

Mill & Bradfords Brook Desk Study for 1st Catchment Partnership

James Hubbard

Project Officer Action for
the River Kennet



Supported by



Contents

Slide Structure

- Targets from Initial Stakeholder Consultation
- Desk Study
 - Landscape Mapping
 - Main River and Reach definitions
 - Hydrology & Geology
 - Land use
 - Priority Habitat creation and restoration
 - Progression to walkover
 - Water Quality
 - Designations, WFD classification & Reasons for Not Achieving Good
 - Predicted sources of nutrients from modelling
 - Environmental Discharge Monitoring from Sewage Treatment Works
 - Thames Water WINEP locations
 - Freshwater Watch water quality testing
 - Predicted surface runoff pathways from river to land & land use
 - Ecology
 - Water Framework Directive Ecology
 - Riverfly Monitoring planned for local citizen science
 - Barriers to fish passage
 - Water vole presence and American Mink proximity
 - Invasive Non Native Species present & Public record collection
 - Priority species & Local Biodiversity Action Plan
- Partner Input
 - Environment Agency
 - Wallingford Restoration Group
 - Thames Water



Supported by



Introduction

Report from Initial Stakeholder Consultation

The Mill Brook Community Consultation and Catchment Approach | Mend the Gap

What is special or important to you about the Mill Brook?

- Value of chalk stream habitat
- Species of interest - otter, brown trout, water vole, kingfisher, mayfly, black poplar
- History and heritage – e.g., agriculture, mills and archaeological features

Supported by



Introduction

Report from Initial Stakeholder Consultation

What would you like to see happen out of this consultation event/group of people?

- Agreed vision & list of priorities through a co-developed catchment action plan.
- Projects focused on local issues on sub-catchment scale with concepts developed to the point where funding can be sought
 - i. Water quality
 - ii. Slowing the flow & natural flood management interventions
 - iii. Citizen science baselining
 - iv. Public access & education opportunities.
- Cohesive **multi-stakeholder approach** to managing water within the sub-catchment... with **one organisation taking leadership** over future development.
- A drive for action and **securing further funding** to continue the momentum in this sub-catchment.
- Representation of the sub-catchment at relevant stakeholder meetings – e.g., Thames Water, South Oxfordshire District Council, Parish Councils.



Supported by



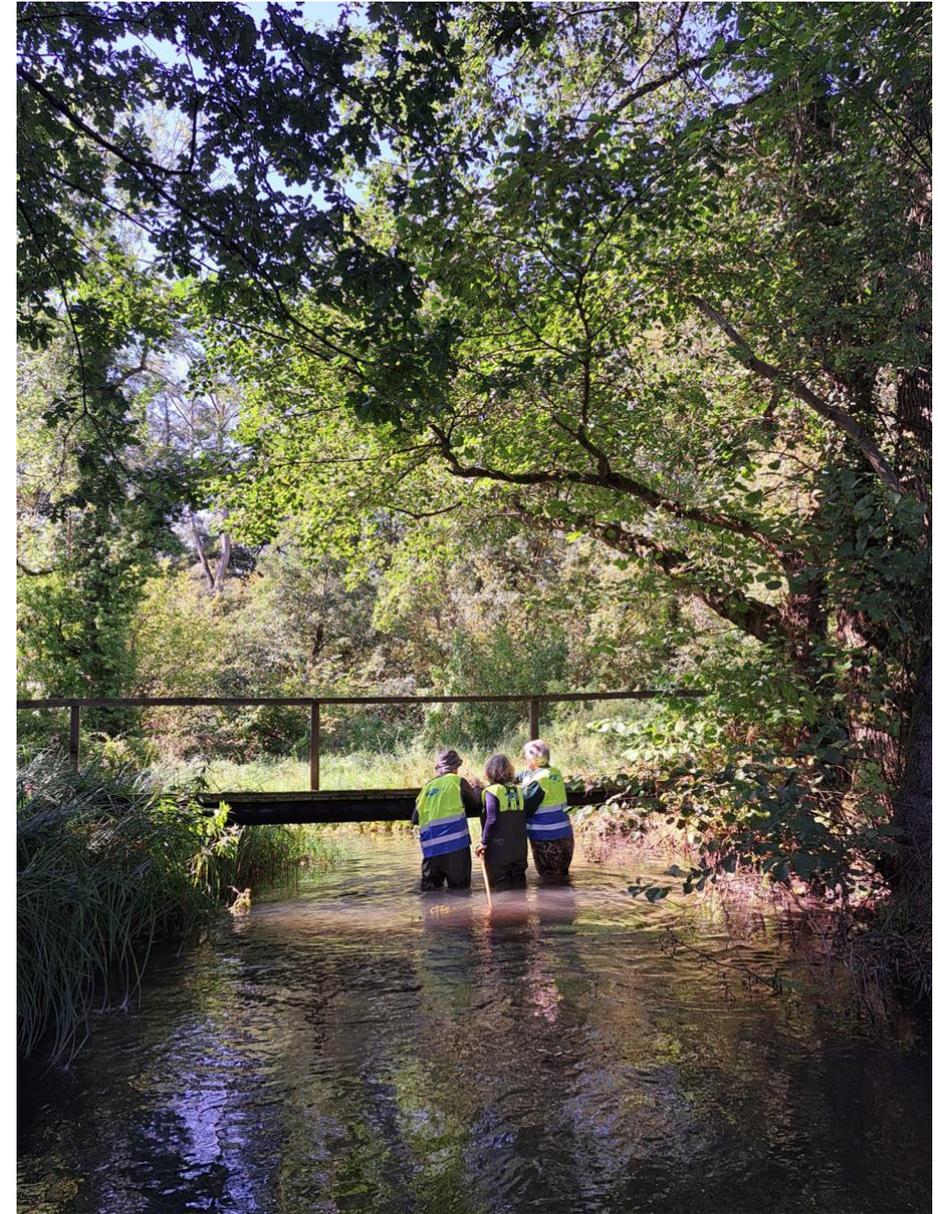
Action for the River Kennet

Introduction

Report from Initial Stakeholder Consultation

What data do we need to collect to evidence and address these priorities and how?

- Baseline water quality data and monitor diffuse and point-source pollution sources through **citizen science**
- Water levels
- Land use mapping
- Mapping of **public access and landownership**
- Mapping of **paleo channels**
- Suggestion to link up Cholsey and Mill Brook sub-catchments with this approach



Desk Study: Landscape Mapping

Summary

- Main River and Reach definitions
- Hydrology & Geology
- Land use
- Priority Habitat creation and restoration
- Floodplain connectivity

Landscape Mapping

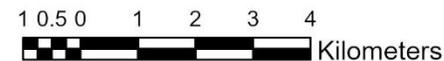
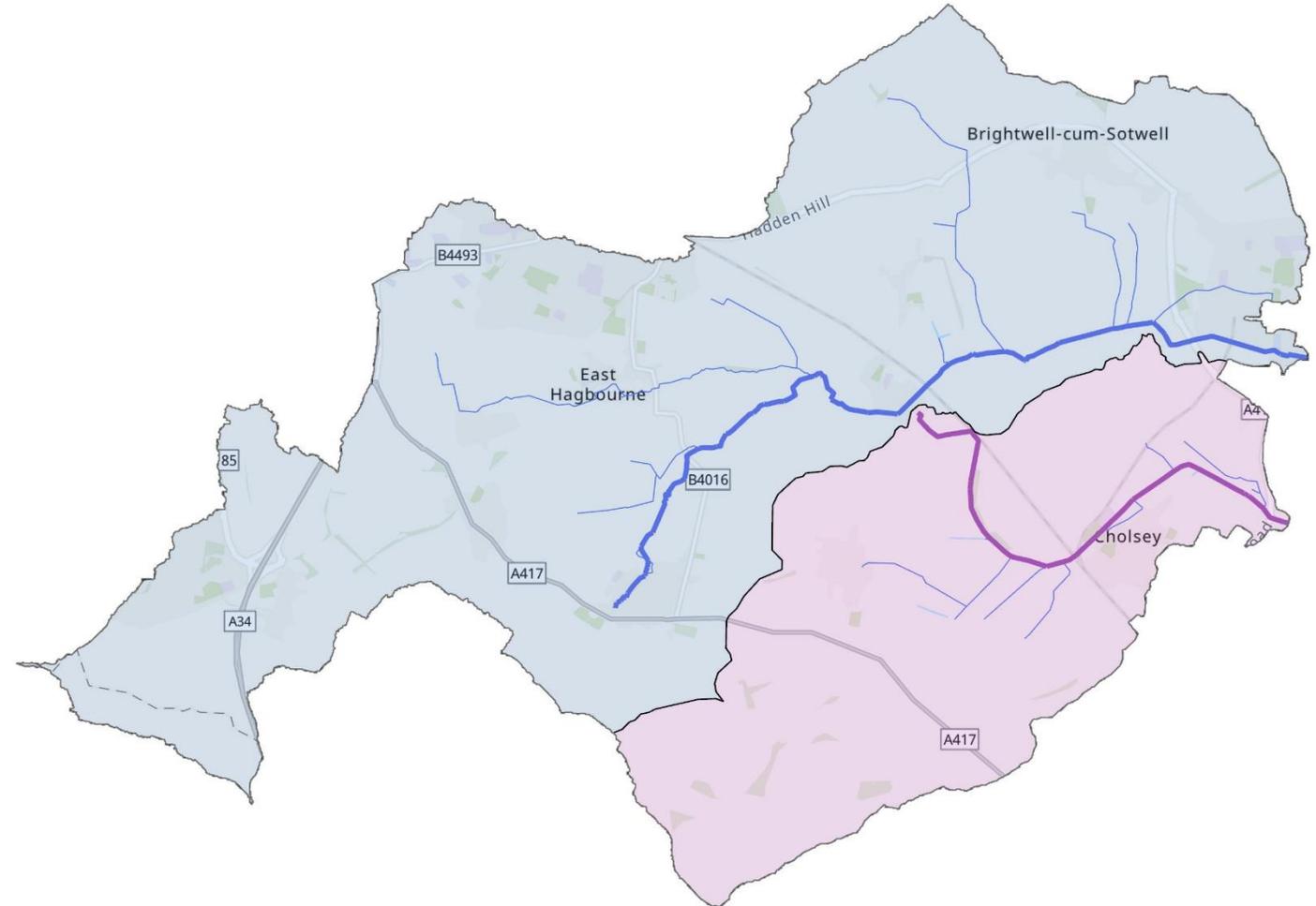
Water Framework Directive Main River

Legend

- Mill and Bradfords Brook WFD Waterbody polygons
- Mill and Bradfords Brook WFD Waterbody lines
- WFD River Water Bodies Cycle 3
- WFD River Water Body Catchments Cycle 3

CaBA Chalk Streams

- Perennial
- Winterbourne
- Near Perennial
- Occasionally wet



Includes data from Open River Network

Data citation: Hornby, D.D., Januchowski_Hartley, S. R., Naura, M., Hill, C. T., (2023) OpenRiversNetwork: a topologically connected river network for Great Britain. GeoData, University of Southampton / River Restoration Centre, University of Cranfield, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Landscape Mapping

Historic flow

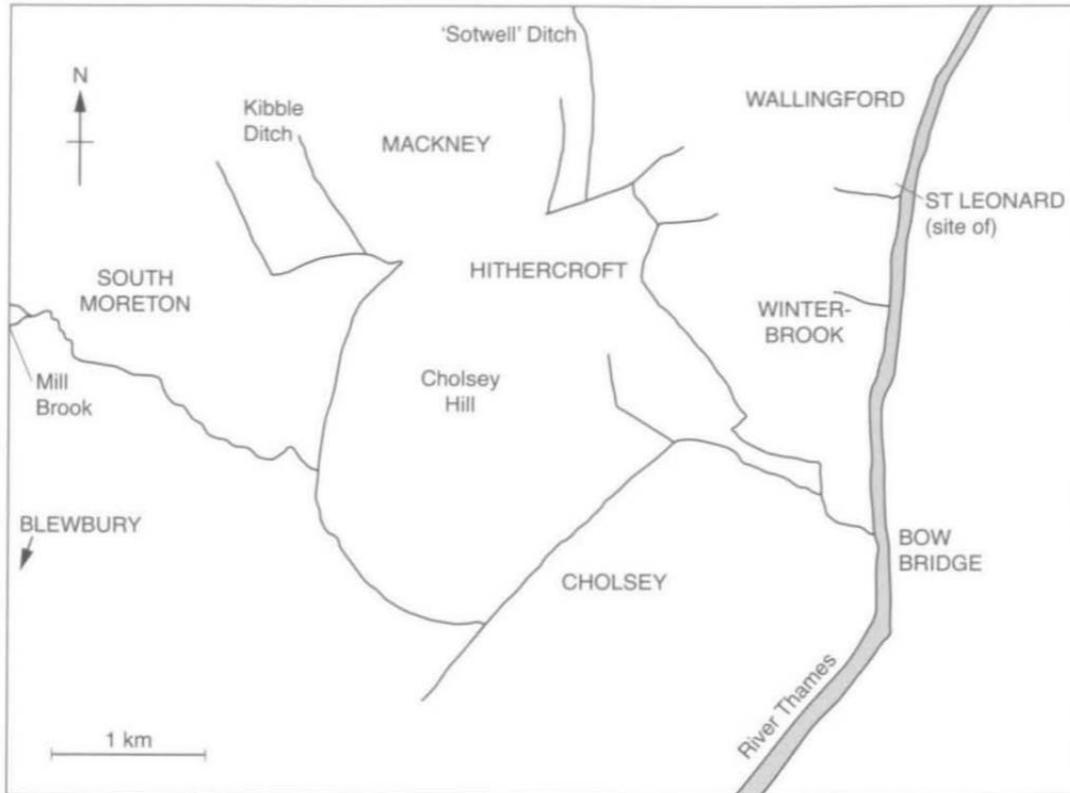


Fig. 2. Illustrative diagram of natural drainage before man-made captures.

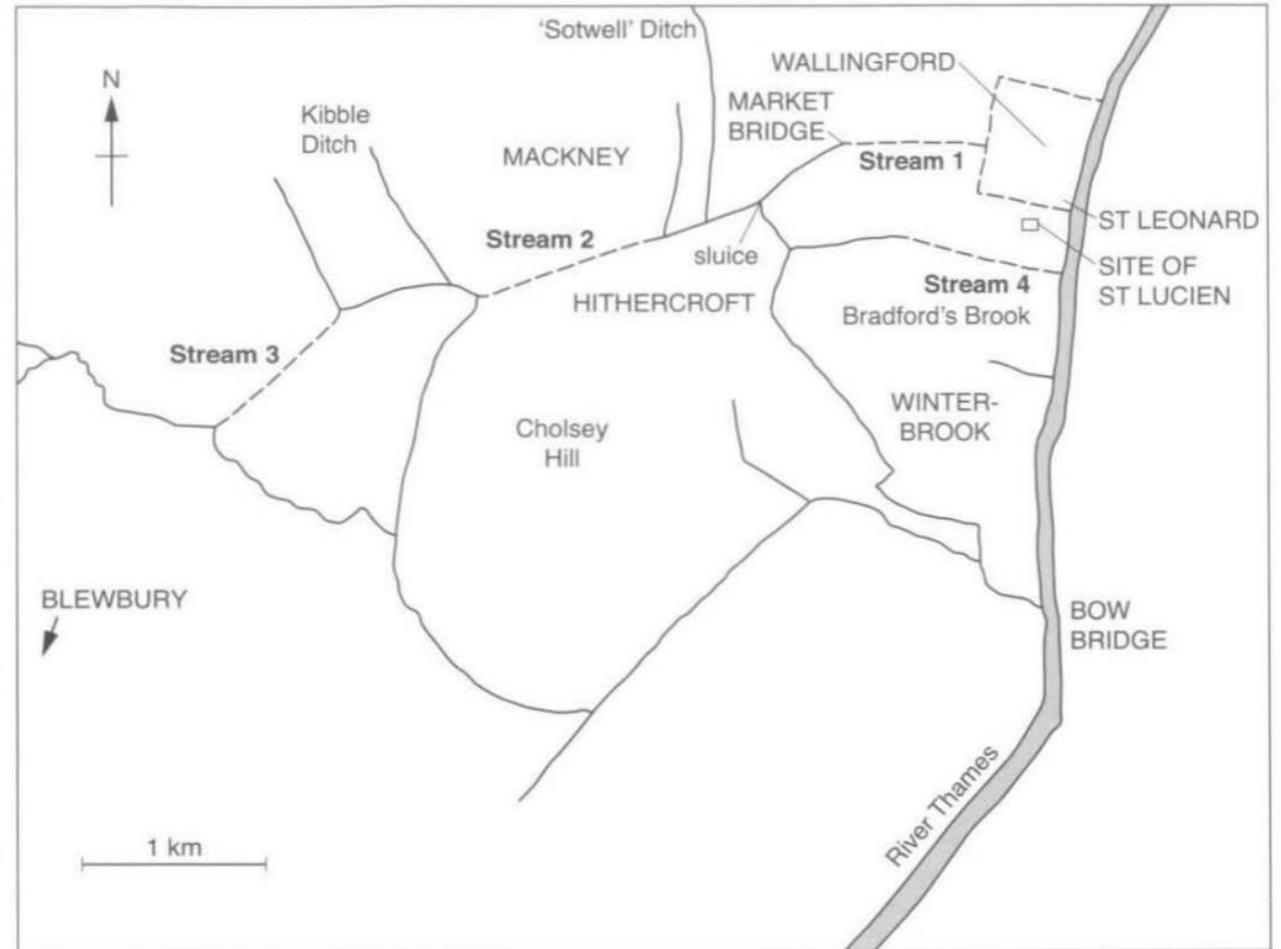


Fig. 3. Plan of successive captures.

Supported by



Action for the River Kennet

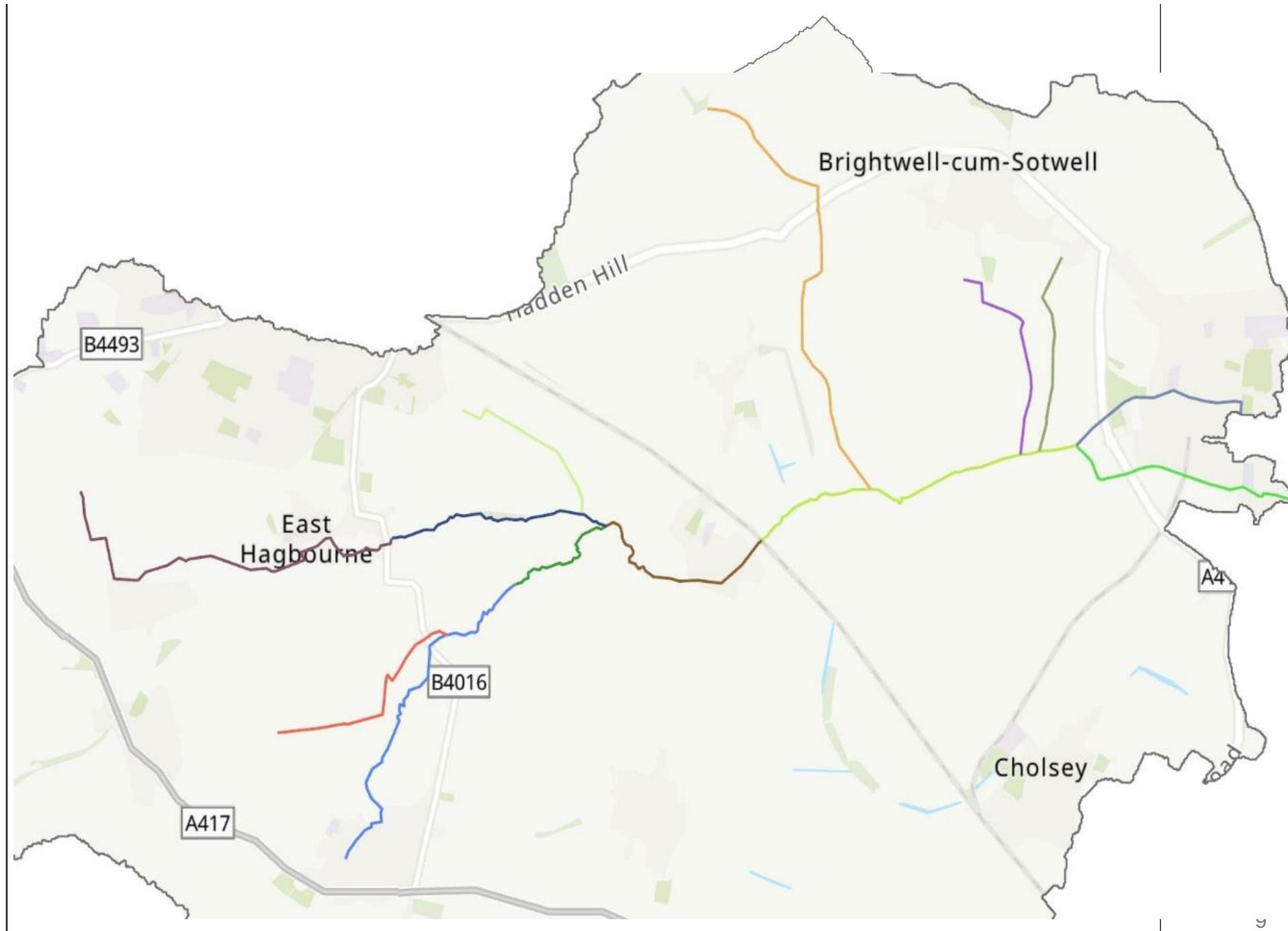
Legend

Mill Brook Reach
Definition

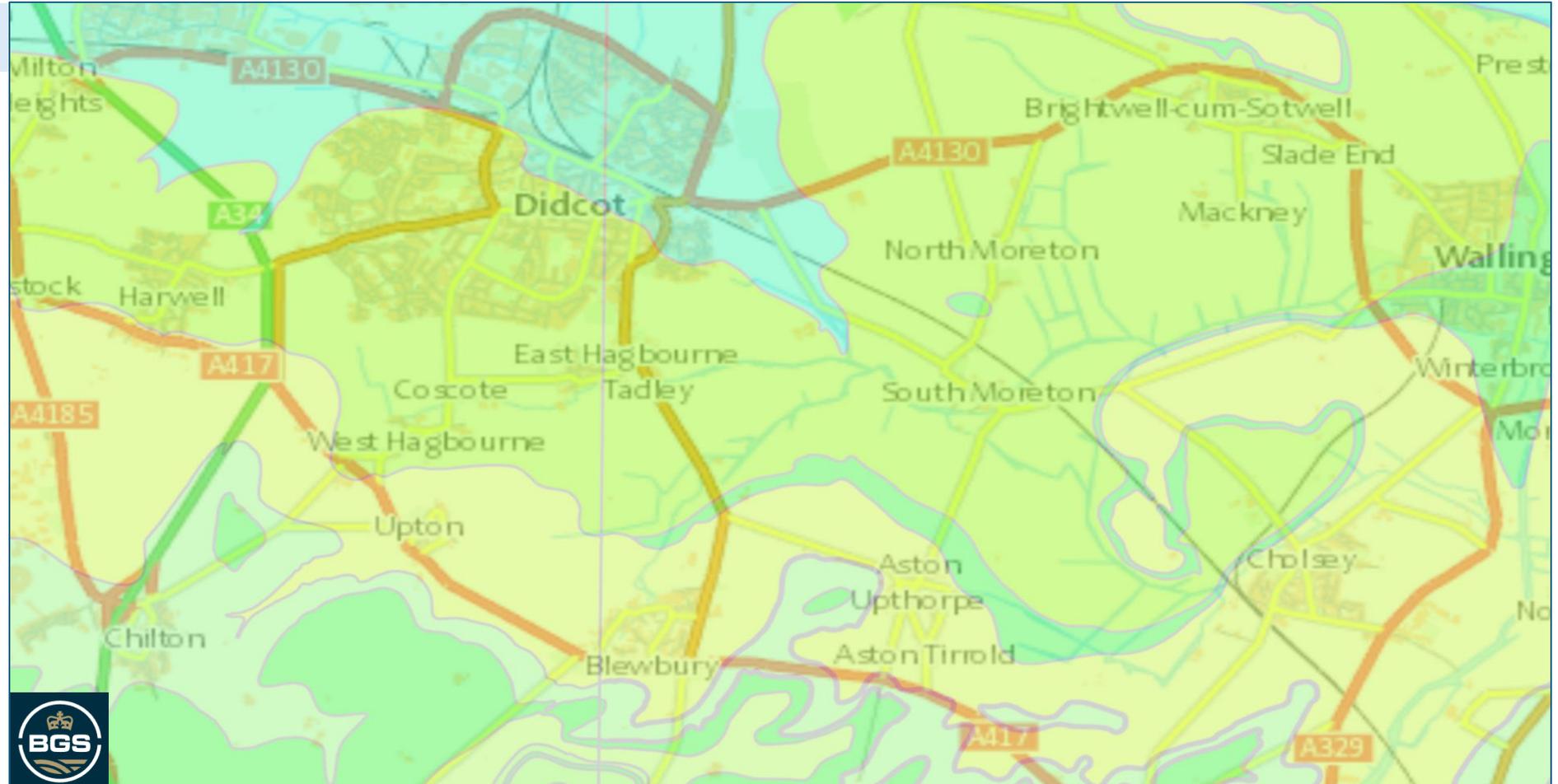
Hymo_indices

Full Name

- Bradford's Brook:
Hithercroft Sluice-
Thames
- Mill Brook: Hithercroft
Sluice-Thames
- Mill Brook: South
Moreton STW-
Hithercroft Sluice
- Sotwell Ditch: Slade
End-Hithercroft Farm
- Mackney-Hithercroft
Farm
- Kibble Ditch: White
Lees, Brightwell-cum-
Sotwell-Mill Brook
- Mill Brook: Hakka's
Brook junction-South
Moreton STW
- Mill Brook: Mill Brook
continued-Hakka's
Brook junction
- Mill Brook: Blewbury-
Mill Brook continued
- Stream Road Upton-
Hagbourne Mill Farm
- Hakka's Brook:
Blewbury Road at East
Hagbourne-Mill Brook
junction
- Fleet Meadow Didcot-
Fulscot
- The Driftway at West
Hagbourne-Blewbury
Road at East Hagbourne
- <all other values>



