) and reasons for deterioration (RFD)

All reasons (RFDs and RNAGs) attributed to the classification elements in this water body

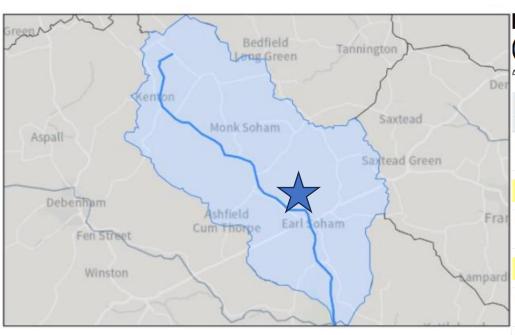
| Reason<br>Type | SWMI  | Activity  | Category                              | Classification Element                | More information |
|----------------|---|---|---------------------------------------|---------------------------------------|------------------|
| RNAG           | Point source  | Sewage discharge (continuous)                     | Water Industry                        | Phosphate                             | Details          |
| RNAG           | measures delivered to address reason, awaiting recovery | Not applicable                                    | No sector responsible                 | Polybrominated diphenyl ethers (PBDE) | Details          |
| RNAG           | Physical modification                                   | Other (not in list, must add details in comments) | Local and Central<br>Government       | Mitigation Measures<br>Assessment     | Details          |
| RNAG           | Diffuse source  | Poor nutrient management                          | Agriculture and rural land management | Fish                                  | Details          |
| RNAG           | Point source  | Sewage discharge (continuous)                     | Water Industry                        | Fish                                  | Details          |
| RNAG           | Diffuse source  | Poor nutrient management                          | Agriculture and rural land management | Phosphate                             | Details          |
| RNAG           | measures delivered to address reason, awaiting recovery | Not applicable                                    | No sector responsible                 | Mercury and Its<br>Compounds          | Details          |
| RNAG           | Diffuse source  | Poor Livestock Management                         | Agriculture and rural land management | Phosphate                             | Details          |



Debenham WRC – new P reduction scheme due to be commissioned this summer – new P limit will be 0.5 mg/l

### **Earl Soham Watercourse Water Body**





# Reasons for not achieving good (RNAG) and reasons for deterioration (RFD)

All reasons (RFDs and RNAGs) attributed to the classification elements in this water body.

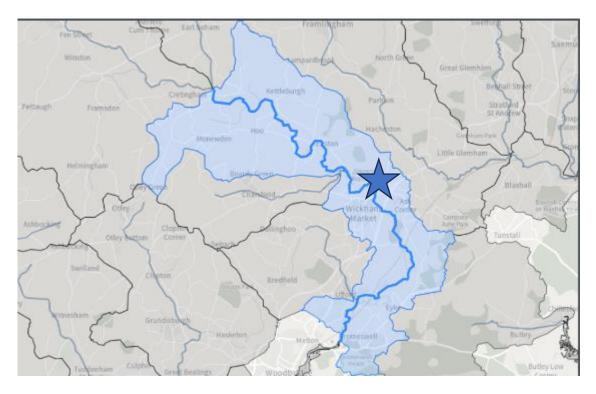
|     | Reason<br>Type | SWMI  | Activity                      | Category                              | Classification Element                | More information |
|-----|----------------|---|-------------------------------|---------------------------------------|---------------------------------------|------------------|
|     | RNAG           | measures delivered to address reason, awaiting recovery | Not applicable                | No sector responsible                 | Polybrominated diphenyl ethers (PBDE) | Details          |
|     | RNAG           | Point source  | Sewage discharge (continuous) | Water Industry                        | Dissolved oxygen                      | Details          |
| ar  | RNAG           | Diffuse source  | Poor Livestock<br>Management  | Agriculture and rural land management | Phosphate                             | Details          |
| rdi | RNAG           | Point source  | Sewage discharge (continuous) | Water Industry                        | Phosphate                             | Details          |
|     | RNAG           | Diffuse source  | Poor nutrient management      | Agriculture and rural land management | Phosphate                             | Details          |
|     | RNAG           | Diffuse source  | Poor soil management          | Agriculture and rural land management | Invertebrates                         | Details          |
|     | RNAG           | Natural   | Drought                       | No sector responsible                 | Invertebrates                         | Details          |
|     | RNAG           | Diffuse source  | Poor soil management          | Agriculture and rural land management | Dissolved oxygen                      | Details          |
|     | RNAG           | Flow  | Low Flow (not drought)        | No sector responsible                 | Dissolved oxygen                      | Details          |
|     | RNAG           | measures delivered to address reason, awaiting recovery | Not applicable                | No sector responsible                 | Mercury and Its Compounds             | Details          |