Bedrock



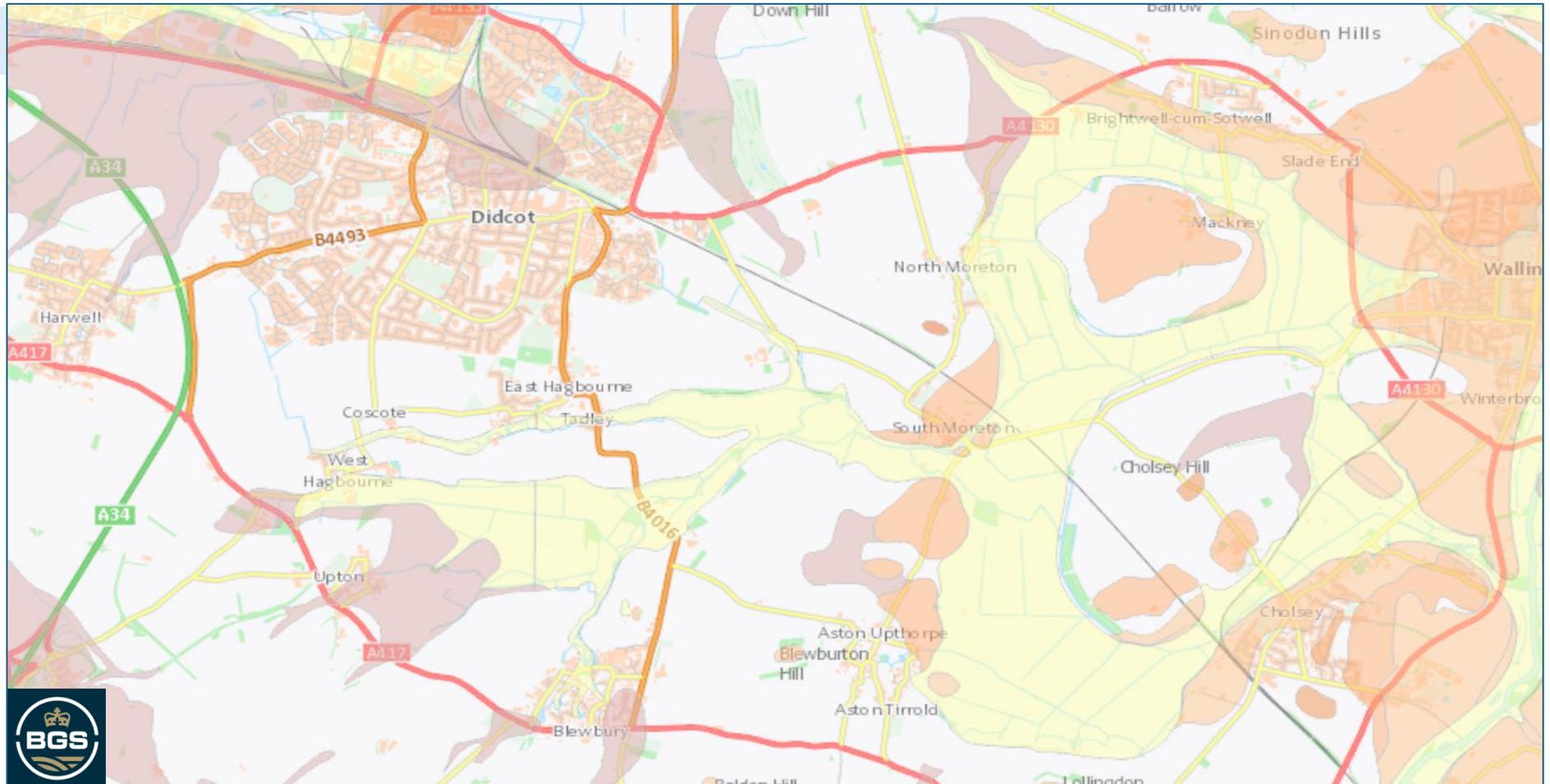
-  Upper Greensand Formation-Siltstone and sandstone
-  West Melbury Marly Chalk Formation-Chalk
-  Glauconitic Marl Member-Glauconitic sandstone

Supported by



Action for the River Kennet

Superficial Deposits



-  Alluvium-Clay, silt, sand and gravel
-  Summertown-Radley Sand and Gravel Member-Sand and gravel
-  Head-Clay, silt, sand and gravel
-  Northmoor Sand And Gravel Member, Upper Facet-Sand and gravel

Supported by



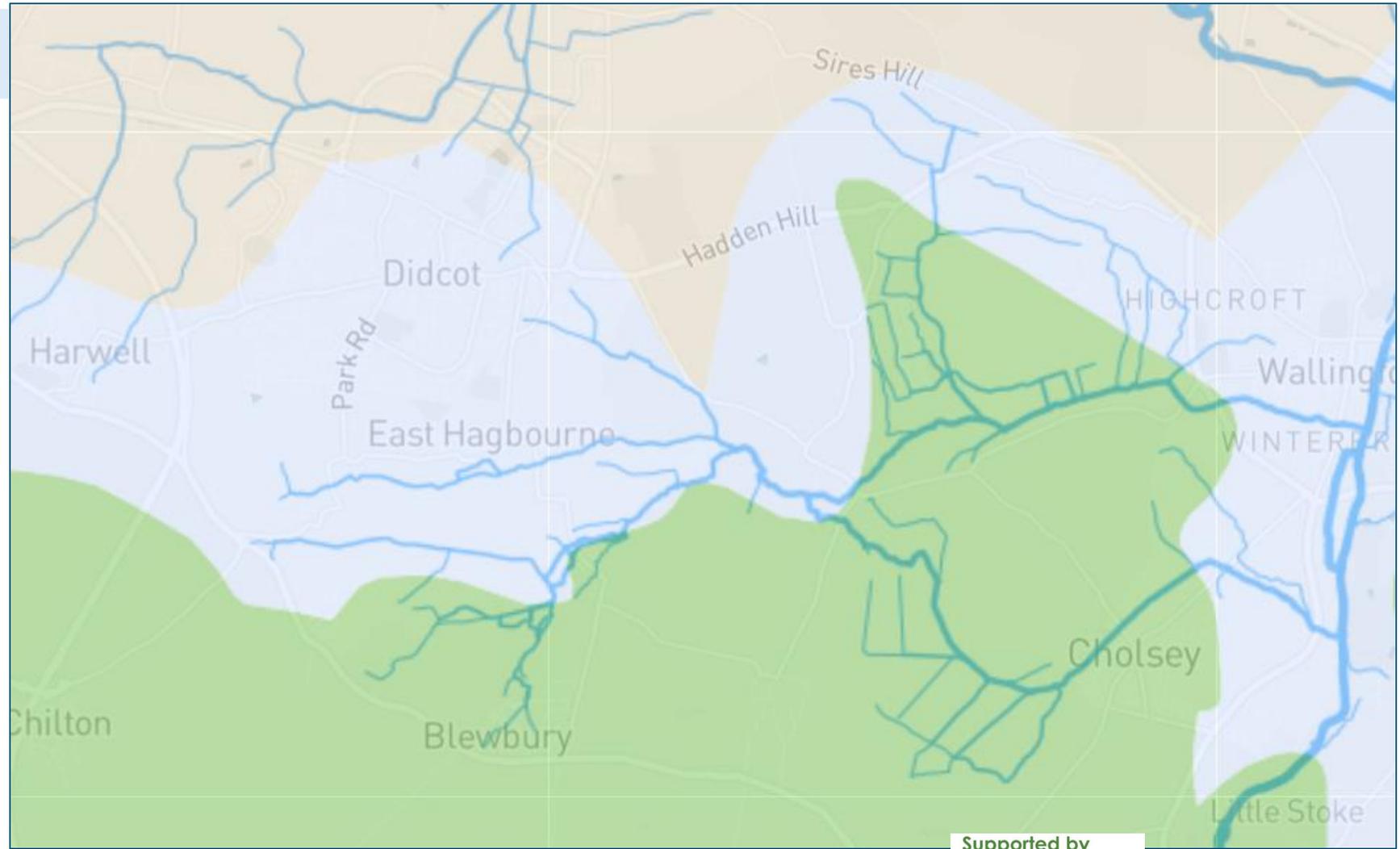
Action for the River Kennet

Hydrology & Geology

NRFA station catchment information for 39130 - Thames at Reading

Bedrock Deposits and Groundwater

- High permeability (fissured)
- Moderate permeability (fissured)
- High permeability (intergranular)
- Moderate permeability (intergranular)
- Very low permeability
- Mixed permeability



Supported by



Action for the River Kennet

Hydrology & Geology

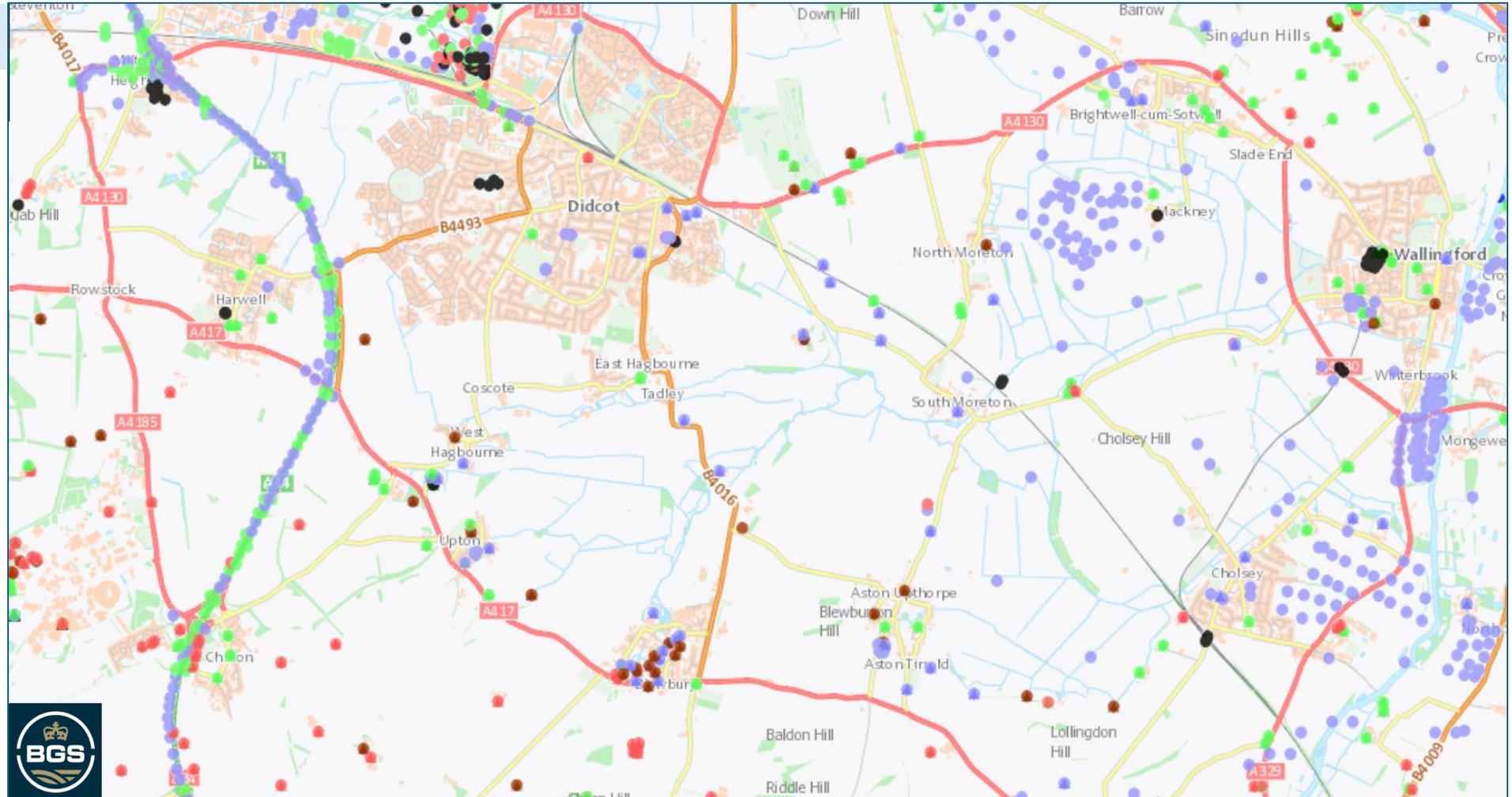
Groundwater

Water wells

- ▲ Not Available
- ▲ 0 - 10m
- ▲ 10 - 30m
- ▲ 30m+

Borehole records

- Unknown Length
- Confidential
- 0 - 10m
- 10 - 30m
- 30m+



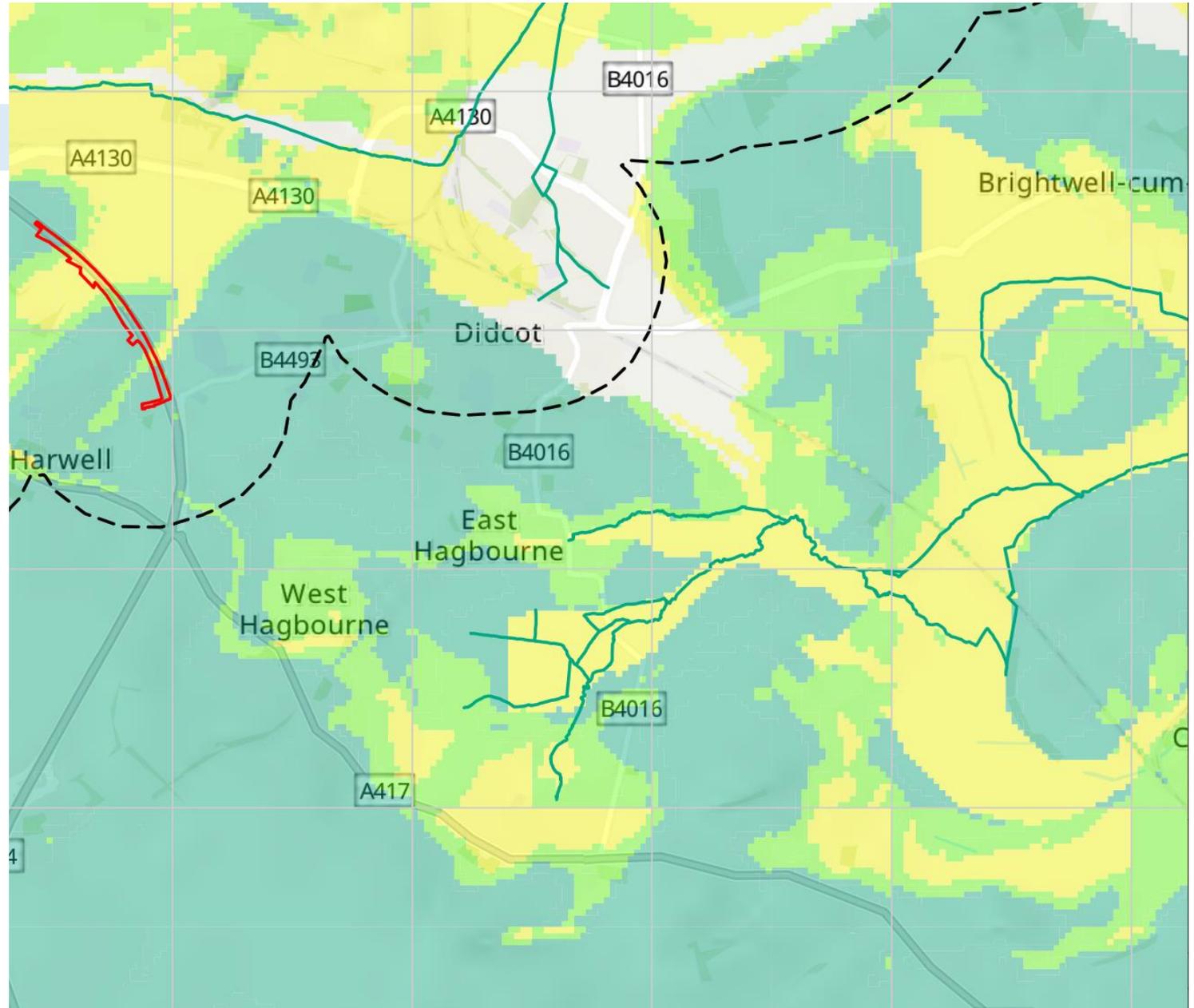
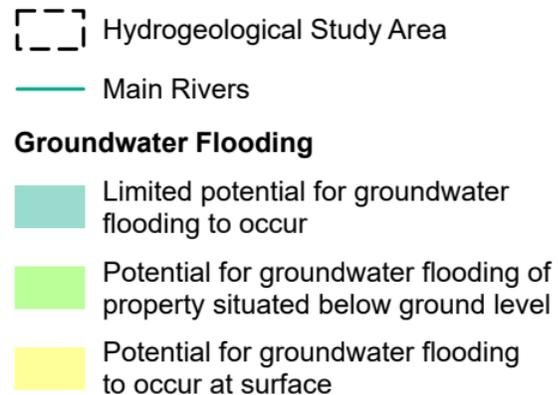
British Geological survey records of well depth provide an indication of groundwater levels

Hydrology & Geology

Modelled Groundwater Flooding

Thames Water Reservoir Oct 2025
Hydrogeology Report:
[Appendix-5-2-Preliminary-Hydrogeological-Impact-Assessment](#)

Geological mapping performed for
catchment assessment in reservoir
construction



Landscape Mapping

NRFA station catchment information for 39130 - Thames at Reading

Land Use

Land Use 2023



Supported by

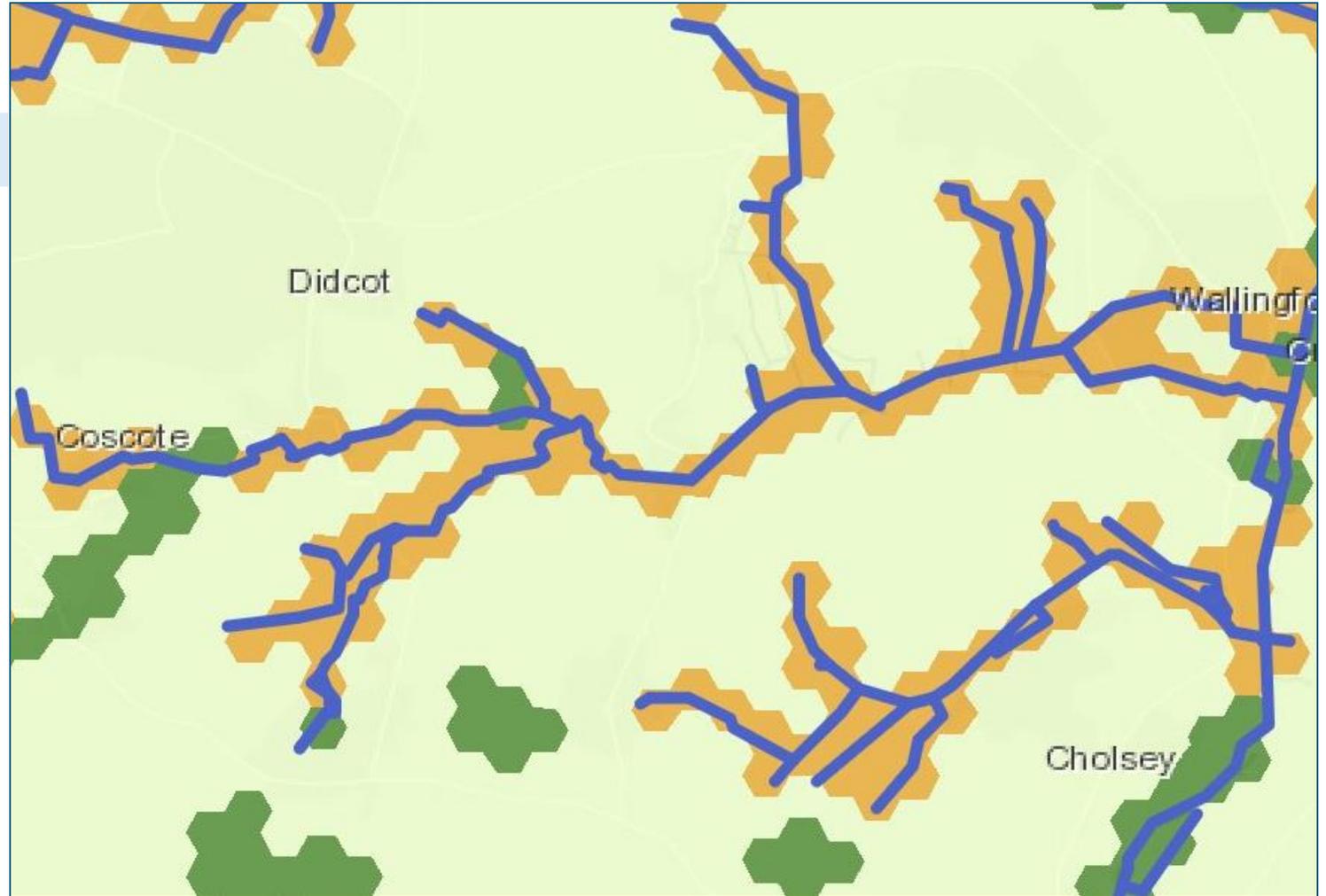


Landscape Mapping

BBOWT Nature Recovery Network

BBOWT's Nature Recovery Network

-  Core
-  Recovery
-  Wider Countryside



Nature Recovery Map | Berks Bucks & Oxon Wildlife Trust

Supported by



Landscape Mapping

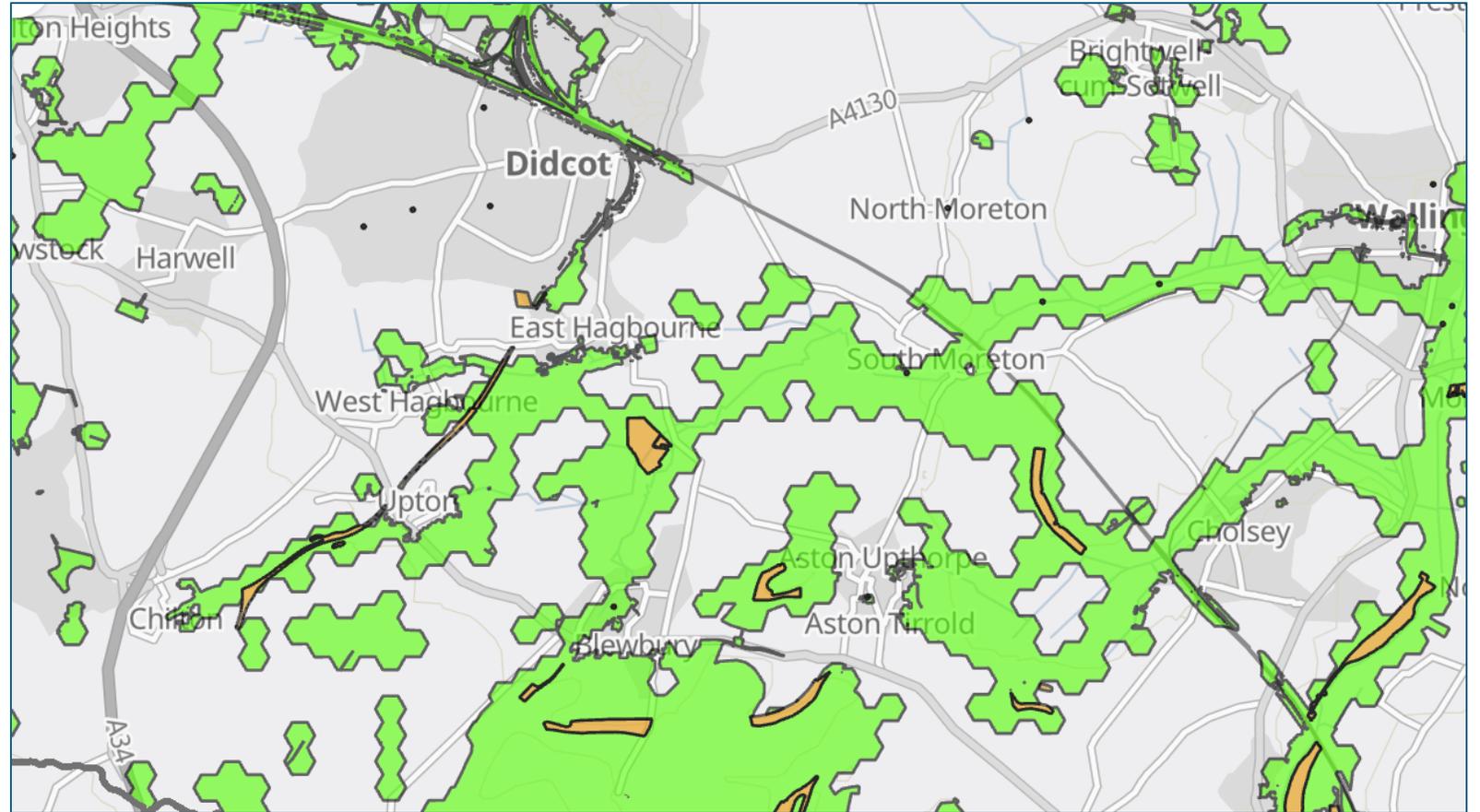
Oxfordshire Local Nature Recovery Strategy Habitat

LNRS Local Habitat Map

Recovery - Areas that could become particularly important to biodiversity



Core - Existing areas of particular importance to biodiversity



Oxfordshire LNRS Local Habitat Map

Supported by



Landscape Mapping

Oxfordshire Local Nature Recovery Strategy Habitat

Detailed Measures

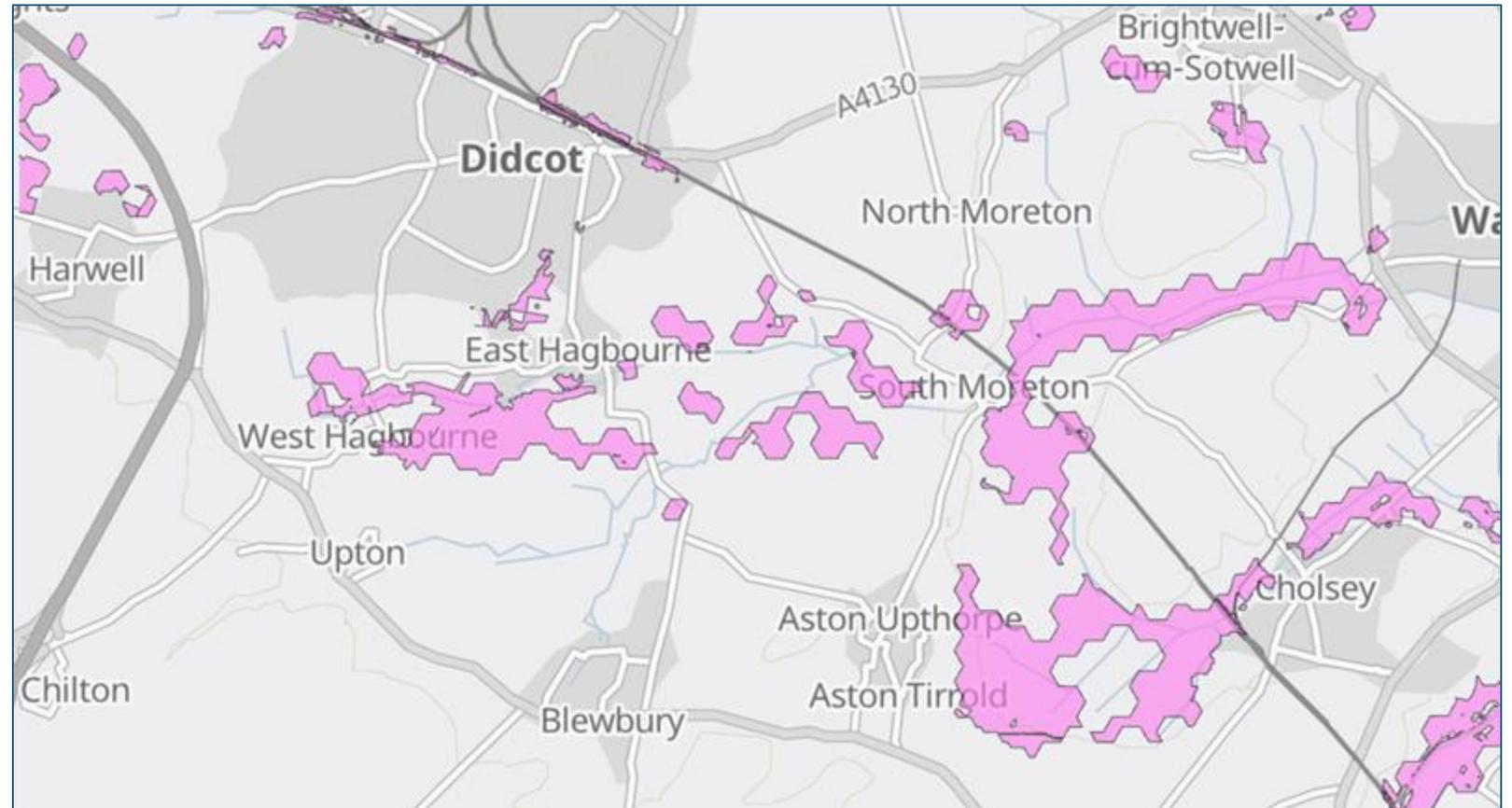
(PM40) Create wet woodland



(PM42) Restore river diversity and riverside habitats



(PM54) Create wetlands with a matrix of habitats



Oxfordshire LNRS Local Habitat Map

Supported by



Action for the River Kennet

Hydrology & Geology

EA Hydrology Data Explorer

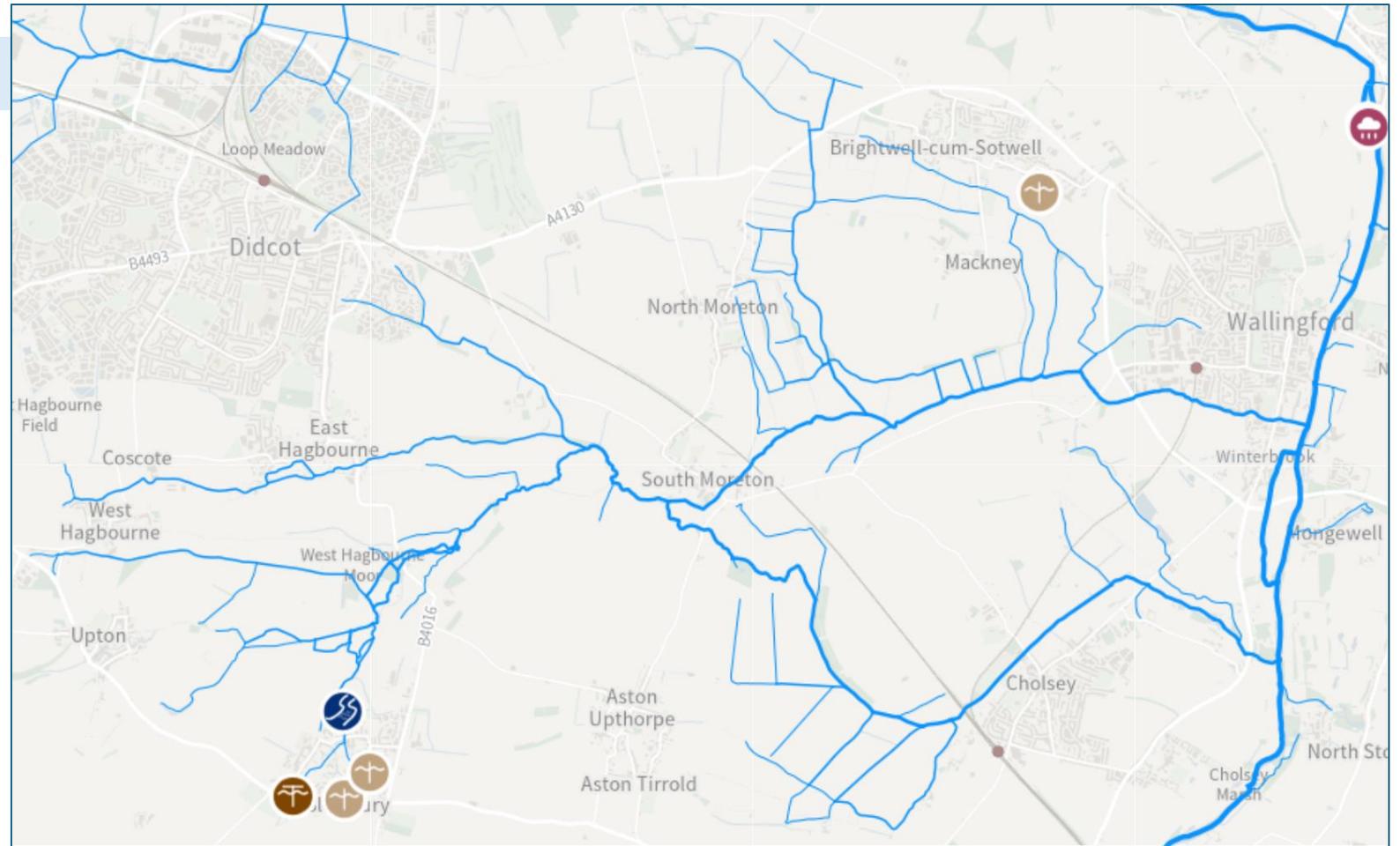
Rainfall : 15 minute resolution at [Benson Lock](#)

Groundwater Dipped: Sporadic (1 month–annual) at [Longwall Cottage](#), Mackney

Groundwater Level: Hourly at [Brookside Blewbury](#)

River Flow: 15 minute resolution at [Blewbury](#)

Water Quality: No continuous monitoring



-  Rainfall
-  River Flow
-  River Level Only

-  Groundwater Level
-  Groundwater Level (Dipped Only)
-  Water Quality



Floodplain Connectivity

Historic Satellite EA Flood Mapping

-  Historic Flood Map
-  Flood Storage Areas
-  Flood Zone 3
-  Flood Zone 2

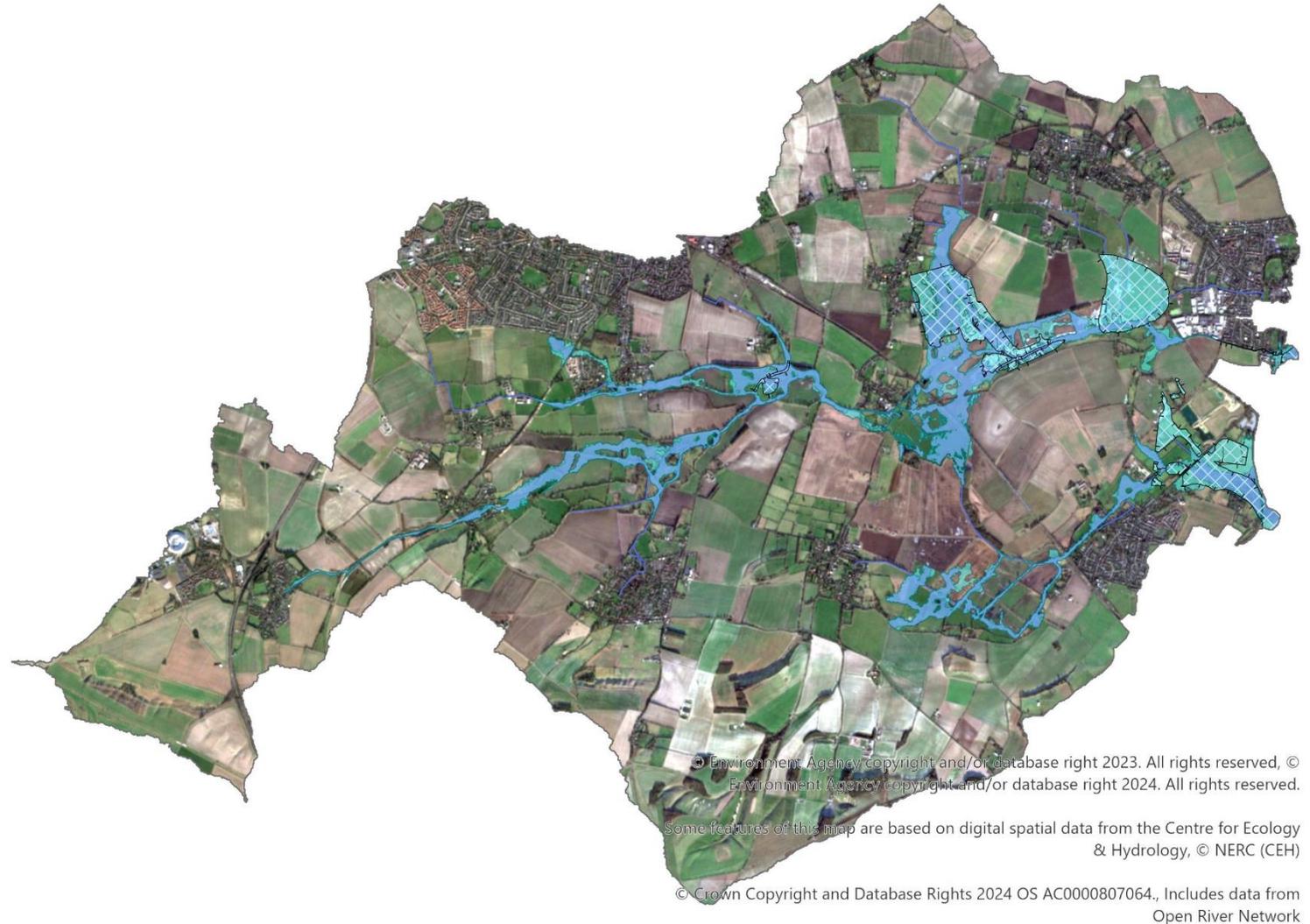
CaBA Chalk Streams

-  Perennial
-  Winterbourne
-  Near Perennial
-  Occasionally wet

Sentinel-2 - Single Scene 2024-01-19

RGB

-  Red: B4_Red
-  Green: B3_Green
-  Blue: B2_Blue



1 0.5 0 1 2 3 4
 Kilometers

Data citation: Hornby, D.D., Januchowski_Hartley, S. R., Naura, M., Hill, C. T., (2023) OpenRiversNetwork: a topologically connected river network for Great Britain. GeoData, University of Southampton / River Restoration Centre, University of Cranfield, Source: Esri, European Commission, European Space Agency, Azure, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Floodplain Connectivity

Satellite Imagery

Legend

CaBA Chalk Streams

- Perennial
- Winterbourne
- Near Perennial
- Occasionally wet



Floodplain Connectivity

Natural Character and structure

Legend

LIDAR Composite
Digital Terrain
Model - 1m (2025)
Hillshade
(Standard)
Value
255
0



Desk Study to Walkover

Opportunities to identify:

- Riverfly Monitoring sites
- Water quality testing sites
- Floodplain reconnection opportunities
- Mink trap deployment sites
- Barriers to fish passage
- Invasive Non-Native Species

Identifying landowners and establishing contact from local knowledge



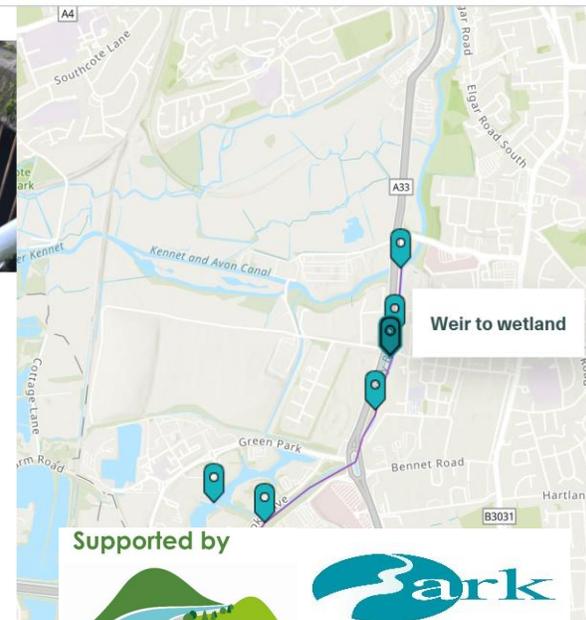
ARK Foudry Brook Walkover, Oct 2024

Action for the River Kennet and the Wild Trout Trust's findings from a walkover of the Foudry Brook

James Hubbard
21 January 2025



ARK Foudry Brook Walkover, Oct 2024



Weir to wetland

At time of survey, more than half the flow of the Foudry here is diverted through a constructed wetland, which is impassable at the point that it flows back into the main channel.

The barrier to passage at its



Desk Study: Water Quality

Summary

- Designations, WFD classification & Reasons for Not Achieving Good
- Predicted sources of nutrients from modelling (SAGIS & SEPARATE)
- Environmental Discharge Monitoring from Sewage Treatment Works
- Thames Water WINEP locations - PR24
- Freshwater Watch water quality testing
- Predicted surface runoff pathways from river to land & land use

No further monitoring found in the academic literature for Mill, Bradfords & Cholsey Brooks

In a Nitrate Vulnerable Zone & Drinking water protected area for Groundwater



Supported by



Water Quality: Water Framework Directive

Mill & Bradfords Brook Designation

Classification Item	2019	2022
Ecological	Moderate	Moderate
Biological quality elements	Moderate	Moderate
Invertebrates	Good	Good
Macrophytes and Phytobenthos Combined	Moderate	Moderate
Macrophytes Sub Element	Moderate	Moderate
Physico-chemical quality elements	Moderate	Moderate
Ammonia (Phys-Chem)	High	High
Dissolved oxygen	Good	Good
Phosphate	Moderate	Moderate
Temperature	High	High
pH	High	High
Hydromorphological Supporting Elements	Not high	Not high
Hydrological Regime	Supports good	Supports good
Morphology	Not high	Not high

Supported by



Water Quality: Water Framework Directive

Mill & Bradfords Brook – Water Quality

Classification Item	2019	2022
Chemical	Fail	Does not require assessment
Priority hazardous substances	Fail	Does not require assessment
Benzo(a)pyrene	Good	
Dioxins and dioxin-like compounds	Good	
Heptachlor and cis-Heptachlor epoxide	Good	
Hexabromocyclododecane (HBCDD)	Good	
Hexachlorobenzene	Good	
Hexachlorobutadiene	Good	
Mercury and Its Compounds	Fail	
Perfluorooctane sulphonate (PFOS)	Good	
Polybrominated diphenyl ethers (PBDE)	Fail	
Priority substances	Fail	Does not require assessment
Cypermethrin (Priority)	Fail	
Fluoranthene	Good	
Other Pollutants	Does not require assessment	Does not require assessment

EA data Mill & Bradfords-2026-2-18

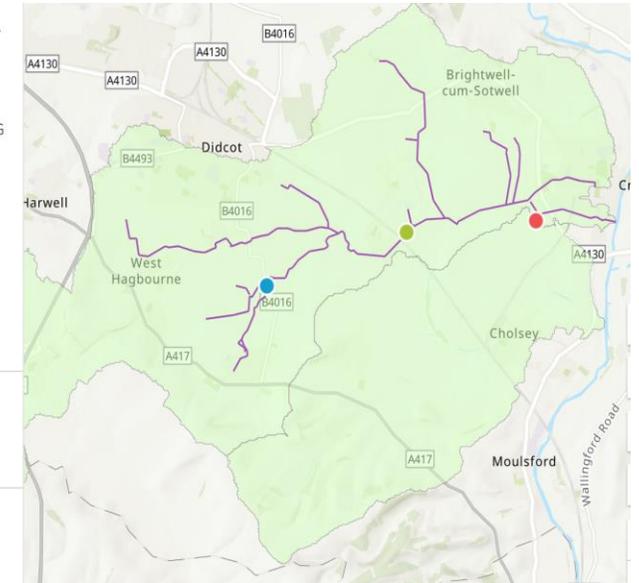
samplingPurpose

- ENVIRONMENTAL MONITORING STATUTORY (EU DIRECTIVES)
- MONITORING (NATIONAL AGENCY POLICY)
- WATER QUALITY OPERATOR SELF MONITORING COMPLIANCE DATA
- Other

Mill Brook Reach Definition Hymo_indices

Wallingford Catchments

- River WB catchment



Exported all EA data for '25-'26 to GIS [here](#)

- **143 tests for statutory monitoring**
- **143 for National Agency Policy**
- **50 for Operator Self Monitoring**

Supported by



Water Quality: Water Framework Directive

Reasons for Not Achieving Good – Mill & Bradfords

Reason Type	SWMI	Activity	Category	Classification Element	More information
RNAG	Physical modification	Land use - arable	Agriculture and rural land management	Macrophytes and Phytobenthos Combined	Details <i>Morphology, Physical Modification</i>
RNAG	Diffuse source	Poor nutrient management	Agriculture and rural land management	Macrophytes and Phytobenthos Combined	Details <i>Nutrients, Phosphate</i>
RNAG	Point source	Sewage discharge (continuous)	Water Industry	Cypermethrin (Priority)	Details <i>Cypermethrin-challenges-for-the-water-environment.odt</i>
RNAG	Point source	Sewage discharge (continuous)	Water Industry	Macrophytes and Phytobenthos Combined	Details <i>Nutrients, Phosphate</i>
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	Phosphate	Details
RNAG	measures delivered to address reason, awaiting recovery	Not applicable	No sector responsible	Mercury and Its Compounds	Details

Supported by

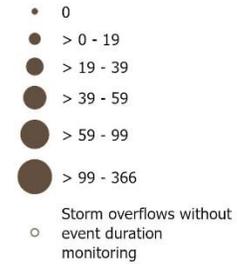


Water Quality

WFD Water Quality monitoring & Event Discharge Monitoring

Event Duration Monitoring - Storm Overflows - 2024 (England and Wales)

countedSpills



England WFD Site Classifications

Site Classification



Produced by The Rivers Trust. © Environment Agency copyright and/or database right 2024. All rights reserved.
© Dŵr Cymru/Welsh Water.
© Hafren Dyfrdwy, Environment Agency, Includes data from Open River Network

Data citation: Hornby, D.D., Januchowski_Hartley, S. R., Naura, M., Hill, C. T., (2023) OpenRiversNetwork: a topologically connected river network for Great Britain. GeoData, University of Southampton / River Restoration Centre, University of Cranfield, Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack

Supported by



Action for the River Kennet

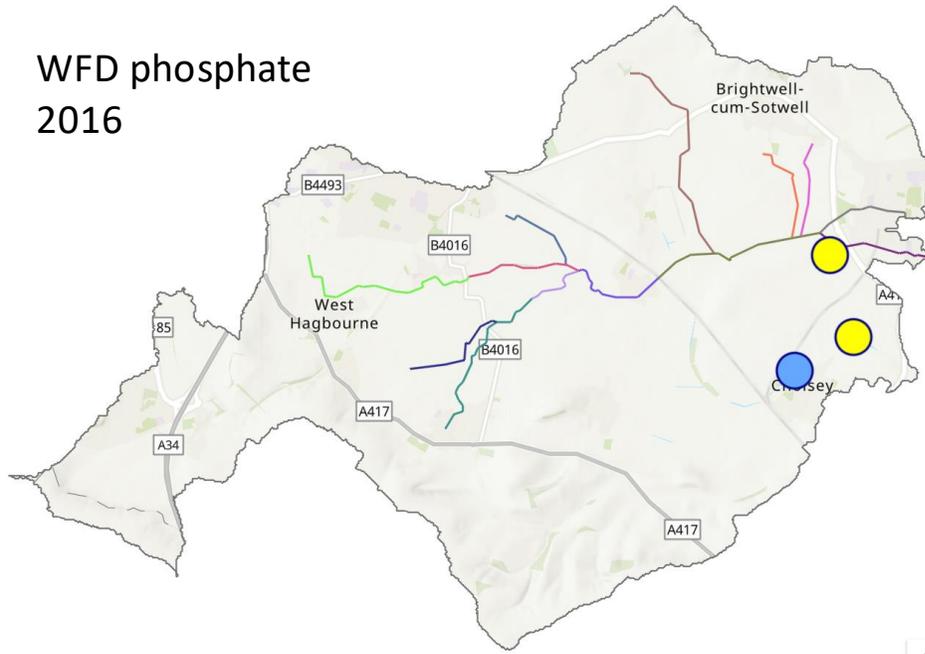
Water Quality

WFD Water Quality monitoring
Sites & Phosphate classification

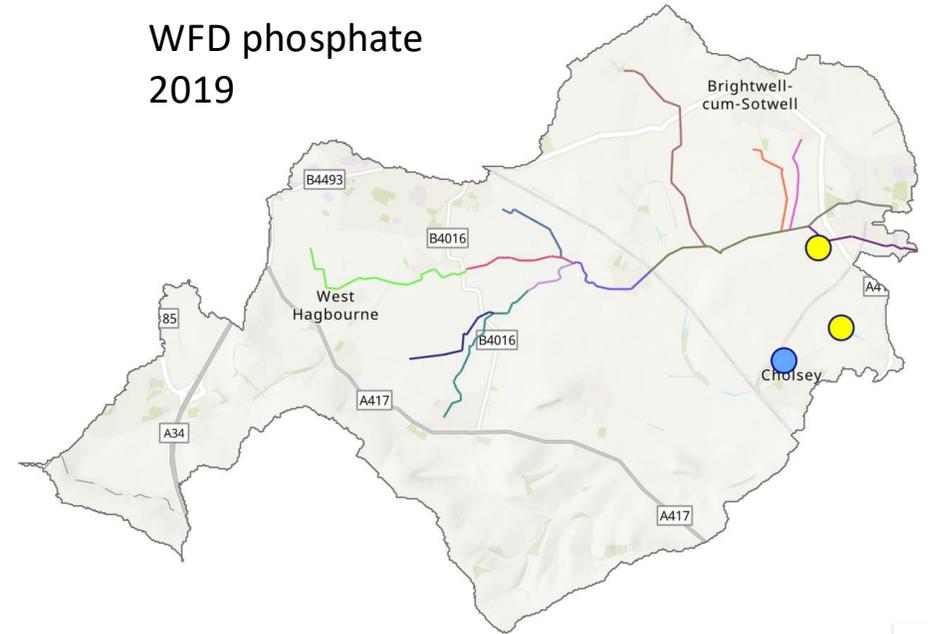
Site Classification

- High
- Good
- Moderate
- Poor
- Bad

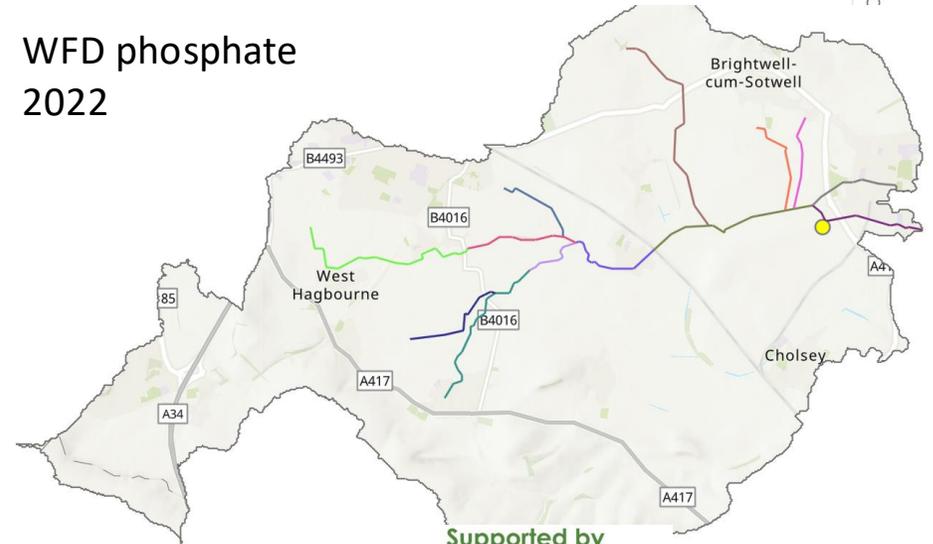
WFD phosphate
2016



WFD phosphate
2019



WFD phosphate
2022



Supported by



Action for the River Kennet

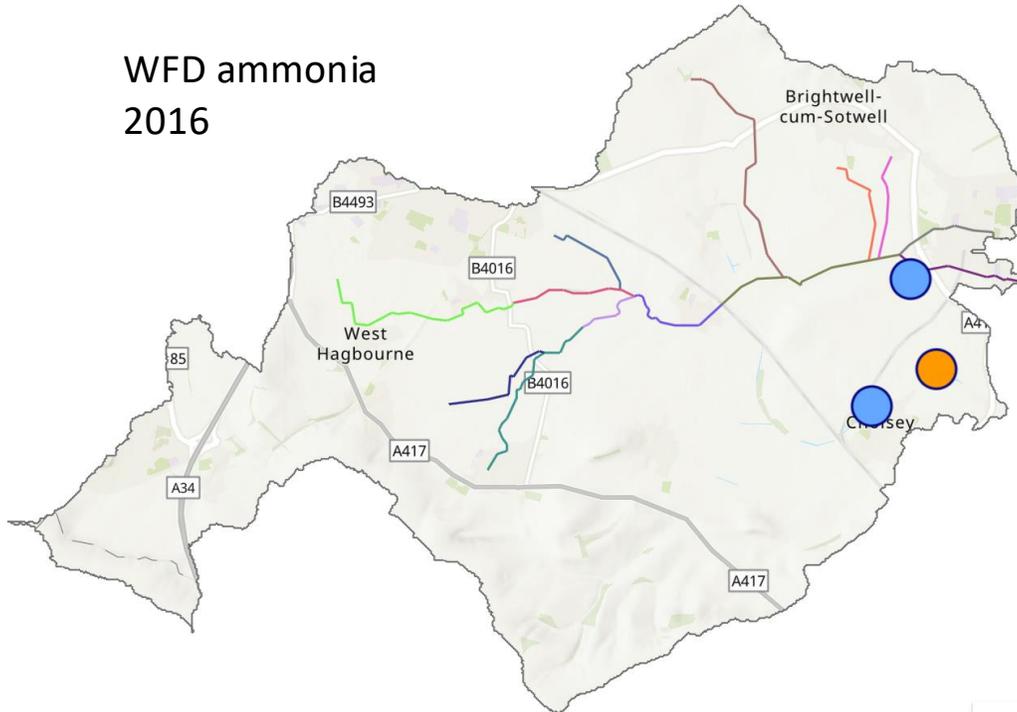
Water Quality

WFD Water Quality monitoring
Sites & Ammonia classification

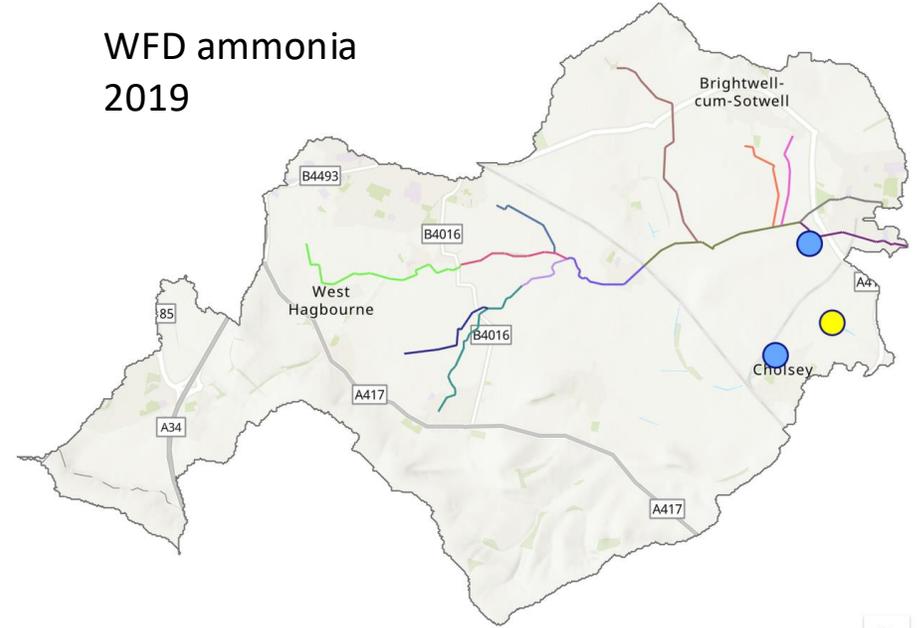
Site Classification

- High
- Good
- Moderate
- Poor
- Bad

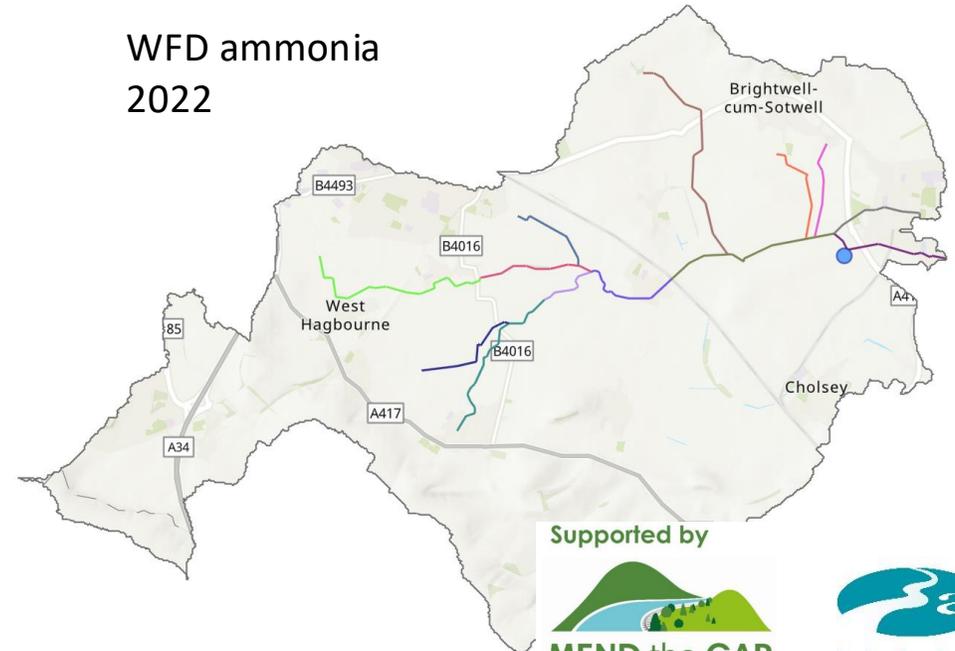
WFD ammonia
2016



WFD ammonia
2019



WFD ammonia
2022



Water Quality: Sewage Treatment Work Spills

Windrush Against Sewage Pollution report

South Moreton STW discharges to the Mill Brook and serves a population equivalent of about 1,250.

December 2024, Thames Water published a “Ground Water Impacted System management Plan” for South Moreton STW.

[Thames Water's illegal sewage spills: 2021-2025](#)
[EDM mapping by WASP](#)



a) Daily Mail 02/04/2024; b) EA report showing reed bed with only 25% coverage
 Figure 4 : South Moreton STW:

South Moreton Analysis

MOST PROLIFIC illegal spiller with annual illegality rate between 34% and 64%

South Moreton STW



	2021	2022	2023	2024	2025
Spill hours	2,142	54	2,568	5,353	2,700
Spill frequency	146	11	145	254	130
Illegal spills	59	7	49	93	79
% illegal	40%	64%	34%	37%	61%

Constituency Olly Glover
MP Didcot and Wantage
Party Liberal Democrat

Supported by



Water Quality

WINEP actions in Wallingford Catchments

Water Company	Action Name	Unique ID	AMP Period	Action Description	Planned Completion Date	Actual Completion Date	Driver Code Primary	EA Area	EA Function	Licence Permit ID	Obstruction Type	Waterbody ID	Waterbody Type
Thames Water Utilities Ltd	SOUTH MORETON STW	08TW100665a	8	MCERTS certification of an AMP7 U_MON3 driver output overflow operation monitor (U_MON3a)	31/12/2025		U_MON3	THM	Water Quality	TEMP.2900	Monitoring	GB106039023600	River
Thames Water Utilities Ltd	SOUTH MORETON STW	08TW100384a	8	Move AMP7 U_MON4 driver output to 2-minute flow monitoring (U_MON4a)	31/12/2026		U_MON4	THM	Water Quality	TEMP.2900	Monitoring	GB106039023600	River
Thames Water Utilities Ltd	CHOLSEY STW	08TW100580a	8	MCERTS certification of an AMP7 U_MON3 driver output overflow operation monitor (U_MON3a)	31/12/2025		U_MON3	THM	Water Quality	CNTW.0360	Monitoring	GB106039023570	River
Thames Water Utilities Ltd	CHOLSEY STW	08TW100314a	8	U_MON4a	31/12/2026		U_MON4	THM	Water Quality	CNTW.0360	Monitoring	GB106039023570	River

Water Quality: Surface Runoff

Land Use & Predicted Overland flow

Land Cover Map (2024)

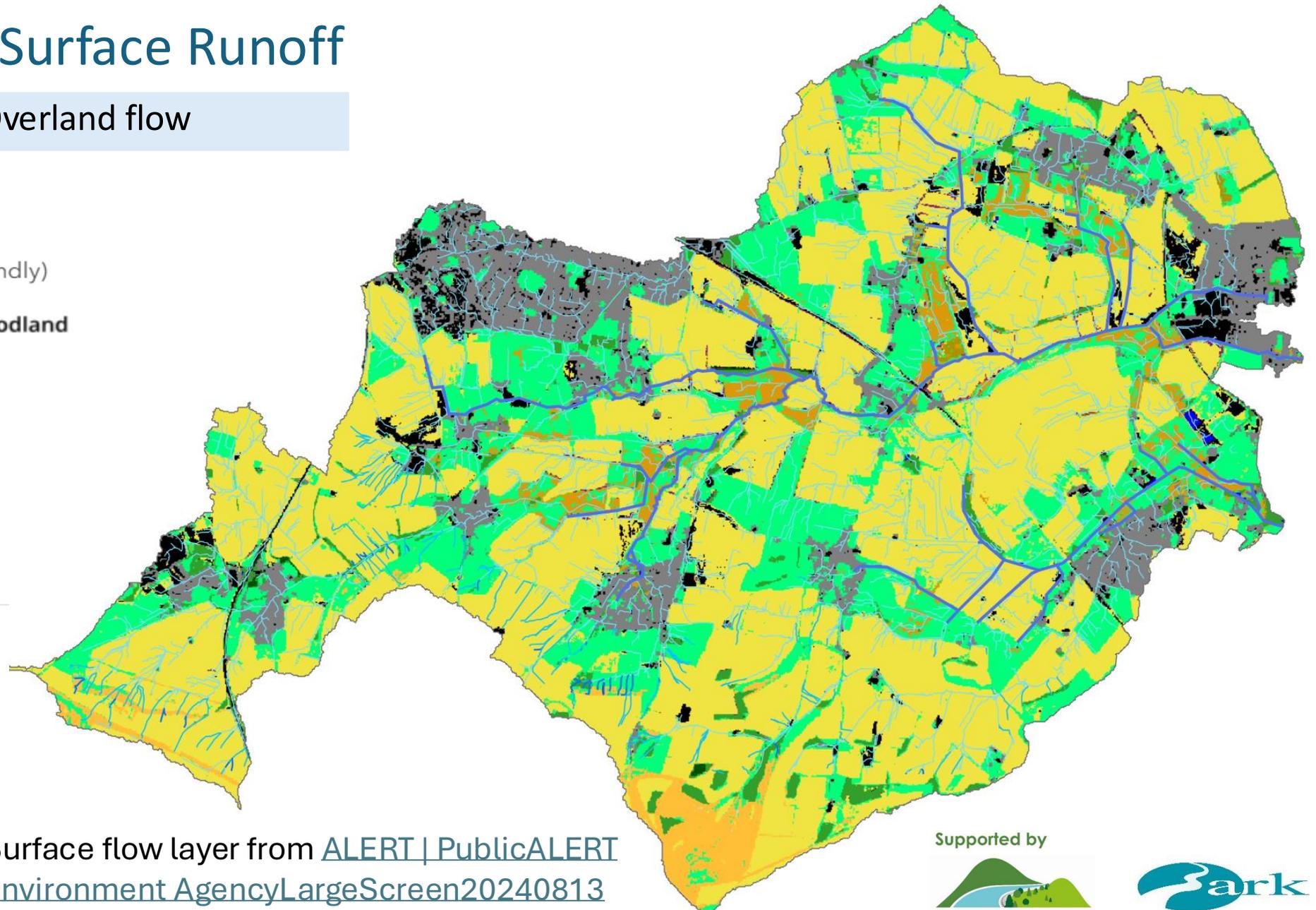
Great Britain 2024 (colour blind friendly)

-  Broadleaved, mixed & yew woodland
-  Coniferous woodland
-  Arable and horticulture
-  Improved grassland
-  Neutral grassland
-  Calcareous grassland
-  Urban
-  Suburban

Probable Overland Flow Pathways

Probable_Overland_Flow_Pathways

-  < 3 Degrees
-  3 - 7 Degrees
-  7 - 12 Degrees
-  > 12 Degrees



Surface flow layer from [ALERT | PublicALERT Environment Agency LargeScreen20240813](#)

Supported by



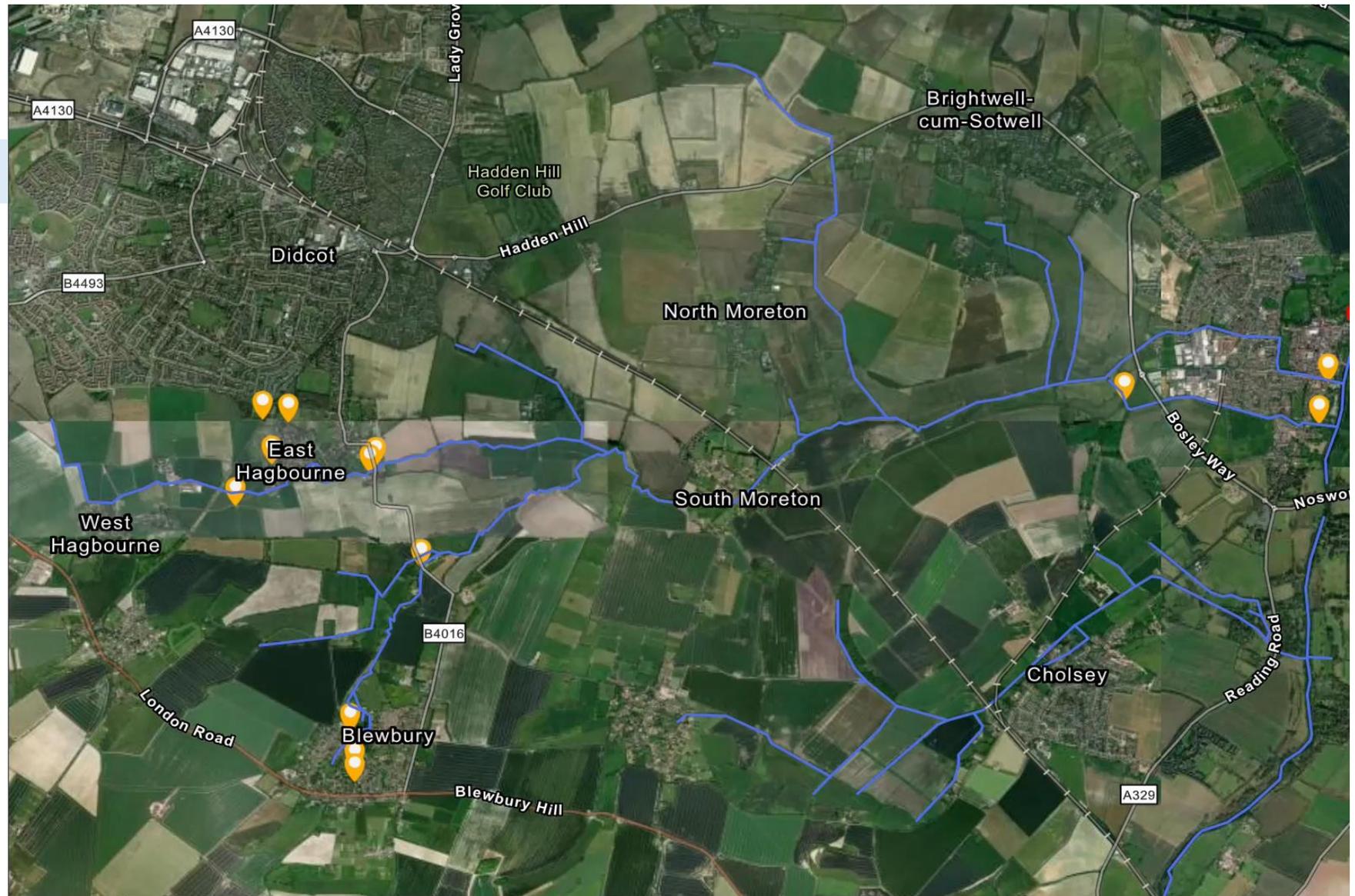
Water Quality

Freshwater Watch data

Freshwater Watch (Global)

Water Quality

-  Poor
-  Moderate
-  Good



Supported by



Water Quality

Consented Discharges

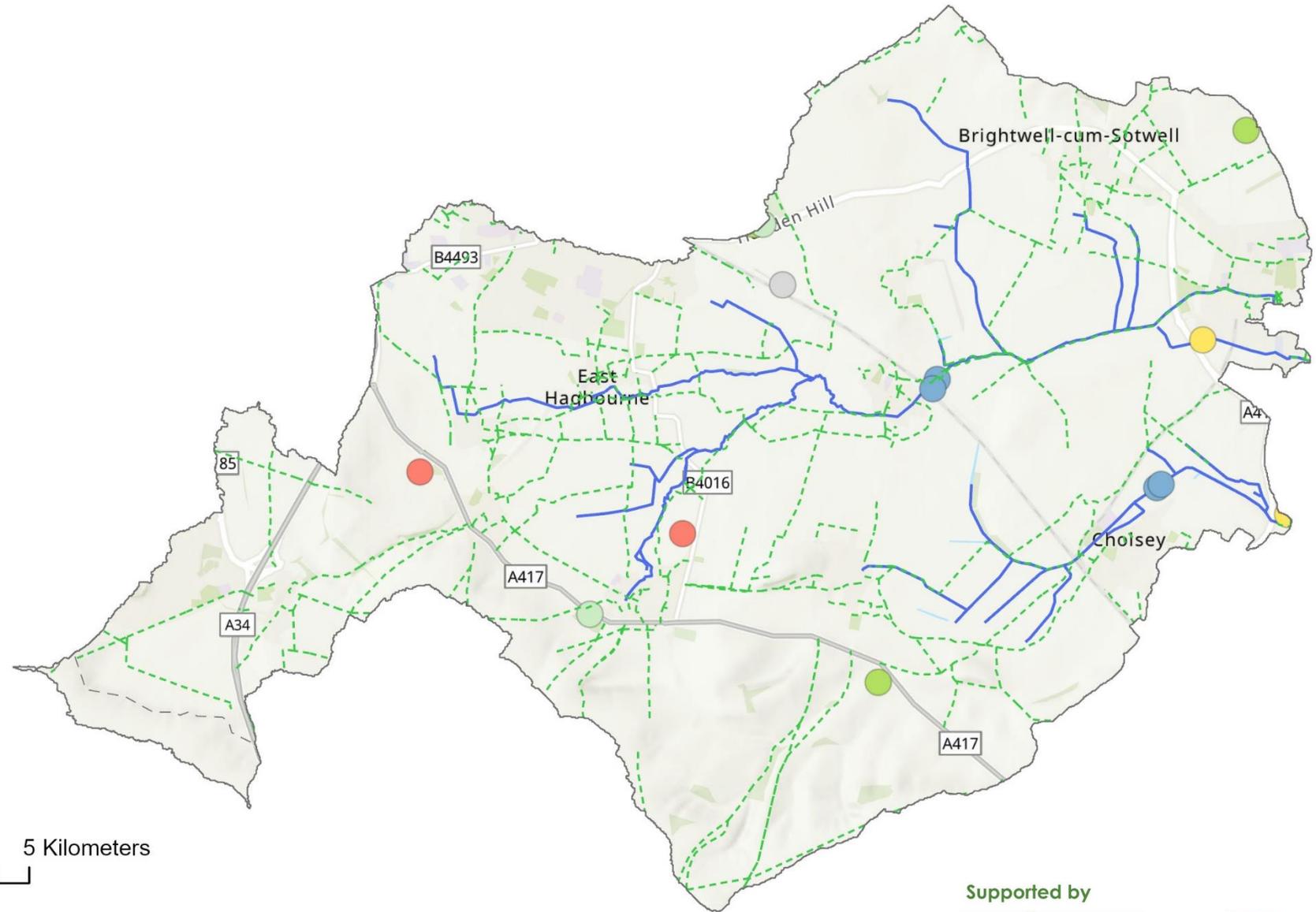


Oxfordshire
--- Footpaths and
Bridleways

Consented Discharges to Controlled Waters (England)

- Domestic property (single) (incl farm house)
- WwTW/Sewage Treatment Works (water company)
- Domestic property (multiple) (incl farm houses)
- Real Estate Activities/Buying/Selling/Renting
- WTW/Water Collection/Treatment/Supply
- Sport, Amusement+Recreation/Golf Club/Gym/Theme Pk/Spa

5 Kilometers



© Environment Agency copyright and/or databases

Supported by



Water Quality

Freshwater Watch & discharge

Freshwater Watch (Global)

Water Quality

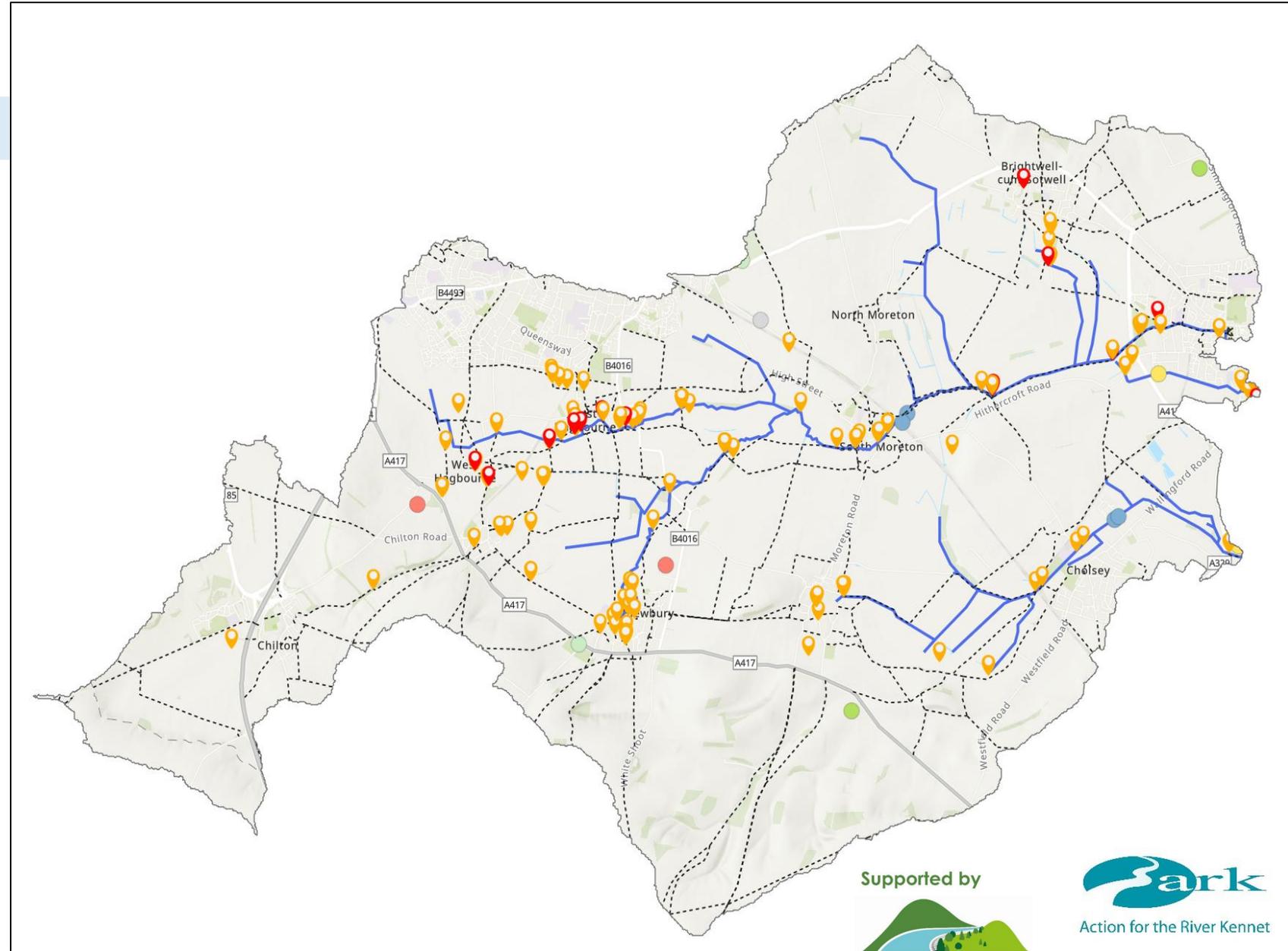
-  Poor
-  Moderate
-  Good

Oxfordshire Footpaths and Bridleways



Consented Discharges to Controlled Waters (England)

-  Domestic property (single) (incl farm house)
-  WwTW/Sewage Treatment Works (water company)
-  Domestic property (multiple) (incl farm houses)
-  Real Estate Activities/Buying/Selling/Renting
-  WTW/Water Collection/Treatment/Supply
-  Sport, Amusement+Recreation/Golf Club/Gym/Theme Pk/Spa



Supported by



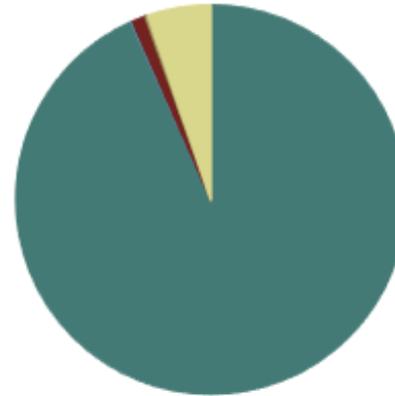
Action for the River Kennet

Water Quality

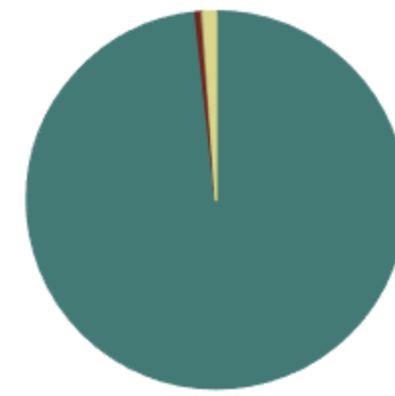
Modelling Nitrate contribution

'SEPARATE' modelling: Nitrate

Mill & Bradfords



Cholsey



- Agriculture mitigated
- Combined sewer overflows
- Urban diffuse
- Septic tanks
- Bank erosion
- Sewer treatment works
- Direct deposition
- Storm tanks

[SEPARATE - All sources of Nitrate - Overview](#)

[SEPARATE - All sources of Sediment - Overview](#)

Supported by



Action for the River Kennet

Water Quality

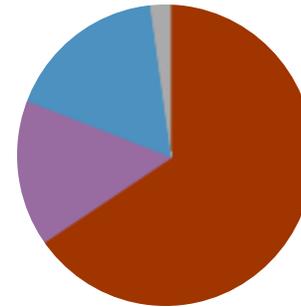
Modelling Phosphate contribution



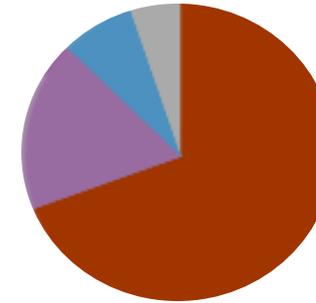
-  Agriculture mitigated
-  Combined sewer overflows
-  Urban diffuse
-  Septic tanks
-  Bank erosion
-  Sewer treatment works
-  Direct deposition
-  Storm tanks