Earl Soham WRC – new P reduction scheme due to be commissioned this summer – new P limit will be 0.9 mg/l



# Deben (u/s Brandeston Bridge- Melton Water Body





Wickham Market WRC – new P reduction scheme due to be commissioned this summer – new P limit will be 1.0 mg/l

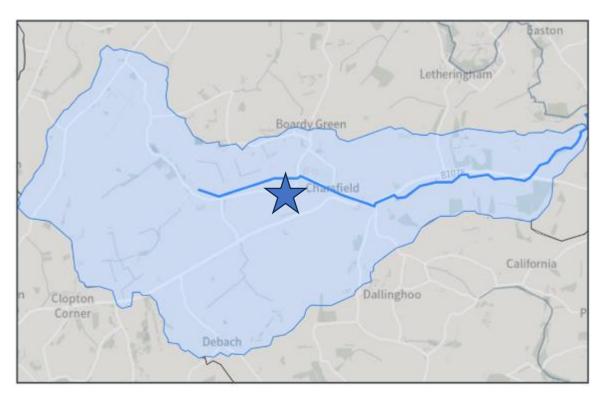
# Reasons for not achieving good (RNAG) and reasons for deterioration (RFD)

All reasons (RFDs and RNAGs) attributed to the classification elements in this water body.

| Reason<br>Type  | SWMI  | Activity  | Category                              | Classification Element                | More information |
|---|---|---|---------------------------------------|---------------------------------------|------------------|
|   |   | Other (not in list, must add details in comments)   | Local and Central<br>Government       | Mitigation Measures<br>Assessment     | Details          |
| RNAG Diffuse source   |   | Poor Livestock Management                           | Agriculture and rural land management | Phosphate                             | Details          |
| RNAG  | Diffuse source  | Poor nutrient management                            | Agriculture and rural land management | Phosphate                             | Details          |
| RNAG  | Point source  | Sewage discharge (continuous)                       | Water Industry                        | Phosphate                             | Details          |
| RNAG  | Diffuse source  | Riparian/in-river activities (inc bankside erosion) | Agriculture and rural land management | Phosphate                             | Details          |
| RNAG  | Unknown (pending investigation)                         | Unknown (pending investigation)                     | Sector under investigation            | Perfluorooctane<br>sulphonate (PFOS)  | Details          |
| RNAG measures delivered to address Not appreason, awaiting recovery |   | Not applicable                                      | No sector responsible                 | Mercury and Its<br>Compounds          | Details          |
| RNAG  | measures delivered to address reason, awaiting recovery | Not applicable                                      | No sector responsible                 | Polybrominated diphenyl ethers (PBDE) | Details          |

#### **Potsford Brook Water body**





### Reasons for not achieving good (RNAG) and reasons for deterioration (RFD)

All reasons (RFDs and RNAGs) attributed to the classification elements in this water body.

| Reason<br>Type | SWMI  | Activity       | Category              | Classification Element                | More information |
|----------------|---|----------------|-----------------------|---------------------------------------|------------------|
| RNAG           | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Polybrominated diphenyl ethers (PBDE) | Details          |
| RNAG           | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Mercury and Its Compounds             | Details          |



Charsfield WRC – new P reduction scheme due to be commissioned this summer – new P limit will be 4 mg/l



#### **Storm overflows – Event Duration Monitor data**

| Site                         | Storm Spills (2022) | Duration (2022) | Storm Spills (2023) | Duration (2023) |
|------------------------------|---------------------|-----------------|---------------------|-----------------|
| DEBENHAM STW                 | 3                   | 7.5             | 7                   | 88.2            |
| WICKHAM MARKET-BRIDGE THE SP | N/a                 | N/a             | 2                   | 13.75           |
| WICKHAM MARKET STW           | 23                  | 299.25          | 10                  | 150.5           |
| WOODBRIDGE-DEBEN RD OV       | 33                  | 18.63           | 40                  | 22.3            |
| WOODBRIDGE-QUAYSIDE TPS      | 13                  | 10.27           | 42                  | 136.43          |
| WOODBRIDGE-STATION RD CSO    | 15                  | 19.96           | 20                  | 46.57           |
| WOODBRIDGE-MARTLESHAM        | 0                   | 0               | 11                  | 69.9            |
| CREEK FM STW                 | U                   |                 |                     | 09.9            |
| MARTLESHAM M BRIDGE SP       | 1                   | 0.06            | 2                   | 0.1             |



Wickham Market WRC – additional storm water storage recently provided (207 m3, up from 127.5 m3)



# Our Investment Plans for 2025-30

**Deben Estuary**: A further £16.9 million for stormwater storage and sustainable urban drainage systems to reduce discharges from combined stormwater overflows in Woodbridge.

**Melton and Woodbridge**: £5 million for UV disinfection to enhance water quality in the bathing areas of the River Deben.

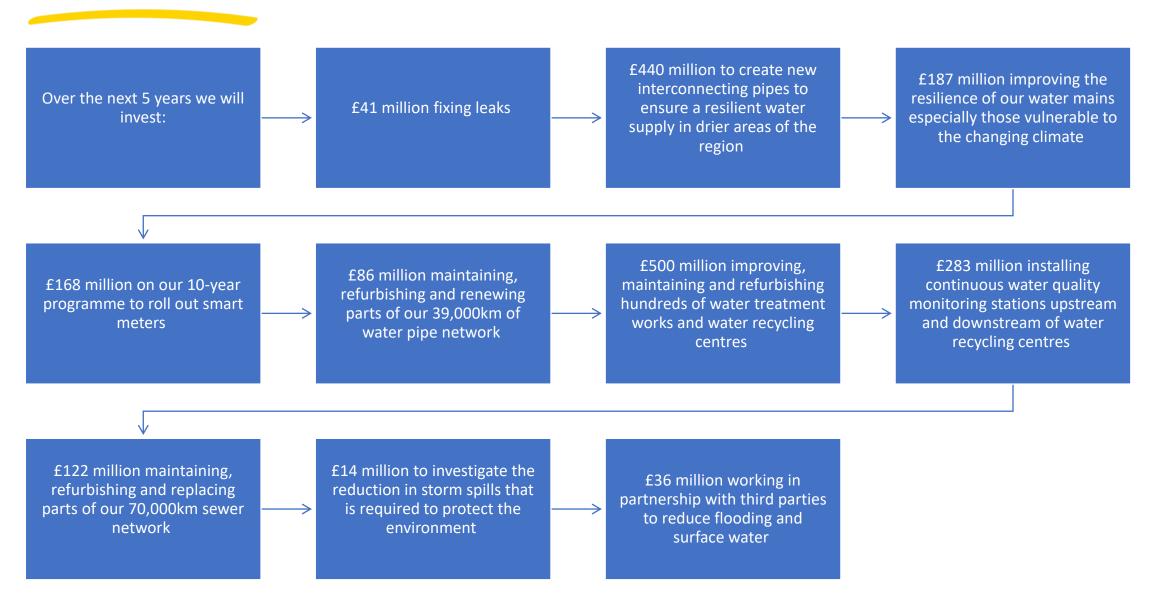
**Rendlesham Park and Wangford**: £3.6 million to reduce phosphorus levels in treated water, preventing algal growth harmful to fish and plant life.