'SAGIS' modelling: Phosphate

Mill & Bradfords



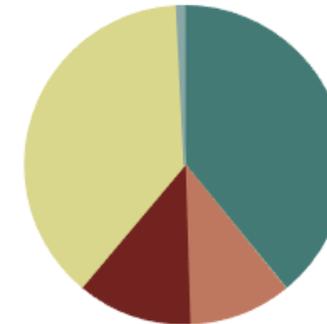
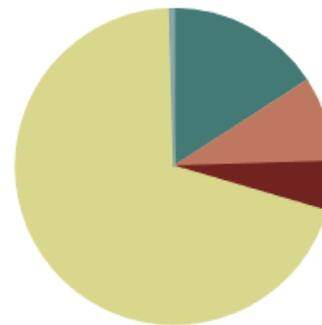
Cholsey



-  River Concentration from Sewage Treatment Works mg/L- WB mean
-  River Concentration from Intermittent discharges mg/L- WB Mean
-  River Concentration from Industrial discharges mg/L- WB Mean
-  River Concentration from Other sources (background) mg/L- WB mean
-  River Concentration from Livestock and Arable farming mg/L- WB Mean
-  River Concentration from Highways mg/L- WB Mean
-  River Concentration from Urban Run off mg/L- WB Mean
-  River Concentration from Septic Tanks mg/L- WB Mean

SAGIS River Concentration from All Sources - chart symbology - Overview

'SEPARATE' modelling: Phosphate



SEPARATE - All sources of Phosphorus - Overview



Ecology Summary

- Water Framework Directive Ecology
- Riverfly Monitoring planned for local citizen science
- Barriers to fish passage
- Water vole presence and American Mink proximity
- Invasive Non Native Species present & Public record collection
- Priority species & Local Biodiversity Action Plan

Supported by



Ecology: EA WFD

WFD - Macroinvertebrates

WFD Ecology only has macroinvertebrate data point & 1 Macrophyte site on Hakkas brook– no fish monitoring (confirmed by local fisheries officer) or phytobenthos monitoring

- [Mill Brook and Bradfords Brook system, Wallingford | Catchment Data Explorer | Catchment Data Explorer](#)
- [Cholsey Brook and tributaries | Catchment Data Explorer | Catchment Data Explorer](#)

Supported by



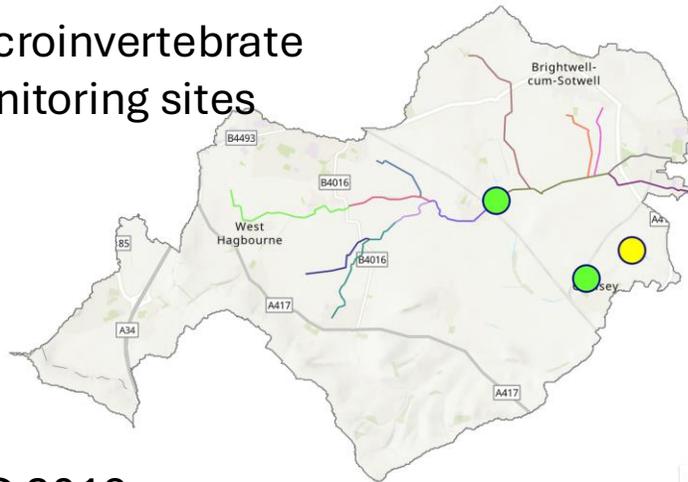
Action for the River Kennet

Ecology: EA WFD

Expected scores from modelling & WFD testing

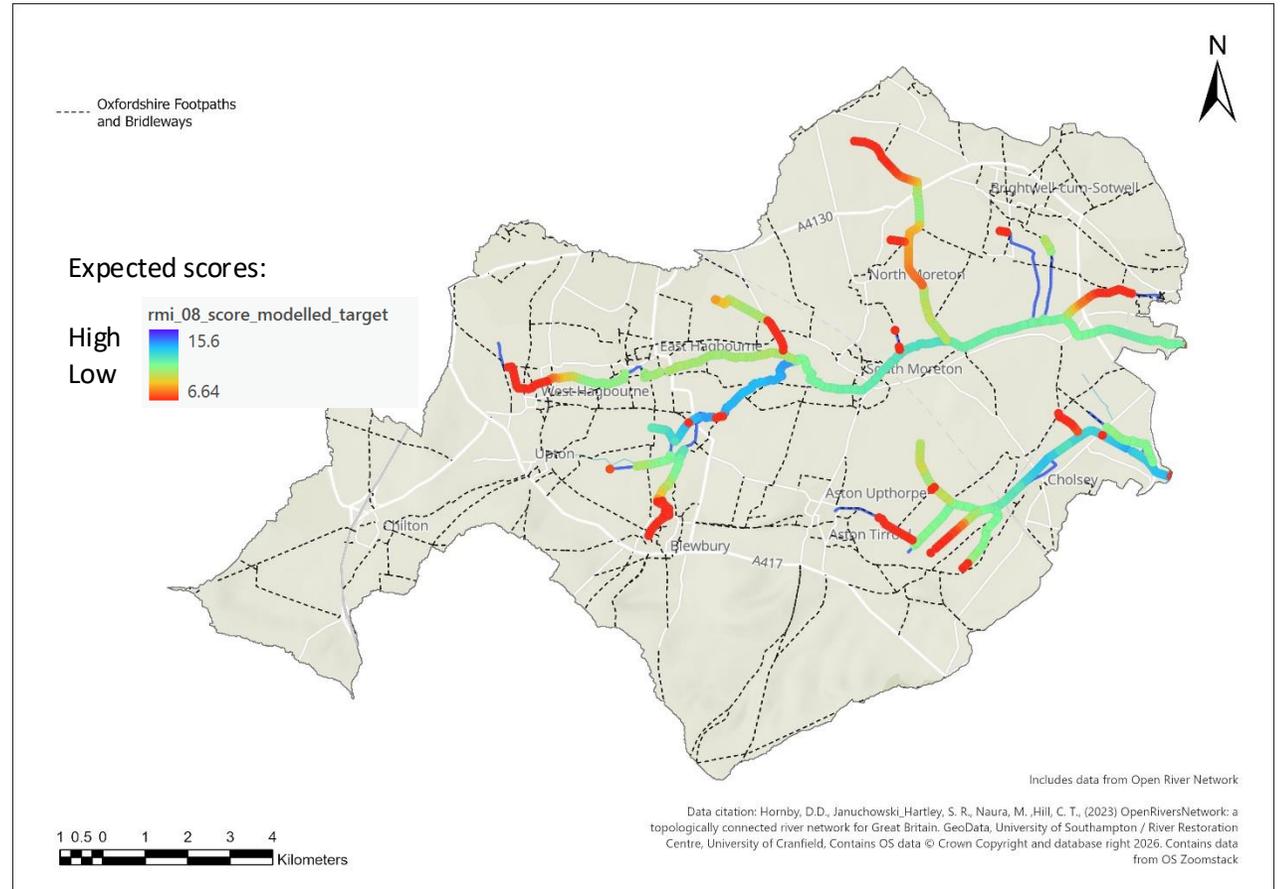
WFD 2016

Macroinvertebrate monitoring sites



WFD 2019

Macroinvertebrate monitoring sites



Planning on setting up 3-4 sites, 6-8 volunteers

Supported by

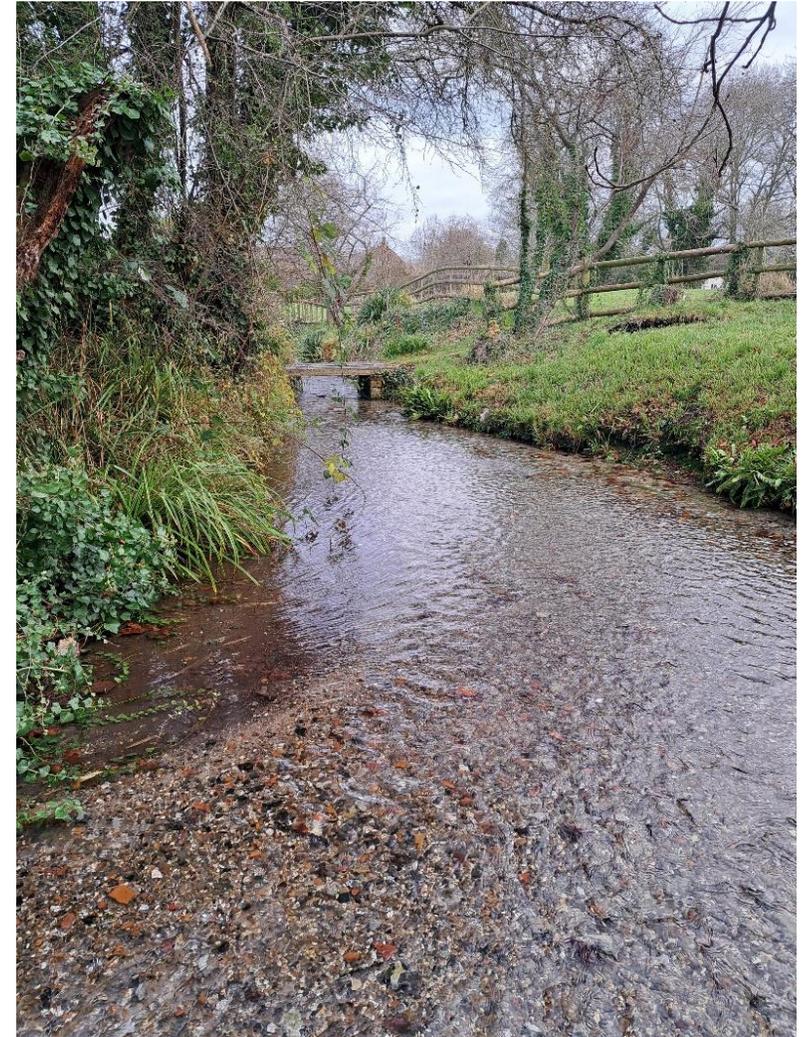


Action for the River Kennet

Ecology: Citizen Science

Riverfly Monitoring Initiative

None active in catchment at present. ARK plan to establish 3-4 sites in the catchment with local citizen scientists.

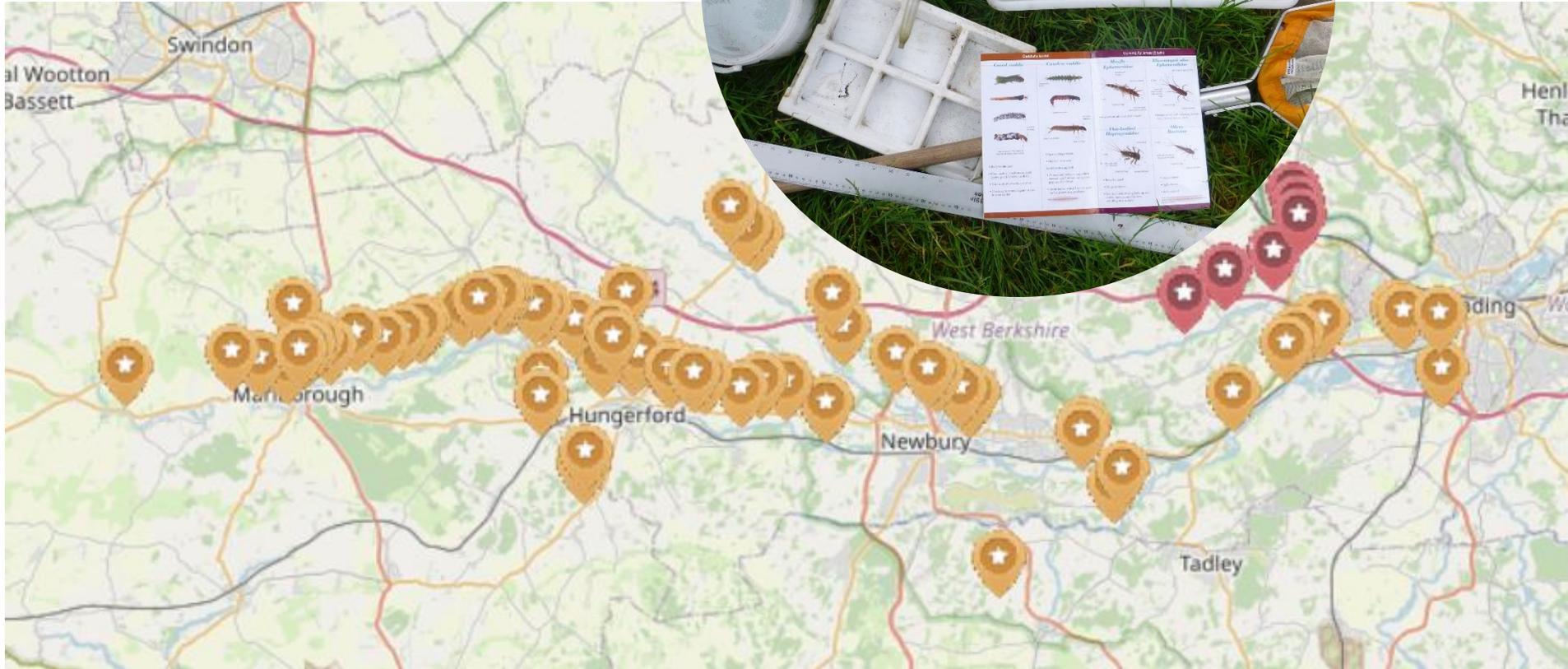


Supported by



Riverfly Monitoring

A national citizen science initiative to pick up serious pollution incidents



Action for the River Kennet



Riverfly Monitoring

- A long-term and regular commitment
- Monitoring every month (conditions permitting) at the same agreed site
- Monitoring takes approximately 1.5 hours each month
- Kit and waders supplied on loan
- Full training and ongoing support provided

Still interested?

Sign up for our all day accredited Riverfly Monitoring Workshop on Saturday 9th May

Email anna@kennetandpang.org

Ecology: Fish

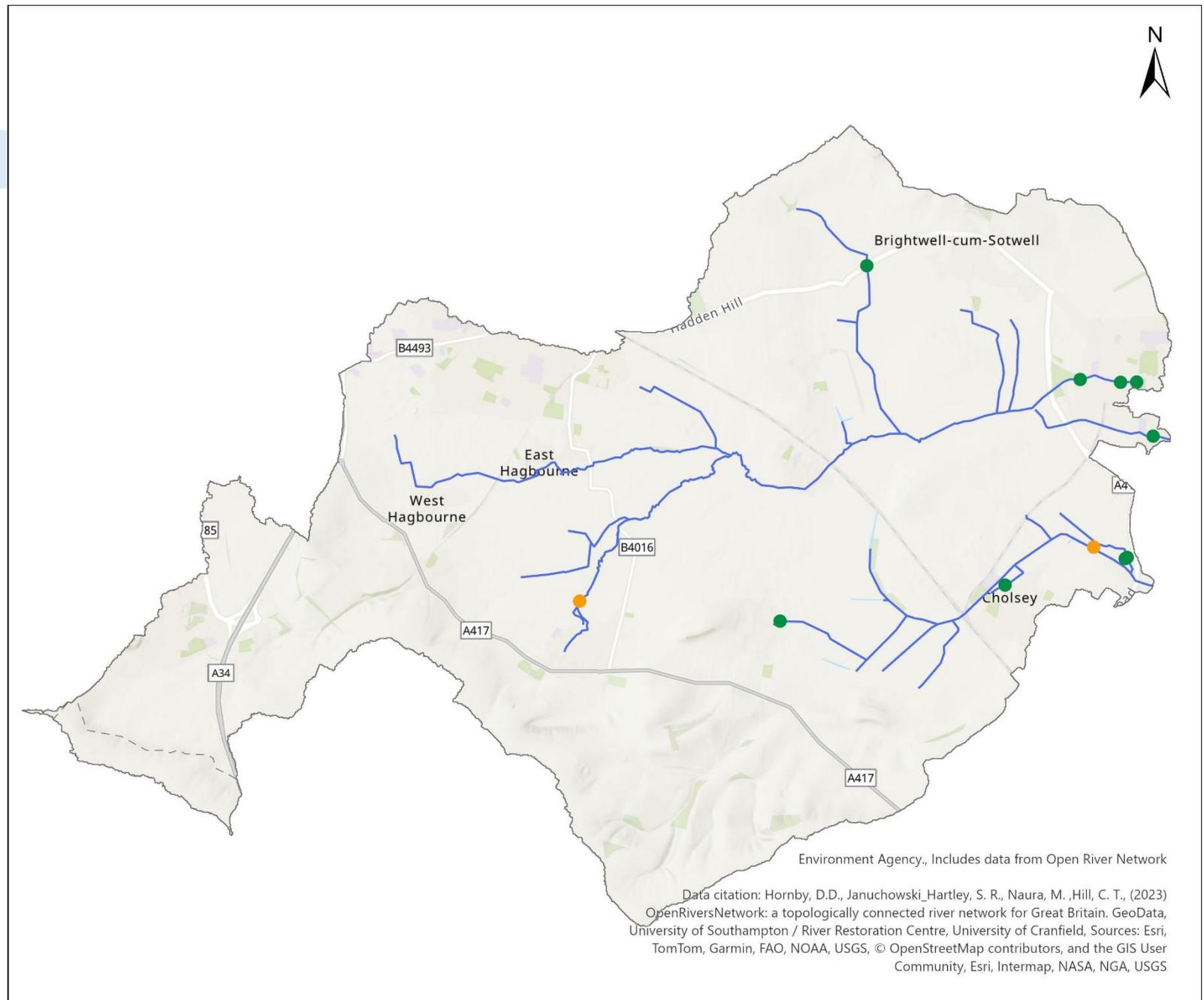
Barriers to Fish Passage

River Obstacles

Obstacle type

	weir	weir
	dam	dam
	culvert	culvert
	ford	ford
	lock	lock
	sluice	sluice
	waterfall	waterfall

River Obstacles - Overview



Our changing rivers

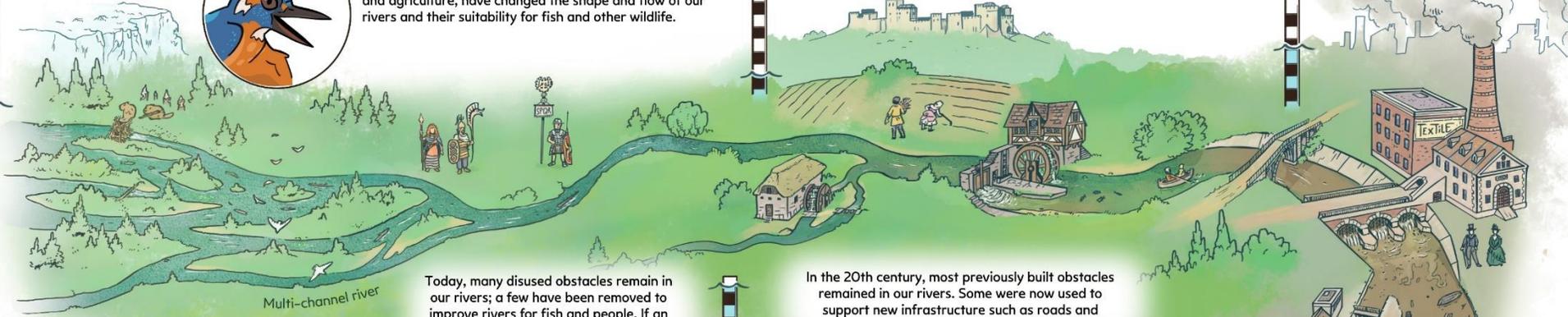
Relative number of human-made obstacles:



Humans have influenced our rivers for over a thousand years. Obstacles, such as weirs, along with urbanisation and agriculture, have changed the shape and flow of our rivers and their suitability for fish and other wildlife.

By 1066, people were building small seasonal weirs to provide water for milling and irrigation. These started to create obstacles to fish movement.

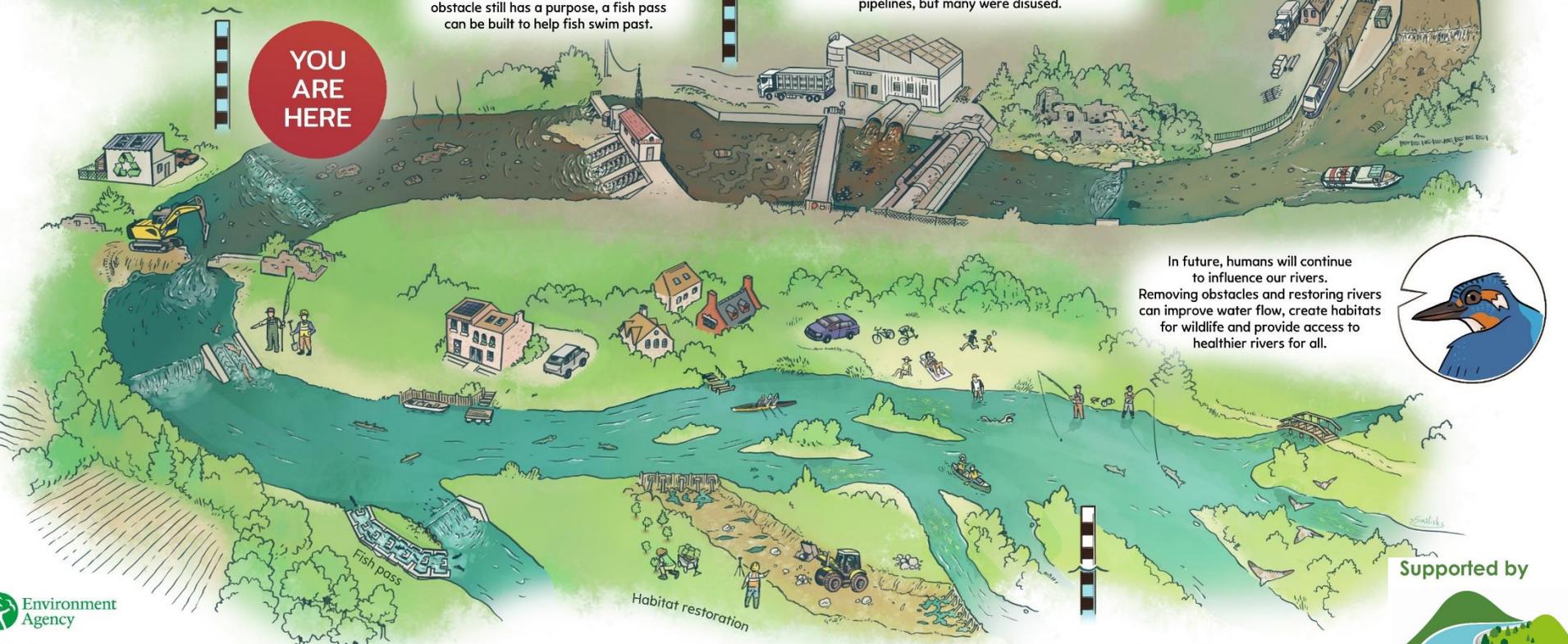
During the Industrial Revolution, more permanent obstacles, such as stone weirs, were built across our rivers, impeding movement of water, organic materials, gravels, and fish and other wildlife.



YOU ARE HERE

Today, many disused obstacles remain in our rivers; a few have been removed to improve rivers for fish and people. If an obstacle still has a purpose, a fish pass can be built to help fish swim past.

In the 20th century, most previously built obstacles remained in our rivers. Some were now used to support new infrastructure such as roads and pipelines, but many were disused.



In future, humans will continue to influence our rivers. Removing obstacles and restoring rivers can improve water flow, create habitats for wildlife and provide access to healthier rivers for all.



Supported by



Action for the River Kennet

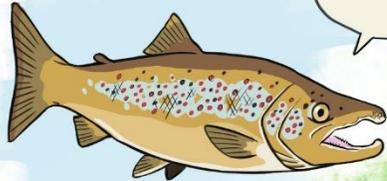
Why do we need fish passes ?



Rivers form networks like roads. Fish need to move up and down river to access food, shelter, and reproduce.

There are at least 10 human-made obstacles to fish movement in this image.

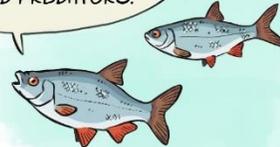
SALMON NEED TO GET FROM THE SEA TO UPRIVER HABITATS TO SPAWN.



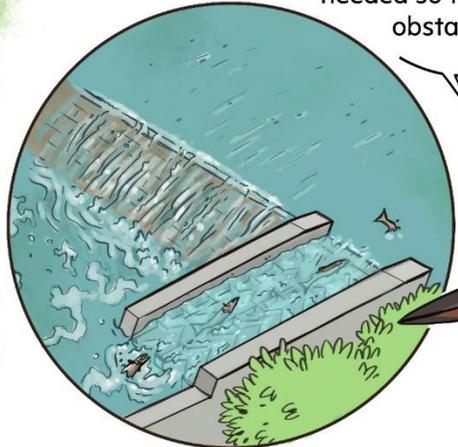
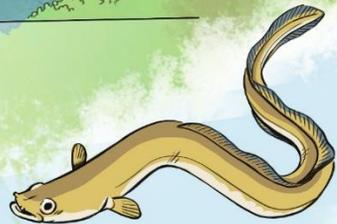
BREAM NEED ACCESS TO FOOD THROUGHOUT THE RIVER NETWORK.



ROACH NEED TO MOVE THROUGHOUT THE RIVER TO SPAWN AND SEEK SHELTER FROM FLOODS AND PREDATORS.



JUVENILE EELS NEED ACCESS UPRIVER TO GROW INTO ADULTS BEFORE RETURNING TO THE SEA TO SPAWN.



More than 50,000 obstacles impede fish movement in English rivers.

Human-made obstacles are being removed to improve rivers for fish and people. Some can't be removed, meaning fish passes are needed so fish can swim past these obstacles.



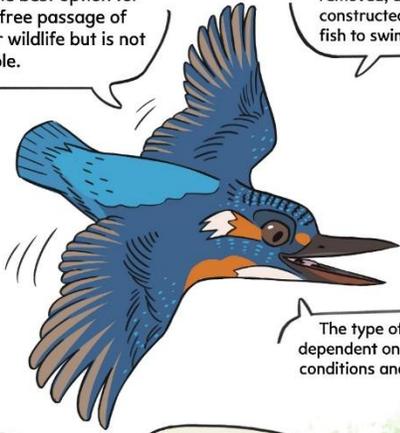
Supported by



Action for the River Kennet

Solutions for Fish Passage

Removing human-made obstacles is the best option for restoring the free passage of fish and other wildlife but is not always possible.