**River Deben and River Fromus**: £1 million to increase stormwater storage at Kirton Drunkards Lane and Benhall Water Recycling Centres.

**Newbourne Springs SSSI**: £196k for a boardwalk and fencing to protect habitats, enhance public access, and enable conservation grazing.



#### **Additional investment**



## Working with farmers and landowners in the Deben



#### **Cover and Companion Crop subsidy**

- 2023 = 2nd year
- £250 off cover crop seed ordered via Oakbank
- Min of 10ha
- 100 Growers supported in trying for first time/expanding area or experiencing different mix

#### **Farmer Training Grant**

- Raise knowledge of practices linked to potential raw water quality protection/improvement
- One grant of 50% of the training/event cost (up to £500) per farm business

2023 = 243 days of training supported, influencing 57,972ha

of land within the Anglian Region







#### **Farm Clusters**

- 2024 = 1<sup>st</sup> year with 21 applications
- £15,000/year to assist new groups for 2 years
- Facilitation can be included alongside projects
- Other interested partners required
- Group must be self sustaining after two years
- 11 applications supported

 Upper Deben Farm Cluster Success led by Mariah Ballam



#### Citizen Science Pilot Programme

Our Citizen Science pilot project is helping us to better understand and safeguard water courses in our region. Launched in 2023, our pilot program has seen us supply groups across our region with water surface testing kits from Hach. These kits, designed to measure key indicators like pH, temperature, Ammonia, Nitrates, Free and Total Chlorine, Dissolved Oxygen, and Phosphate, empower communities to self-monitor safely and accurately.

As the pilot phase progresses, we are accumulating a rich bank of data to inform decision-making in collaboration with communities.







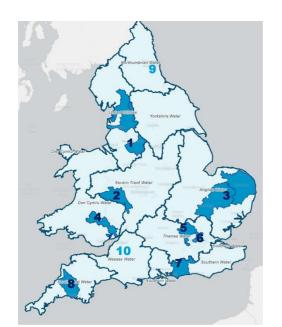




# CaSTCo Mission Statement

'Communities to be included in collecting and sharing river catchment data so that we all have better understanding and achieve better management of our rivers'.

CaSTCo is a 3 year Ofwat Innovation Project involving 24 partners including water companies, Rivers Trust, CaBA partners, Environment Agency, Specialist advisors and Universities.



Collaborative project to co-create a national framework focussed on citizen science and low-cost monitoring to generate a body of evidence regarding catchment health enabling a standardised approach that can be applied in a range of situations.

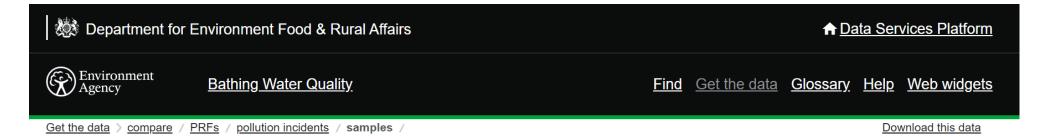
To demonstrate the value of this framework, the approach will be piloted in 8 test catchments across partnering water company regions. Anglian Water have specified The Lark and the Wensum catchments.

The demonstrators will assess the effectiveness of key procedures for data collection, integration and management as well as assessing that the anticipated benefits are delivered.

Watch and find out more with the launch video Rivers Trust CaSTCo MASTER1 on Vimeo

# Waldringfield Bathing Water - 2023

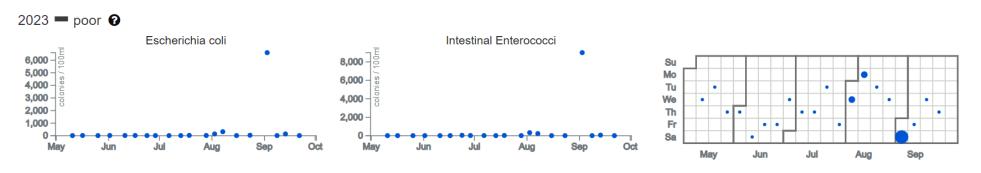




#### Water samples history: River Deben Estuary, Waldringfield

1 See the help page for additional information on interpreting these charts.

#### River Deben Estuary, Waldringfield





20 samples taken by the EA in 2023. 17 were 'Excellent' Quality and 3 were 'Poor'

# Waldringfield Bathing Water - 2023





**Bathing Water Quality** 

#### **Investigations statement**

The Environment Agency can use a DNA tracing technique to identify whether sources of pollution are human or non-human. Analysis of three samples taken in 2023 showed clear evidence of faecal pollution from seabirds; human signals possibly from non-faecal waste sources e.g., misconnections from washing machines, showers, hand basins and faecal waste sources; possible signal from pigs and clear evidence of dog DNA. The DNA technique cannot yet be used to 'source apportion' and DNA markers are not yet available for all species (for example seals).

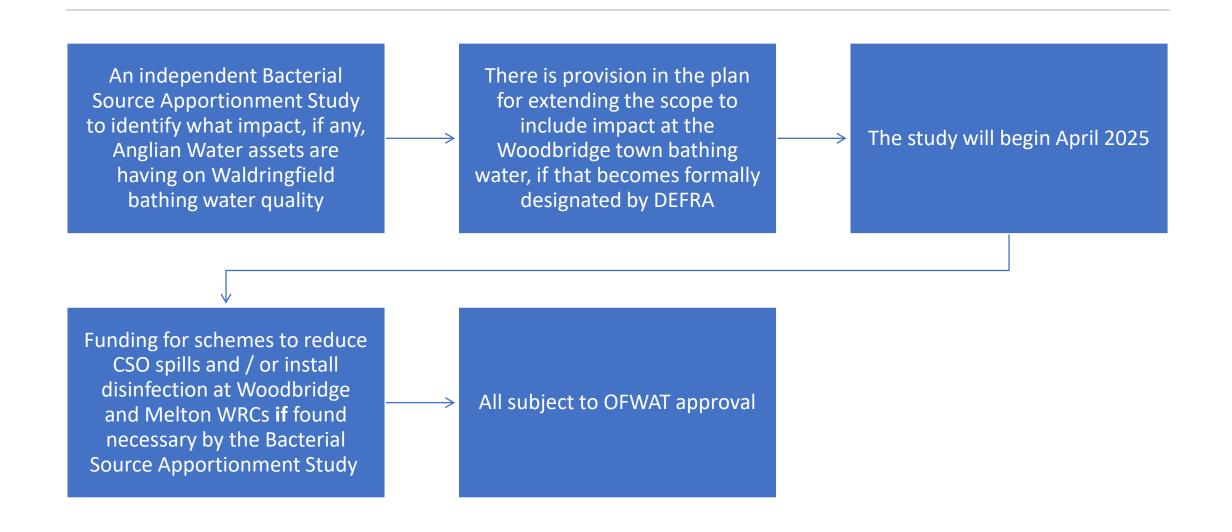
The high sample taken in September 2023 was taken on an astronomical high tide and parts of the shoreline not usually submerged were covered by tide. Bacteria that would not normally enter the watercourse would have been washed in. It is possible this bathing water will be affected by high tides, but the Environment Agency will continue to investigate this.

#### **Visible pollution**

Environment Agency samplers make observations of litter present on the beach at every visit, this includes assessments of sewage debris, litter and tar. At River Deben Estuary, Waldringfield for the one year (2023) assessment period where data is available, sewage debris was not noted at this site. Litter was not assessed as being sufficient to be objectionable, but was observed as being present on 50% of visits. Tarry residue was not noted at this site.

# **Bathing Water AMP8 investment plans**





## **Get River Positive partnerships**

GRP budget committed to projects £5,212,860 Match funding generated (so far...) £8,592,816

#### Our partners include:























NENE RIVERS TRUST

