When an obstacle cannot be removed, a fish pass can be constructed to provide a route for fish to swim past the obstacle.

Flood gates can be automated to allow fish to move freely up and down river when it is not in flood.

Floodbanks can be breached or moved further from a river to provide space for fish to seek shelter during floods.

ROCK RAMP PASSES ARE BUILT UP TO AN OBSTACLE TO PRODUCE A SUITABLE SLOPE AND WATER DEPTH FOR FISH TO SWIM UP.



The type of fish pass constructed is dependent on the environmental and site conditions and the fish species that need to use it.

EEL PASSES HAVE ARTIFICIAL SUBSTRATE AND TRICKLING WATER FOR EELS TO CRAWL UP



Bypass channels resemble river channels and can restore habitat and free passage for fish and other wildlife.

Deep Vertical Slot passes slow water into a series of pools.

REMOVAL OF ALL HUMAN-MADE OBSTACLES ALLOWS A RIVER TO CHOOSE WHERE IT FLOWS, CREATING RIFFLES, SHALLOWS, POOLS, AND WETLANDS FOR ALL WILDLIFE AND PEOPLE.



Baffle passes have a series of baffles on the wall or floor of a constructed channel to slow the water flow.

Weir removal



Supported by



Action for the River Kennet

Ecology

Beavers



(c) Nick Upton

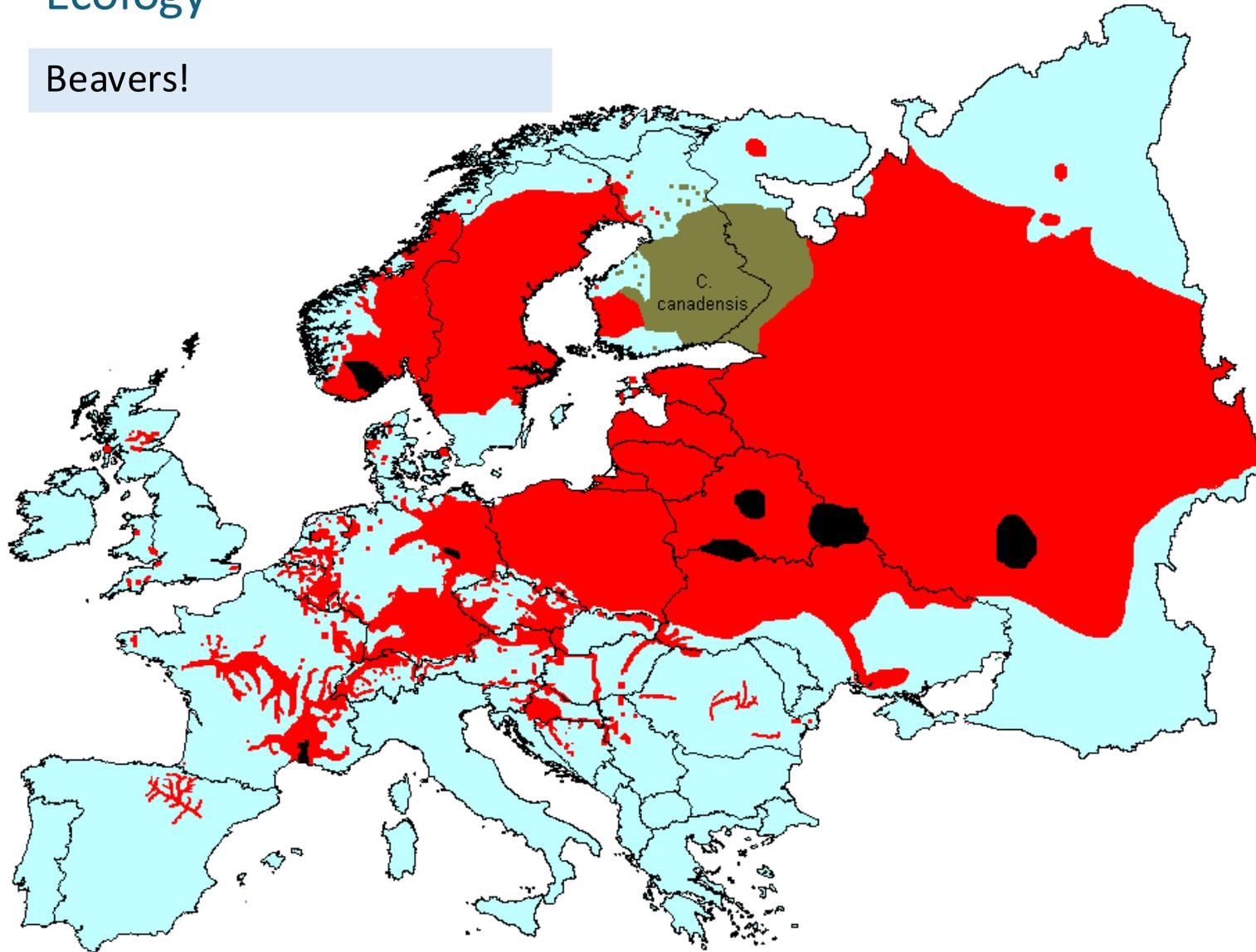
Supported by



Action for the River Kennet

Ecology

Beavers!



Where did all the beavers go?

Halley et al. 2020

Supported by



Ecology

Beavers?



[Search: species: Castor fiber | Occurrence records | NBN Atlas](#)

Occurrence date	2025-04-29
Event remarks	Photo, verified. Mammal Society

Supported by



Action for the River Kennet

Ecology

Feeding signs



Ecology

Invasive Non Native Species: **iRecord**

ALERT Species

These are species requiring urgent action. A list of alert species can be found at: [Species alerts » NNSS](#)

When submitting a record they need to know:

- What the species is; a photo helps!
- Where you found it
- When you first spotted it
- Who you are

Records will be sent straight to the GB NonNative Species Secretariat via iRecord or you can submit your records to: alertnonnative@ceh.ac.uk

ARK can support as a Local Action Group by organising targeted removal and trapping of certain Invasive species

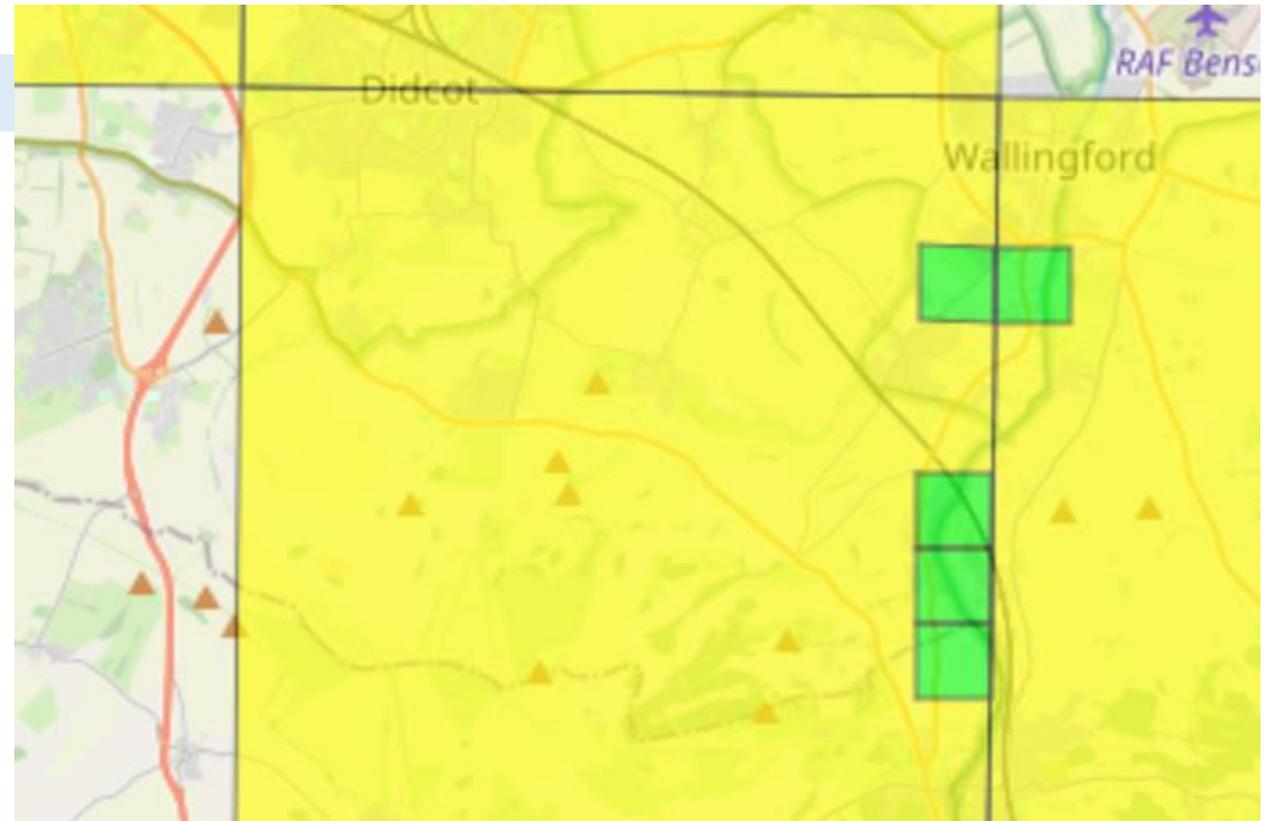


Ecology

American Mink

9 records from 2018-present along the Thames near Wallingford (see right)

5 confirmed by Mammal society



[Analyse data | NBN Atlas](#)

Supported by

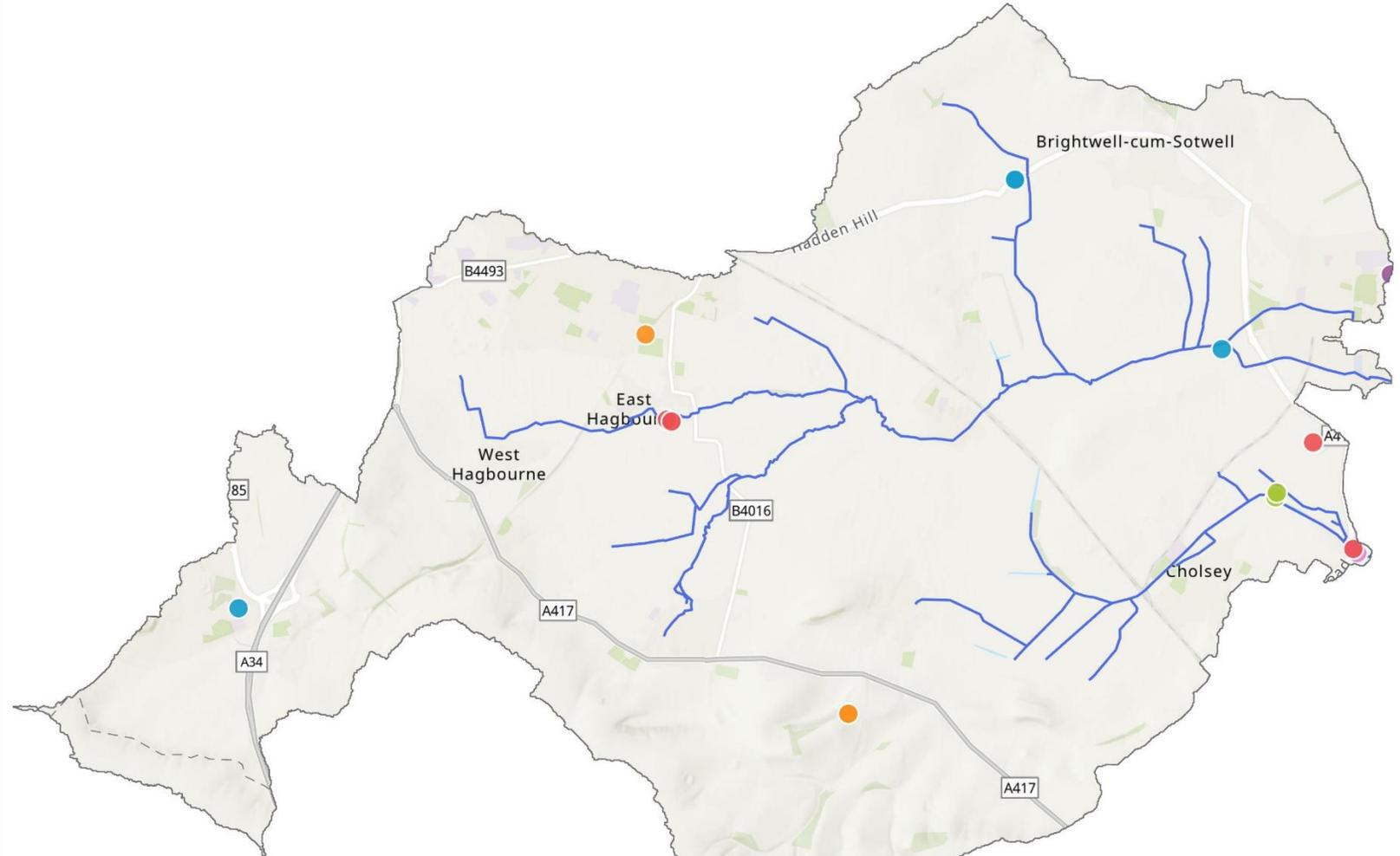


Ecology

Invasive Non Native Plant Species

Common name

- Himalayan Balsam
- Japanese Knotweed
- American Mink
- Canadian Waterweed
- Giant Hogweed

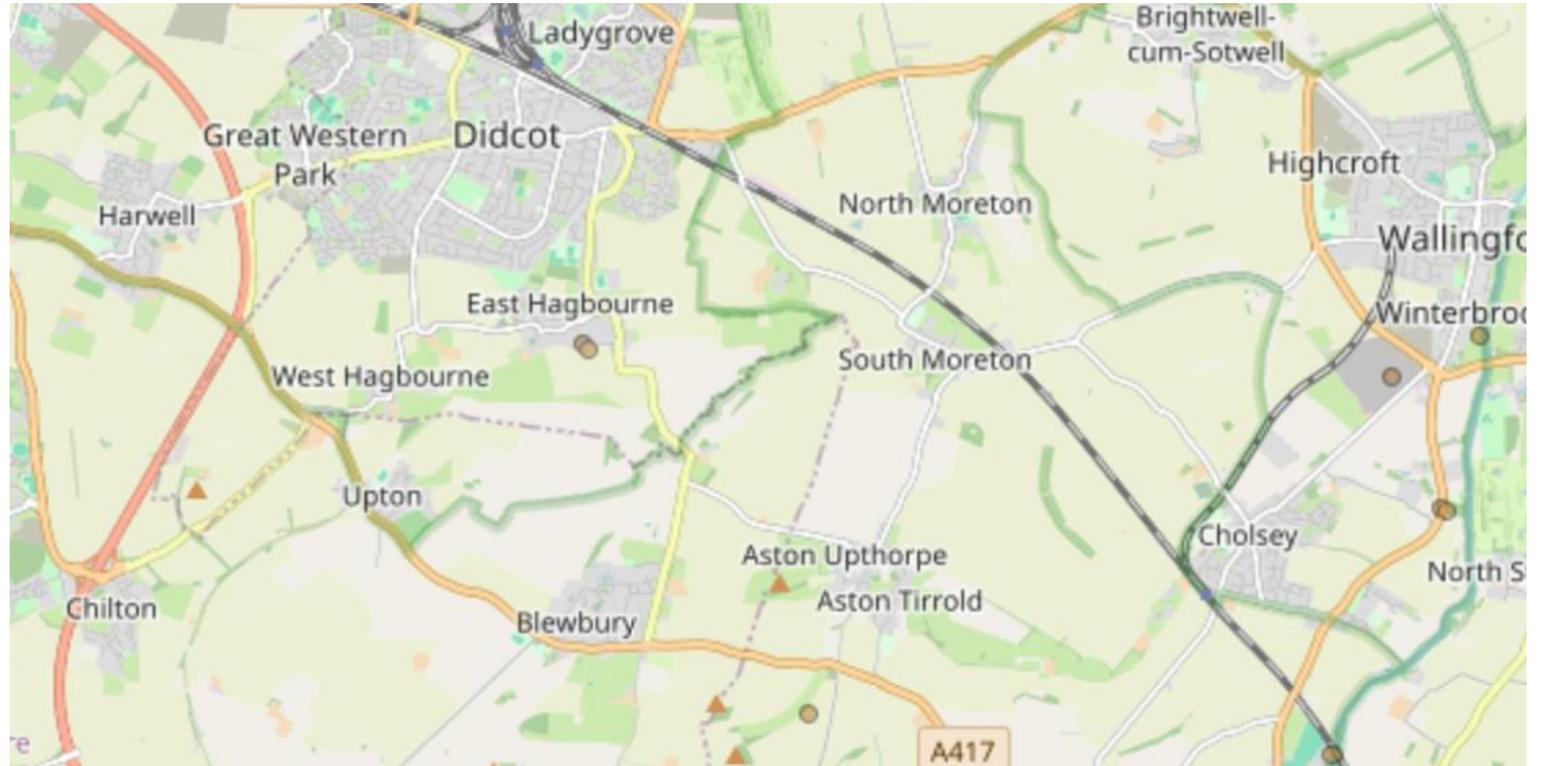


Includes data from Open River Network

Data citation: Hornby, D.D., Januchowski_Hartley, S. R., Naura, M., Hill, C. T., (2023)
OpenRiversNetwork: a topologically connected river network for Great Britain. GeoData,
University of Southampton / River Restoration Centre, University of Cranfield, Sources: Esri,
TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User
Community, Esri, Intermap, NASA, NGA, USGS

Ecology

Himalayan Balsam



[Analyse data | NBN Atlas](#)

Supported by



Action for the River Kennet



Japanese Knotweed



**New Zealand
Pigmyweed**



Curly Waterweed



Giant Hogweed



**Canadian/Nuttall's
Waterweed**

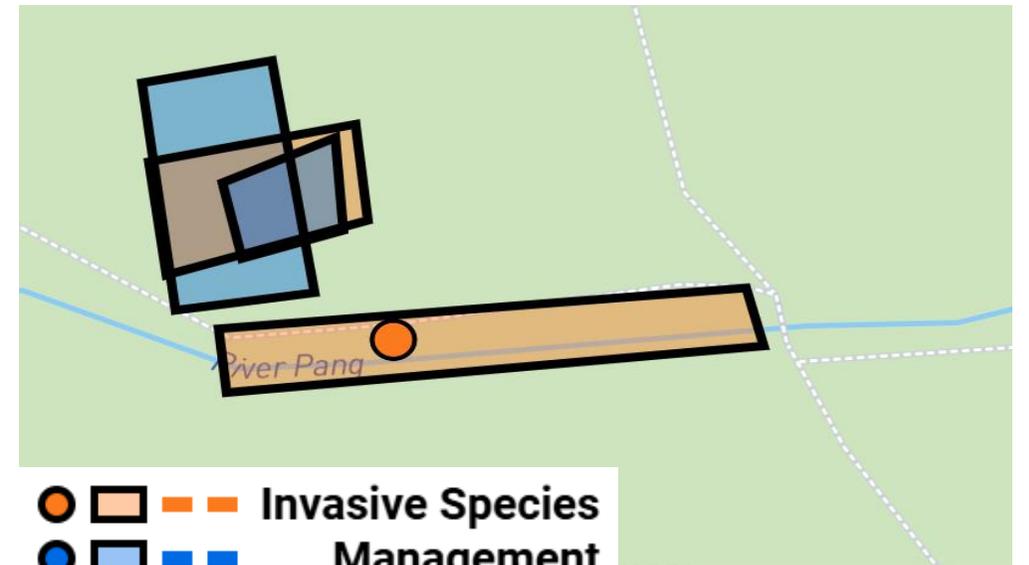


Rhododendron

Ecology

Invasive Non Native Species: iRecord & INNS Mapper

- iRecord
 - Free, anyone can use
 - Feeds into NBN Atlas
 - Great for data validation and sharing
 - Limited visualisation
- ARK can then use [INNS mapper](#) to keep track of action taken to mitigate INNS in area.
 - Not so good for uploading species records
 - *More American Mink, Himalayan Balsam, Water Primrose (2024 pond near chilton), giant hogweed 2019 ~East Hagbourne)*



-   Invasive Species
-   Management Survey

Ecology

TVERC – Mend the Gap report

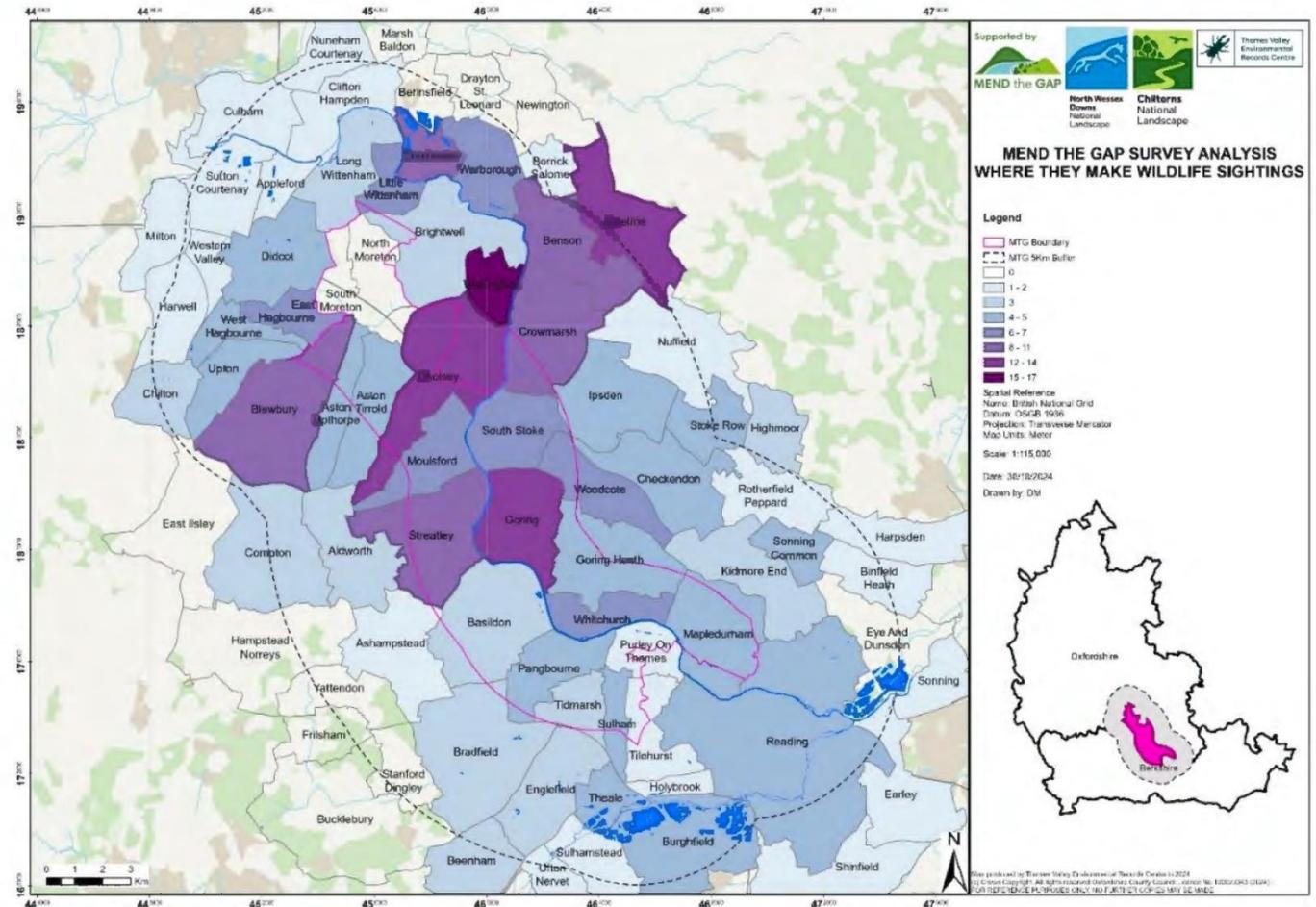


Figure 13 Spatial representation of where respondents make wildlife sightings. Responses were in answer to Wildlife Sightings Question 12 - *Where do you make *wildlife sightings in the Mend the Gap area?*

[TVERC-MTG-Report-2024-Final-compressed.pdf](#)

Supported by



Action for the River Kennet

Ecology – LNRS

Priority Species: Black Poplar



Species by Common Name (ordered A – Z)	Potential measure (the action needed to help the relevant species to recover). Potential measures are in bold with additional detail about the species added below.	Particularly important locations for the action(s)	Which species are intended to benefit most?	Habitat
<p>Black poplar trees</p>  <p>Link to map</p>	<p>Plant or enable Black Poplars to grow in Oxfordshire and retain dead and dying poplars where they have been growing. Retain deadwood where possible.</p> <p><u>Black poplar trees</u> used to be commonplace across England but are now few and far between. The black poplar is considered to be Britain's rarest tree species associated with wet woodland and forested floodplain. One cause of the decline for this wetland tree was the extensive draining of agricultural land across the country.</p> <p>Now that there are so few black poplars left, it is unlikely that they can pollinate each other due to the distance between the trees. Careful propagation and planting should be undertaken to grow male and female black poplars close to each other where their seeds can land on damp ground. In this way, population numbers may start to recover.</p> <p>Oxfordshire used to have strong populations of this tree since it grows particularly well in wetlands, floodplains, and near ditches. The tree itself supports a wide range of other rare species. Efforts to plant new black poplars could be targeted near to the remaining black poplar trees in Oxfordshire as well as other wetland sites in the county that are suitable to support the growth of new black poplars.</p> <p>See a Black Poplar action plan here.</p> <p>Avoid removing or burning the deadwood of any remaining black</p>	<p>River Thames catchment</p>	<p>Fly: True fly (Solva marginata)</p>  <p>Tree: Black Poplar (Populus nigra)</p>	 

Supported by



Action for the River Kennet

Ecology – LNRS

Priority Species: Water Vole



Species by Common Name (ordered A – Z)	Potential measure (the action needed to help the relevant species to recover). Potential measures are in bold with additional detail about the species added below.	Particularly important locations for the action(s)	Which species are intended to benefit most?	Habitat
<p>Water vole</p>  <p>Link to map</p>	<p>Manage (or enhance) riverside banks, ditches, and watercourses for Water Voles.</p> <p>This action can be to support existing Water voles, or to create suitable habitat for new water voles to colonise. Manage riverside banks, ditches, and watercourses to create or maintain areas of sunny shallow water margins with marginal and bankside vegetation and avoid excess or extensive overshadowing of the water by scrub or trees (especially if water vole colonies are already present).</p> <p>Avoid trampling or intensive grazing along the watercourse edge which can damage water vole burrows. Ensure that American Mink are being controlled with the aim to achieve their exclusion where water voles are present.</p> <p><u>Water voles</u> have experienced drastic declines in the UK. Their numbers dropped by almost 90 per cent between 1989 - 1998 but water voles can still be found in the banks and waters of Oxfordshire's fens, rivers, streams, and ditches.</p> <p>They are most commonly found in areas of slower flowing water with abundant vegetation and steep sided banks (for burrowing into) that have small ledges at their base. Effort should be made to improve habitats where the remaining populations could be joined up with each other.</p> <p>Alongside improved bank and ditch management, it is key to control the (invasive species) American mink which predate on water voles in an unsustainable manner and cause local extinctions which have driven the decline of this species. Water vole recovery is primarily based on whether the efforts to control American Mink are successful.</p> <p>Mink were introduced to the country and are the primary cause of the decline of water voles. Water vole projects, like <u>that of BBOWT</u>, bring</p>	<p>Areas that bridge a gap between existing populations</p>		

Ecology

Wallingford Biodiversity Action Plan 2024

10.2 Mill Brook and Bradford's Brook

... [Culverting of Mill Brook]...

BBOWT's Water Vole Recovery Project surveys and monitors local water vole populations (currently present on Bradford's Brook and Mill Brook) and works with landowners and volunteers to monitor and control American mink and enhance habitat for water voles. The water vole population on the Mill Brook was last surveyed in 2022 and is currently stable but needs more mink monitoring and control measures. Bradfords Brook will be surveyed in 2024.

Action for WTC. Develop plans to restore the Mill Brook and install mink rafts to monitor and trap American mink.



Topic	Action	Target Areas
Watercourses	Reconnect reaches, restore channel form and reduce shading	Mill Brook
Watercourses	Designate as bathing area. Mill Brook	River Thames at Wallingford bridge
Mammals	Remove American Mink	River Thames, Bradford's Brook and Mill Brook
Agricultural land	Identify opportunities for biodiversity friendly farming	Agricultural land in and around Wallingford
Connectivity	Identify opportunities to connect habitats	With Wallingford and with neighbouring parishes.
Education	Offer schools locations in for wildlife education	Throughout Wallingford
Volunteering	Encourage volunteers	Throughout Wallingford

[Oxfordshire LNRS Local Habitat Map](#)

Ecology

Water Voles



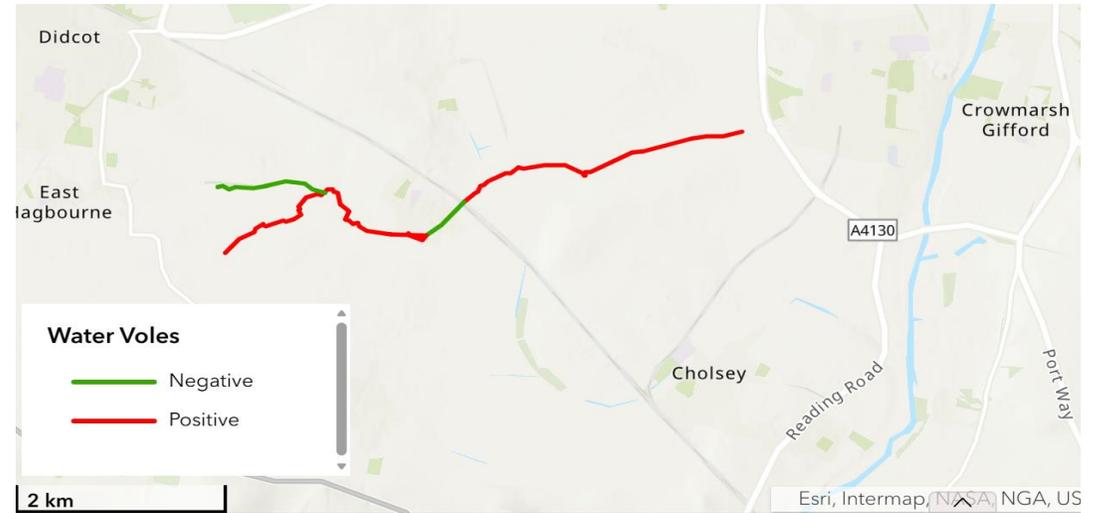
Water Vole



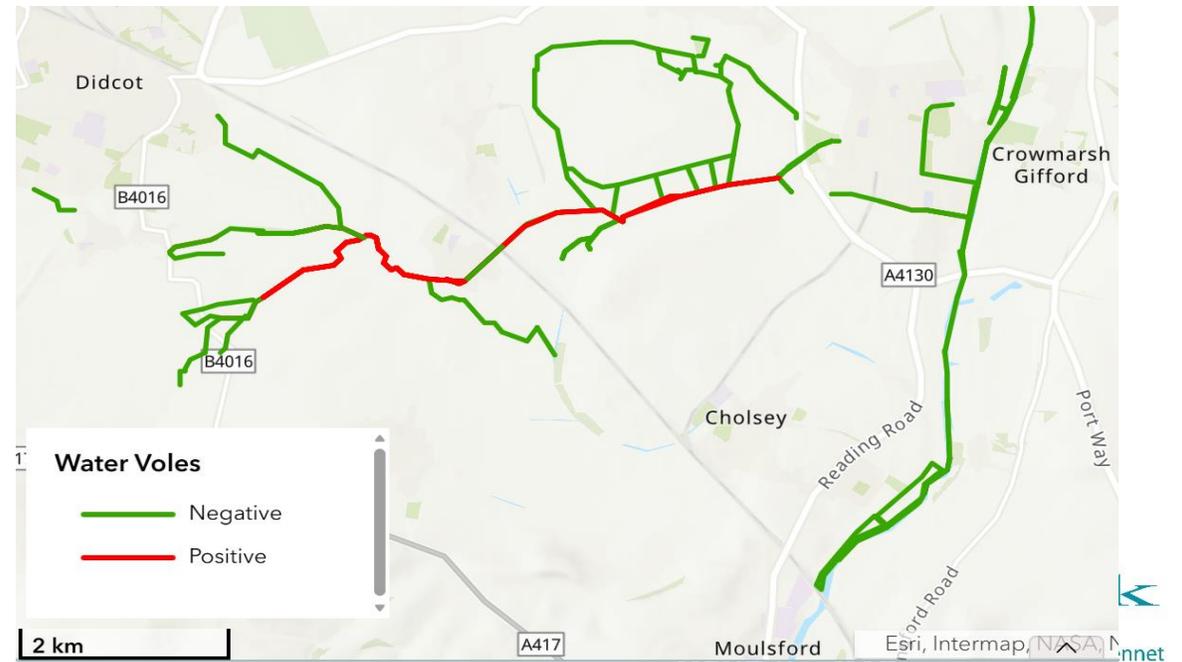
Rat

BBOWT's Water Vole Survey Public Results WebEx

2025 presence



2002 to Present Day



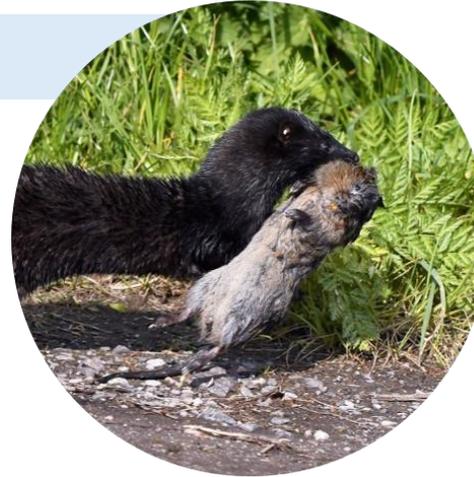
MEND the GAP

Ecology

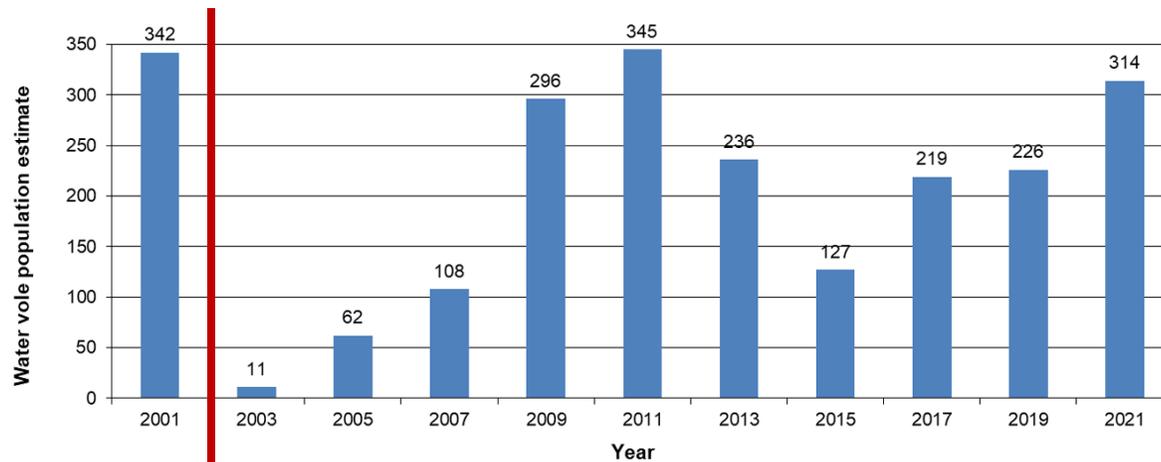
Water Voles & American Mink

We know that American Mink are present on the Thames

Preventative action is needed to avoid decimation of water vole population



Water Vole population on the River Chess:



Mink found

Remoti

Home Get Started The Unit Web Service Free Trial Legal Purchase Contact

Trap Monitor Unit.

The **Remoti** unit is a highly versatile and configurable unit, and can be attached to a multitude of different animal spring traps including squirrel, mink, fox, mole and magpie.

The unit will automatically connect to the best mobile networks available across the globe. Because the Remoti unit can use any mobile network available, it even works in locations where your own mobile phone doesn't!

That's it! A simple, low cost solution for animal trap monitoring.
[Technical Specification](#)

Clean & simple...On any trap

Remoti units are able to monitor any type of trap (that has a mechanical action) you wish. The unit is simple to mount and set-up and we've worked hard to make operation as simple and painless as possible.

The unit is built for simplicity and peace of mind!

- Simple magnet system gives peace of mind the unit is set
- Indicator light gives clear 'in the field' indication that unit can communicate with our system (no confusing beeps or need to check



Action for the River Kennet

Gaps for further input & expertise

- Research data – UKCEH
- Heritage
- Hydrology and low flow expertise
- Land ownership – who's who and establishing contact for walkover, monitoring and project scoping



Supported by



Partner Input

Environment Agency

Links to resources

- [Map Explorer | Water Quality Explorer](#)
- [GOVAQUA Oxford Rivers Data Portal](#)
- [Thames River Basin District | Catchment Data Explorer](#)

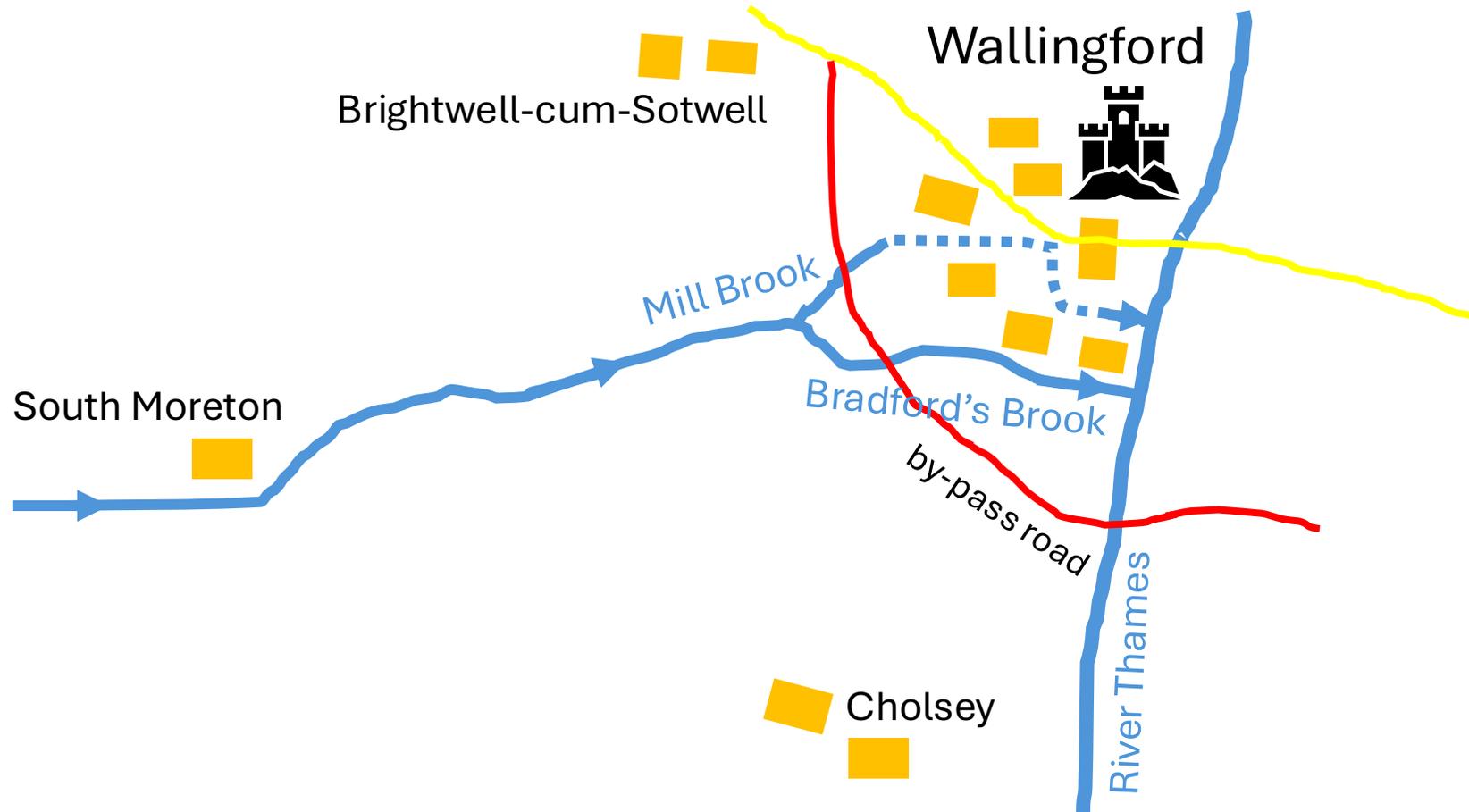
[Mill Brook and Bradfords Brook system, Wallingford River Basin Management Plan: maps \(to 2022\)](#)

2025 WFD cycle due out in 2026. Comparable scope to 2019 cycle (more detail than the previous 2022 three yr cycle)

Partner Input

Wallingford Restoration Group – Mike Acreman

Wallingford Brooks catchment partnership



... the Wallingford end

A great asset until 1975

Water for the moats of the castle and Saxon embankments

for public water supply, breweries, mills, foundries

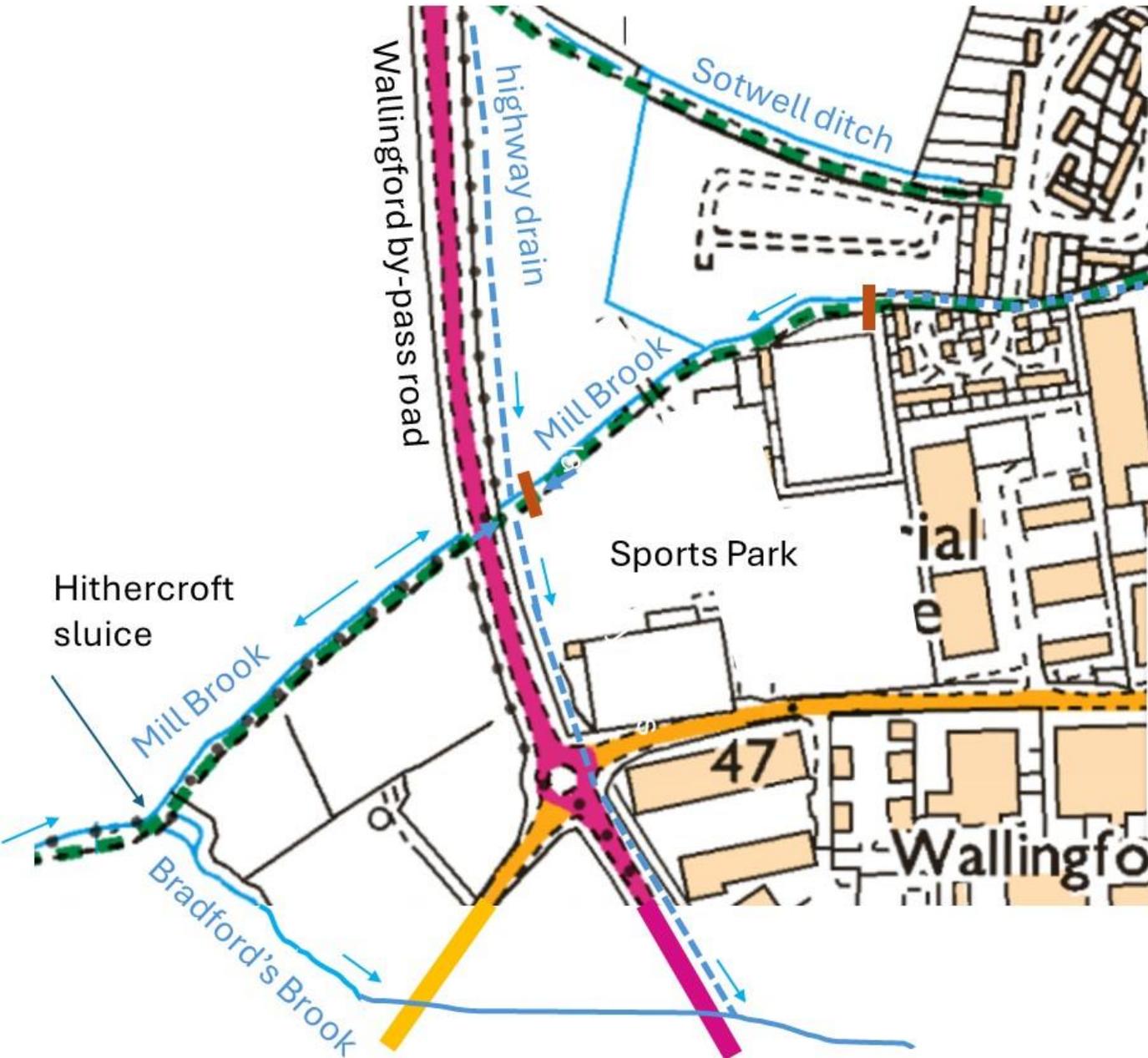
for recreational fishing, paddling



Market bridge 1970



same view today



An uphill struggle

1975 water diverted “upstream” to Bradford’s Brook to reduce flooding in town

1992-3 bypass road built with culvert

2015 bypass culvert blocked, water diverted into highway drain to reduce flood risk at Sports Park



10 years of decline

Bad smells and clouds of flies

High E.coli, BOD, ammonia, low DO

Oily surface, foam, grey water

Ecologically dead (no fish, newts, frogs)

February 2026

Sewage fungus

Thames Water say no sewage leaks

Environment Agency investigating

The Herald

heraldseries.co.uk

Wednesday, March 11, 2026

Wallingford

£1.30

PAGE 6



OFSTED GIVES HIGH PRAISE TO PRIMARY

MAN MADE TO
DIG BUNKER
FOR HITLER
TURNS 100



PAGE 3



PAGE 14

Landmark 500-year-old
hotel goes up for sale

BID TO CLEAN UP STREAM

Campaigners gather
beside the stream they
want restored.
Image: Ed Nis



Watercourse
where kids
paddled in
summer now
left 'smelly
and oily'



By Madeleine Evans
madeleine.evans@newsquest.co.uk

A CAMPAIGN to save a historic Wallingford brook – described as 'an ecological disaster' – has been launched.

Many townspeople remember paddling in the Mill Brook, which runs parallel to Wallingford Sports Park and Hithcroft.

The stream once supplied the moats of Wallingford Castle and fed mills, breweries and the town's water supply.

But the man leading a push for its restoration says it is now in a poor state, often smells and looks oily.

FULL REPORT: PAGE 8

Mill Brook Restoration Group

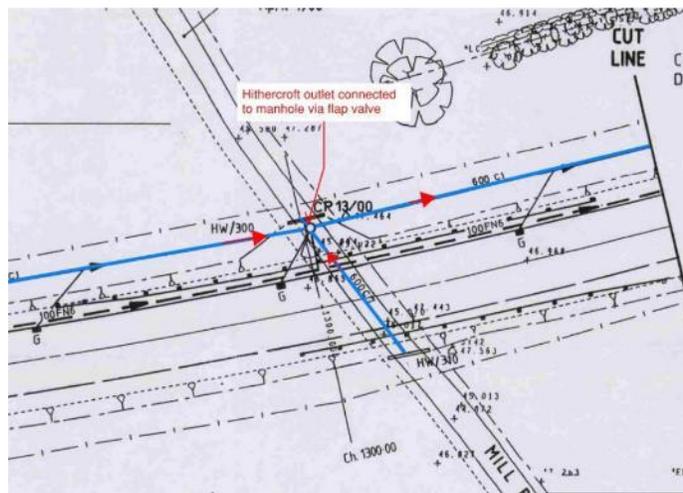
Small, but very active group

Passionate residents, drainage engineer, former staff of Environment Agency, Thames Water, Centre for Ecology & Hydrology

Working closely with Sports Park and Wild about Wallingford

Strong support from locals and Wallingford Town Council

Wallingford Herald 11 March 2026



Restoration action

Short term: Raise awareness

Building relations with business, agencies, councils, community groups

Mid-term: Restore flow and biodiversity

Collating knowledge, monitoring water (quality & quantity) & ecosystem condition
Wildlife corridor management

Long term: de-culvert Mill Brook through Wallingford

Fund raising for restoration (e.g. S106)

Partner Input

Thames Water – Freddie Collins

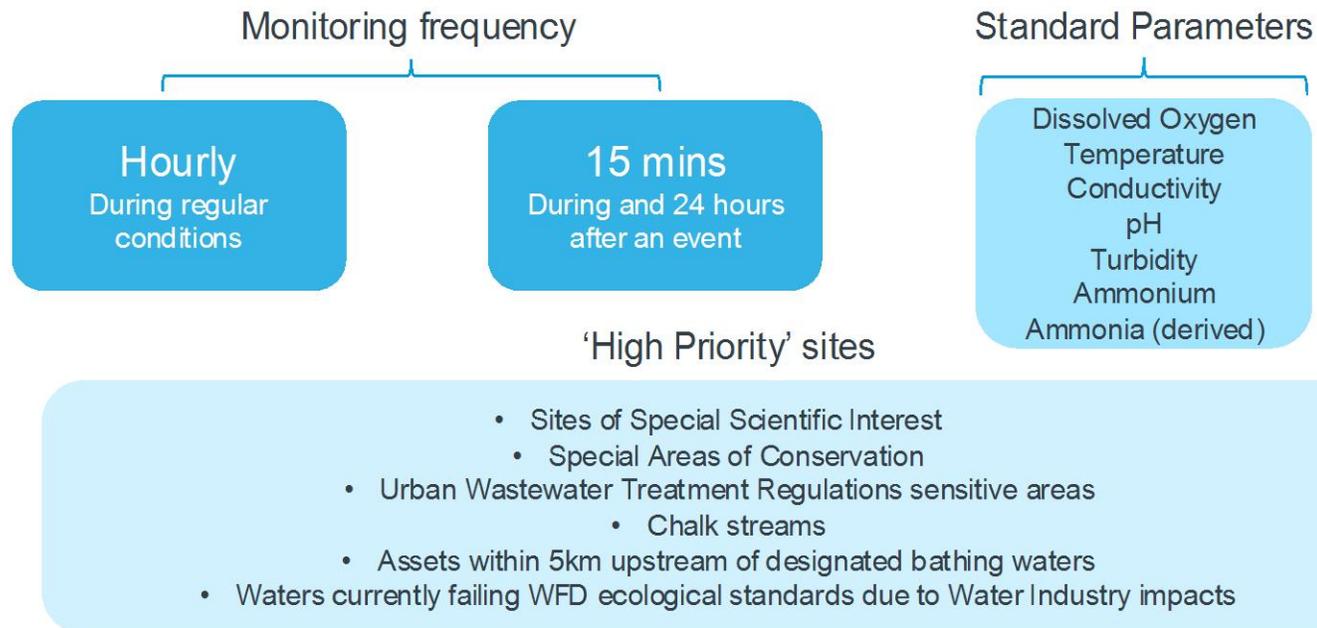
Continuous Water Quality Monitoring

As part of our continued commitment to river health, alongside our regulatory responsibilities, we are working to reduce the number of storm overflows from our assets and their impact.

The 2021 Environment Act has recently been updated to require all water companies to continuously monitor upstream and downstream of all storm overflows and STW discharges to watercourses.

We are required to monitor 25% of our discharges* by 31st March 2030, and the remainder by 31st March 2035. This data will be made publicly available in near real-time (within one hour) and reported annually to the Environment Agency.

We are in the process of prioritising locations for monitoring and will provide updates as we progress.

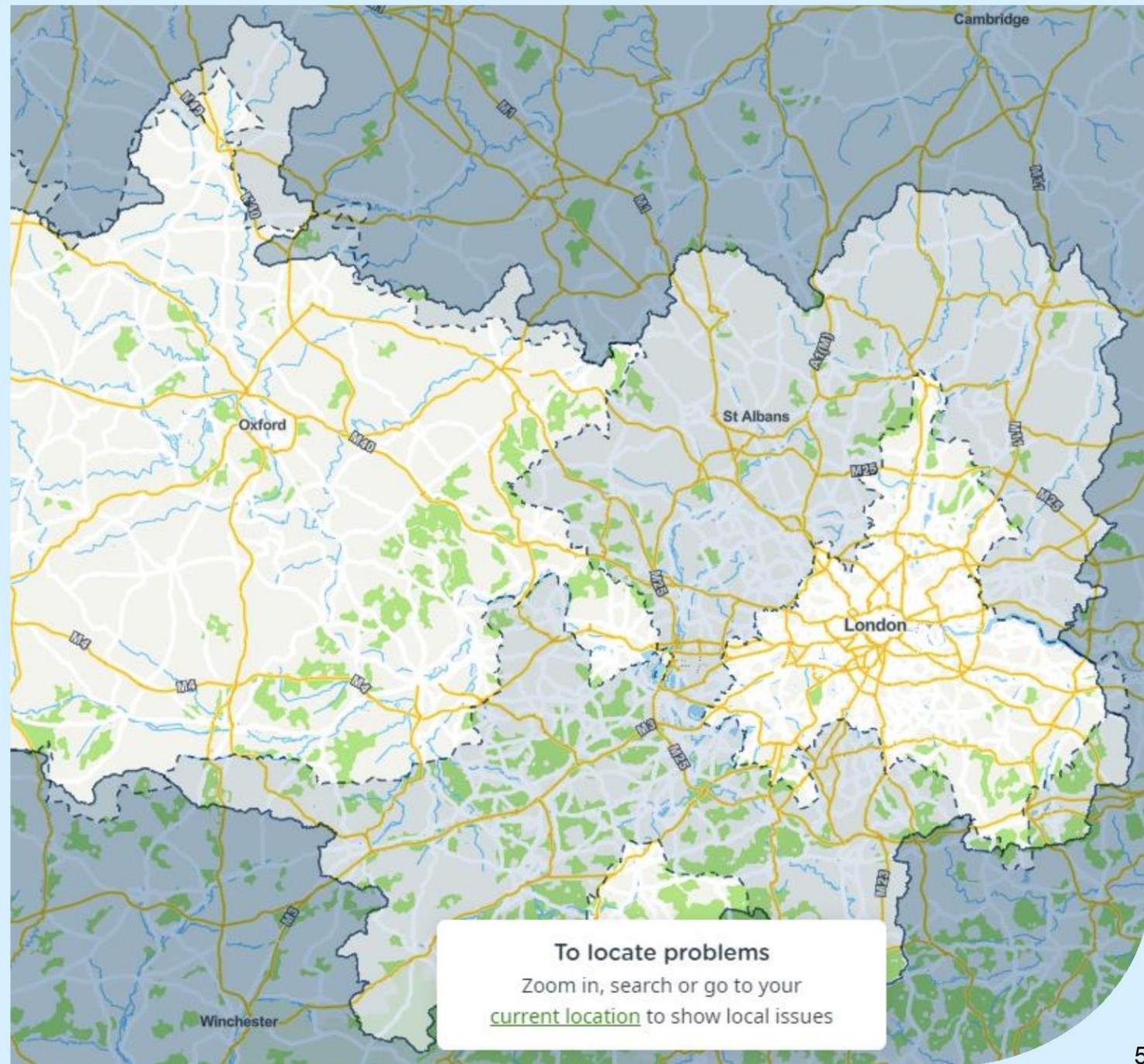


*Discharges are only exempt from monitoring if the receiving watercourse has a year-round, permanent depth below 4cm, or the storm overflows spill fewer than 10 times per year over a 5-year rolling annual average.



Reporting a Problem

- The sooner we receive a report the sooner we can attend, assess the situation and take steps to rectify the issue.
- New [reporting a problem online tool](#) has been launched
- You can also call **0800 316 9800** and select option 3 and then option 2.
- Once reported, a rapid response team will be at the scene within two hours to take swift action. This has been reduced in many cases to under 60 minutes.



To locate problems
Zoom in, search or go to your
[current location](#) to show local issues

Potential Pollution Incidents Mailing List

Over the past few years, we have proactively emailed Catchment Partnership hosts when a potential serious pollution incident to water has taken place in their Catchment Partnership.

Potential pollution incidents and increasing transparency are important to us. With this in mind, we are now expanding this communication to beyond Catchment Partnership hosts.

Please note;

- *The team providing these emails work 9am - 5pm; information regarding potential pollution incidents will be shared the day after an incident or on Monday for incidents which take place on a Friday, Saturday or Sunday.*
- *Information relating to incidents can change following site investigations.*
- *Only potential serious pollution incidents to water (incidents with a potential major or significant environmental impact level) will be shared with this mailing list. The categorisation of potential pollution incidents can change throughout their investigation.*
- *Further updates on potential pollution incidents are available on request but may be limited by our team's capacity.*

Potential pollution incident near LU1 2NB.

Thames Water Partnership
To

1110152750.jpg 352 KB

Good morning,

I am writing to let you know of a potential pollution incident which occurred on 11.10.2025 near LU1 2NB. The NIRS reference for this incident is 2435425.

We received an EA report of discolouration and foul odour near a surface water outfall on the River Lea. Our network team attended and traced the pollution to a set of culverts upstream, but could not locate the source as manholes further upstream were clear. Downstream there was biofilm coverage and an oily sheen on the surface of the watercourse. Works were raised for a CCTV investigation to check the culverted line. Mitigation was difficult to put in place due to the culverted watercourse, but an assessment has been requested to deploy aeration units in the watercourse to aid dissolved oxygen levels.

Run ID	Location	Location Information	Date & Time	Distance	DO %	NH3 (mg/l)	NH4 (mg/l)	Chlorine (ppm)	Turbidity (NTU)	Temp (C)	pH	Comments
1	Upstream 1	Unable to take readings as river was dry at closest accessible point u/s	11/10/2025 19:59									
1	Ingress 1	POI - TL0901621587	11/10/2025 19:59		8.9	0.01	2.31				7.25	
1	Downstream 1	TL0904221553	11/10/2025 19:59	50	19.2	0.02	3.01				7.40	
1	Downstream 2	TL0918821380	11/10/2025 19:59	270	29.7	0.02	2.57				7.53	
1	Downstream 3	TL0987921008	11/10/2025 19:59	1160	14.0	0.03	3.62				7.59	

The information which has been shared is accurate to the best of our knowledge as at the time it was sent. It is based on our initial assessment of the incident, and may change as a consequence of further investigations. The incident described in this email has been initially categorised as a serious pollution incident. The final categorisation for a pollution incident is determined by the Environment Agency.

Please note, if you would like to share any knowledge relating to this incident outside of working hours (9am - 5pm), please contact our Customer Service Team (0800 316 9800).

If you would like to request any further information relating to this incident, you may do so through an [Environmental Information Request](#).

If you do wish to opt out of these notifications, please contact ThamesWaterPartnerships@thameswater.co.uk and we will ensure that you will no longer receive any notifications regarding pollution incidents.

Style Settings Preview Collect responses View responses 99

Potential Pollution Incidents Mailing List

Please submit your details below if you would like to receive emails regarding potential pollution incidents in your Catchment Partnership.

Please note. The team providing these emails work 9am - 5pm; information regarding potential pollution incidents will be shared the day after an incident or on Monday for incidents which take place on a Friday, Saturday or Sunday. Information relating to incidents can change following site investigations. Only potential CAT 1/2 pollution incidents to water (incidents with a potential major or significant environmental impact level) will be shared with this mailing list. Further updates on potential pollution incidents are available on request.

Your information will be used only for the purposes of sharing potential pollution incidents which have taken place in your Catchment Partnership of interest.

If you do wish to opt out of these notifications, please contact ThamesWaterPartnerships@thameswater.co.uk and we will ensure that you will no longer receive any notifications regarding pollution incidents.

We will retain your data for 12 months. Following this period of time, you will be contacted to ask for consent to retain your information and continue to opt in to receive potential pollution incident communications.

1. Name *

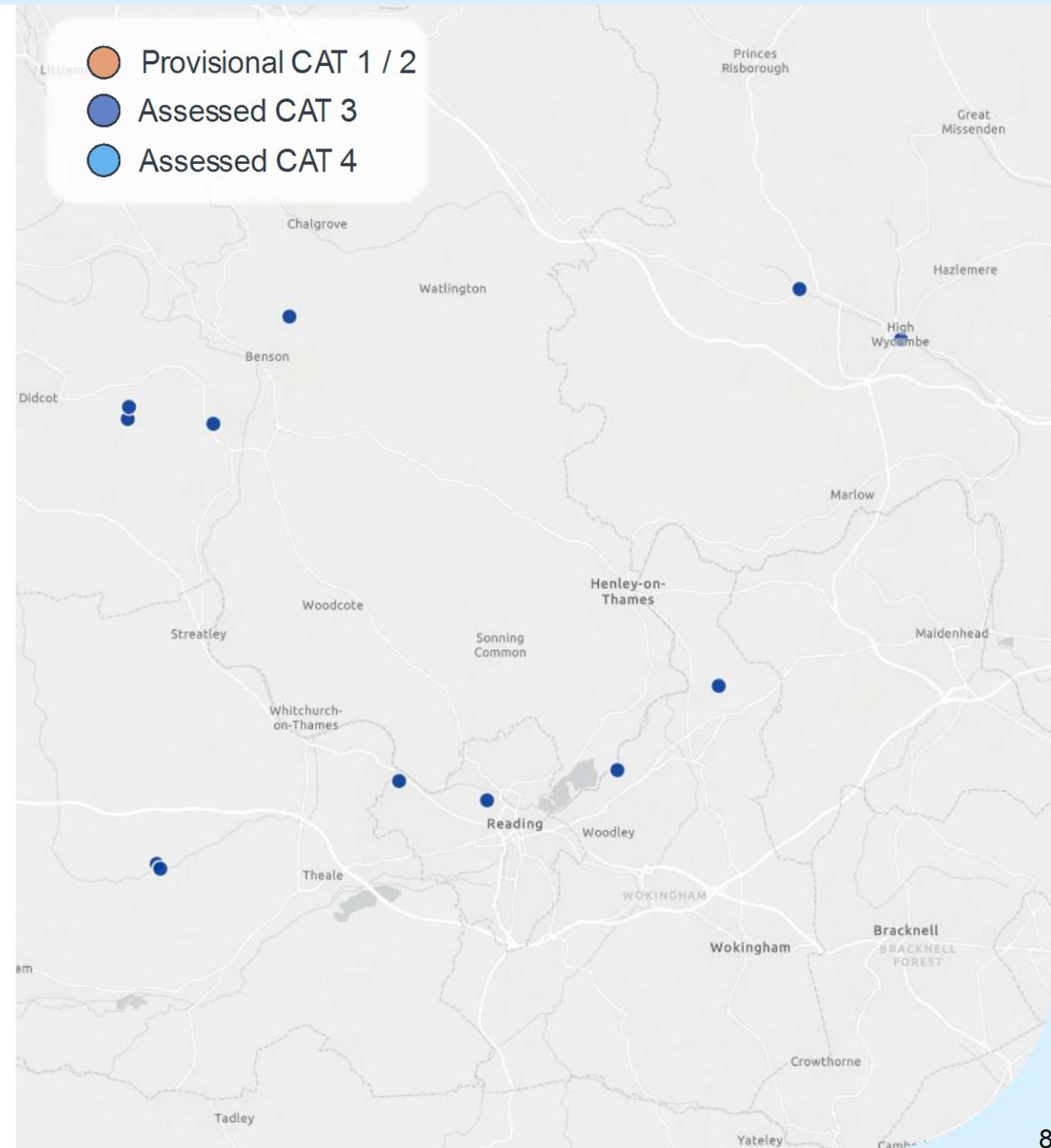


To register to receive emails on potential pollution incidents for your Catchment Partnership, please scan the QR code or follow this [link](#).

Potential Pollutions

December 2025 – March 2026

1. Assessed CAT 3 NIRS 2469149 19.02.26
Hydraulic overload of foul sewer caused manhole to discharge to River Pang. Nearby SPS also hydraulically overloaded. Tankers deployed to manage flows; sandbags requested to mitigate further.
2. Assessed CAT 3 NIRS 2468046 16.02.26
Hydraulic overload of foul sewer caused manhole to discharge to watercourse. Nearby SPS also hydraulically overloaded. Tanker deployed to manage flows.
3. Assessed CAT 3 NIRS 2467502 14.02.26
Hydraulic overload of foul sewer caused manholes to discharge to watercourse. Nearby SPS also hydraulically overloaded. Tankers deployed to manage flows.
4. Assessed CAT 3 NIRS 2466572 11.02.26
Hydraulic overload of foul sewer caused manhole to discharge to watercourse. Nearby SPS also hydraulically overloaded. Tankers deployed to manage flows.
5. Assessed CAT 3 NIRS 2466504 11.02.26
Rag & fat blockage in foul sewer caused manhole to discharge to watercourse. Blockage cleared, clean up around manhole completed.
6. Assessed CAT 3 NIRS 2463866 05.02.26
Hydraulic overload of foul sewer caused manhole to discharge to Lady Brook. Tankers deployed to manage flows.
7. Assessed CAT 3 NIRS 2462493 01.02.26
Blockage in foul sewer caused manhole to discharge to River Wye over land. Blockage cleared, clean up around manhole completed.

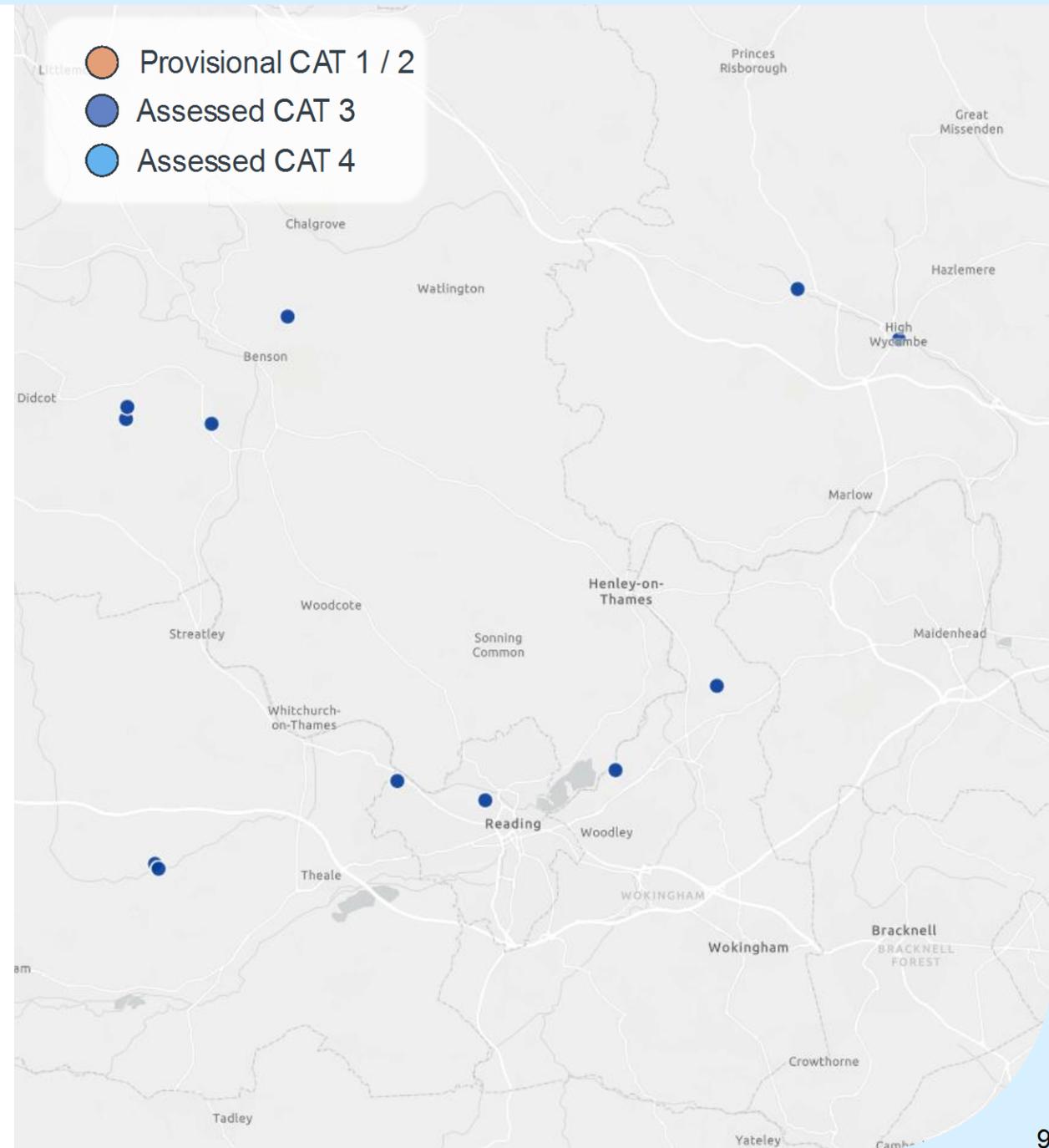


The information which has been shared is accurate to the best of our knowledge as at the time it was sent. It is based on our current assessment of the incident and may change as a consequence of further investigations. The final categorisation for a pollution incident is determined by the Environment Agency.

Potential Pollutions

December 2025 – March 2026

- | Assessment Category | NIRS Reference | Date | Description |
|---------------------|----------------|----------|---|
| 8. Assessed CAT 3 | NIRS 2458947 | 22.01.26 | Hydraulic overload of foul sewer caused manhole to discharge to River Pang. Tankers deployed to manage flows. |
| 9. Assessed CAT 3 | NIRS 2458769 | 22.01.26 | Hydraulic overload of foul sewer caused manhole to discharge to Lady Brook. Tankers deployed to manage flows. |
| 10. Assessed CAT 3 | NIRS 2468704 | 22.01.26 | Hydraulic overload of foul sewer caused manhole to discharge to River Pang. Nearby SPS hydraulically overloaded due to heavy rainfall and infiltration. Tankers deployed to manage flows. |
| 11. Assessed CAT 3 | NIRS 2456999 | 15.01.26 | Foul manhole discharged to River Pang due to hydraulic overload. No operational issues at nearby SPS, this was caused by overload after heavy rainfall. |
| 12. Assessed CAT 3 | NIRS 2454651 | 06.01.26 | Discolouration and grit discharged from outfall to The Dyke. Non-TW asset implicated, thought to be road runoff from a private outfall. |
| 13. Assessed CAT 3 | NIRS 2453694 | 31.12.25 | Foul discharge from a blue poly pipe reported in unnamed stream. Non-TW asset implicated, local council have been informed for further investigation. |

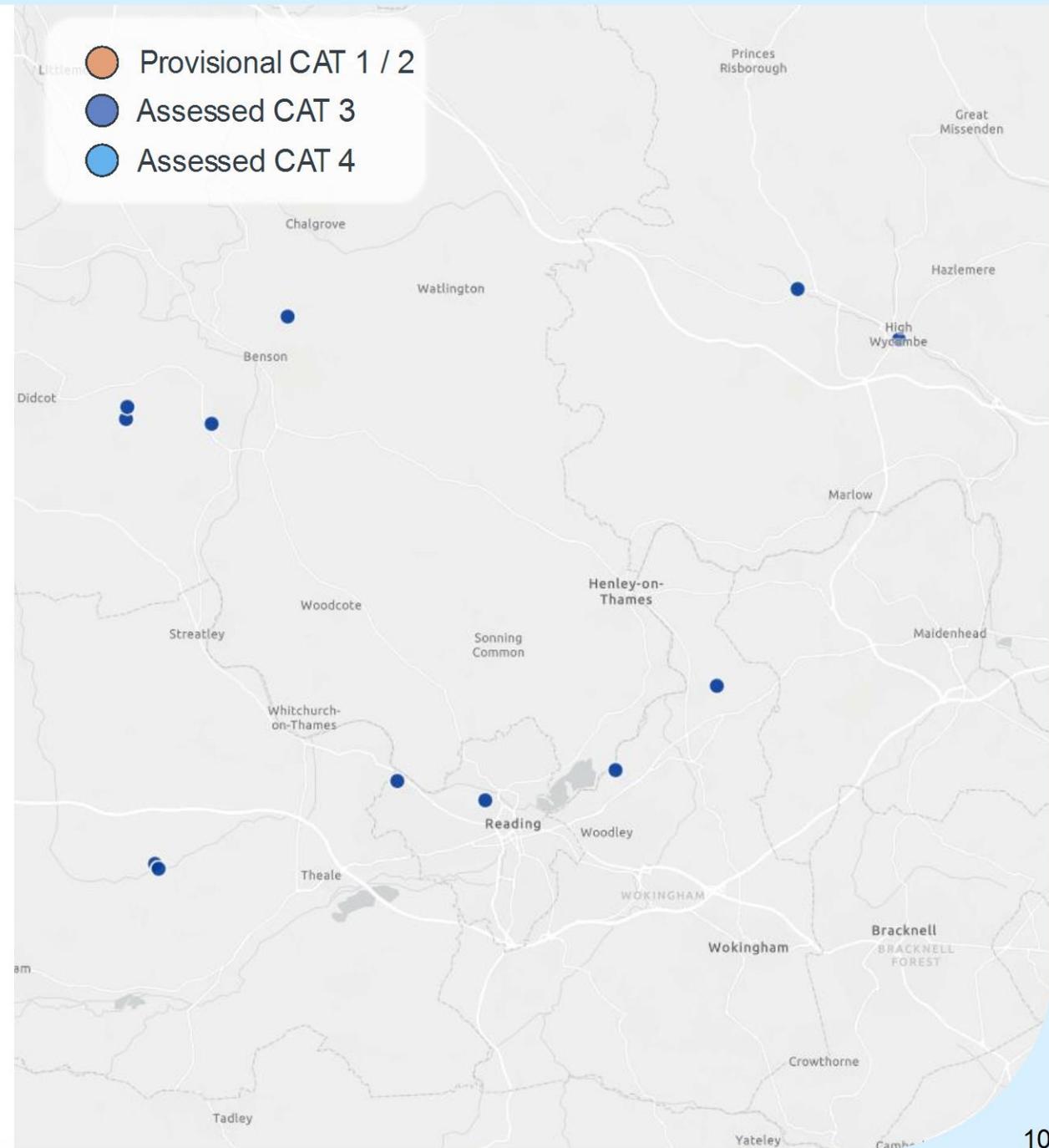


The information which has been shared is accurate to the best of our knowledge as at the time it was sent. It is based on our current assessment of the incident and may change as a consequence of further investigations. The final categorisation for a pollution incident is determined by the Environment Agency.

Potential Pollutions

December 2025 – March 2026

- | | | |
|--|--------------|----------|
| 14. Assessed CAT 3 | NIRS 2453462 | 30.12.25 |
| Black discolouration reported in Mill Brook due to a fly tip into the surface water network. Booms deployed at outfall to prevent further flows. Watercourse is full of litter and debris which have stagnated the flow. | | |
| 15. Assessed CAT 3 | NIRS 2451776 | 20.12.25 |
| Clean water main burst flowing to watercourse via surface water network. Main repaired as of 22/12. | | |
| 6. Assessed CAT 3 | NIRS 2446817 | 02.12.25 |
| Clean water main burst, flowing to watercourse via ditch. Main repaired as of 04/12. | | |



The information which has been shared is accurate to the best of our knowledge as at the time it was sent. It is based on our current assessment of the incident and may change as a consequence of further investigations. The final categorisation for a pollution incident is determined by the Environment Agency.

Investment at storm discharge sites

South Chilterns

Site	Investment plan	Estimated completion date
Beenham STW	Beenham STW has been upgraded. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme completed in 2024.	Completed
Benson STW	Benson STW has been upgraded at a cost of more than £9 million. This work provides a major increase in treatment capacity, from 58.7 to 74.9 litres per second. This will reduce the need for untreated discharges in wet weather. The work was completed in 2024.	Completed
Bucklebury (Briff Lane) STW	An upgrade is planned for Bucklebury STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. We expect the project to complete in early 2026.	2026
Chapel Row STW	An upgrade is planned for Chapel Row STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme is due to complete in summer 2026.	2026
Cholsey STW	Cholsey STW is being upgraded at a cost of more than £8 million. It includes an increase in treatment capacity from 74 to 105 litres per second and an increase in storm tank capacity. This will reduce the need for untreated discharges in wet and stormy weather. We expect the scheme to complete in summer 2025.	2025
Compton STW	An upgrade is planned for Compton STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme is due to complete in autumn 2027.	2027
Hampstead Norreys STW	An upgrade is planned for Hampstead Norreys STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme is due to complete in 2025. Note: This upgrade is now in the commissioning stage, new construction is undergoing reliability testing before sign-off.	2025

Investment at storm discharge sites

South Chilterns

Site	Investment plan	Estimated completion date
Henley STW	An upgrade is planned for Henley STW. This will provide a major increase in treatment capacity, from 67 to 82 litres per second. This will reduce the need for untreated discharges in wet weather. We expect the project to complete in 2026.	2026
Little Marlow STW	An upgrade is planned for Little Marlow STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme, which is still being designed, is likely to complete in 2028.	2028
Pangbourne STW	Pangbourne STW is being upgraded at a cost of over £3 million. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme is due to complete in 2026.	2026
Sonning Common STW	An upgrade is planned for Sonning Common STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme is due to complete in 2026.	2026
South Moreton STW	An upgrade is planned for South Moreton STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme, which is still being designed, is due to complete in 2026.	2026

Storm overflow reduction plan

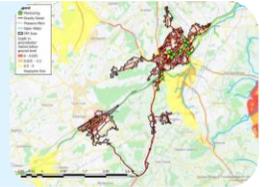
South Chilterns

Location	Estimated completion date
Benson STW Chapel Row STW	We expect these locations to meet all government targets for storm overflows by 2025 – 2030.
Compton STW Hampstead Norreys STW Hambleton STW	We expect these locations to meet all government targets for storm overflows by 2030.
Friday Street, Henley High Wycombe STW Pangbourne STW	We expect these locations to meet all government targets for storm overflows by 2030-2035.
Little Marlow STW	We expect these locations to meet all government targets for storm overflows by 2035-2040.
Beenham STW South Moreton STW	We expect these locations to meet all government targets for storm overflows by 2040-2045.
Goring STW Cholsey STW Reading, Caversham SPS Cholsey STW Henley STW Sonning Common STW	We expect these locations to meet all government targets for storm overflows by 2045-2050.

Useful resources

[Groundwater Impacted System Management Plans \(GISMPs\)](#)

Our short, medium, and long-term plans to reduce infiltration of groundwater into sewers and drains.



[Drainage and Wastewater Management Plan \(DWMP28\)](#)

Our 25-year strategic plan that sets out how we'll manage, maintain and improve our drainage and wastewater systems.



[Environmental Information Requests \(EIRs\)](#)

View guidance on how to request records of environmental information held by Thames Water. We usually provide the information within 20 days (this may be extended depending on the nature and complexity of the information request).



[White Horse Reservoir \(SESRO\) & Teddington Direct River Abstraction \(TDRA\)](#)

Updates on our plans to secure water supplies for the future of the Thames region.



[Report a problem online](#)

Once reported, a rapid response team will be at the scene within two hours to take swift action. This has been reduced in many cases to under 60 minutes. You can also call [0800 316 9800](tel:08003169800) and select option 3 and then option 2; or contact us via [WhatsApp](#).

