

Water Quality in our Local Streams and Rivers



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Our precious river landscapes

We are fortunate to live in a National Park, with stunning landscapes and river valleys still rich in wildlife.

The River Wye and its catchment is a highly protected landscape – a National Nature Reserve and a Special Area of Conservation.



This landscape is loved and enjoyed by local people and visitors alike.



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But there are major problems, even in our rivers and streams

- August 2024 – Tideswell Brook in the national news – "*The second most polluted stream in the country*".
- Pharmaceutical pollution study by Prof Alistair Boxall, University of York – discovered high concentrations of antibiotics, antidepressants and diabetes drugs in Tideswell Brook.



<https://setac.onlinelibrary.wiley.com/doi/10.1002/etc.5973>



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Do we know the causes?

- The York study did not identify causes. A lot of speculation in the press.
- A modern problem - human drugs end up in waterways through the sewage system.
- Between 30% and 90% is excreted from the body, then flushed down the toilet supposedly to be treated at a sewage plant.



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But

- Pharmaceutical pollution is not routinely monitored.
- Not all sewage treatment plants can treat pharmaceutical pollution.
- New EU regs will require pharmaceutical companies to pay for the pollution, but the last government said these would not be adopted in England.
- Many sewage treatment plants are permitted to release untreated sewage in `exceptional` weather conditions.



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Stormwater Overflows

- In 2023, Severn Trent Water was permitted to discharge raw sewage into Tideswell Brook on 125 occasions for a total of 1,702.41 hours, from Tideswell sewage works.
- Severn Trent Water are permitted to do this as part of the stormwater overflow system, mainly due to a lack of hydraulic capacity at sewage works.



**What is happening to address
these problems?**



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The following slides are based on notes from Martyn Owen, Environment Agency

Water Framework Directive (WFD)

- The WFD requires water quality to be assessed through various tests. Failure to meet any one individual Environmental Quality Standard means that the whole water body fails to achieve good ecological status (GES).
- The UK Government target is for all UK water bodies to reach Good Ecological Status by 2027.
- The Upper River Wye catchments are already at a Good WFD classification for almost all elements.
- Work to improve the Wye Valley catchment is focused on nutrient reduction.

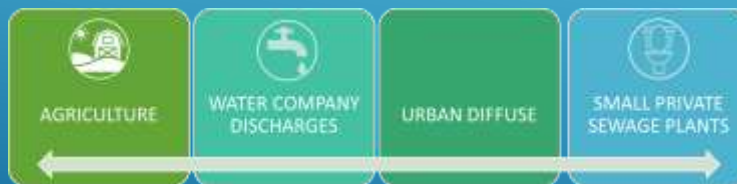


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Main focus of EA actions in the Wye catchment

Organophosphate levels -

The current in-river Orthophosphate concentrations are higher than SSSI targets for 'near natural' conditions 0.015 mg/l



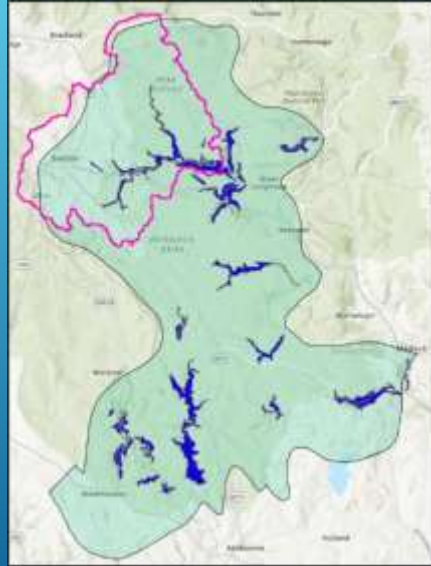
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Diffuse Water Pollution Plan (DWPP)

DWPPs are produced jointly by Natural England and the Environment Agency.

Where diffuse pollution is preventing a SSSI from achieving favourable condition this plan will:

- identify the causes, evidence of impacts and knowledge gaps
- identify remedies and plan when and how action will be taken
- identify the monitoring required to validate remedies



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Monitoring and Improvements

Orthophosphate annual averages have improved over the last 20 years at these monitoring points (primarily through improvements to Water Company discharges) – with further improvements planned.



10 fold reduction in orthophosphate concentration

This improvement has continued, with orthophosphate concentrations halved since 2018.



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Further Improvements

Actions already identified are programmed in and will begin to deliver improvements in the next few years. These include:

- Agriculture visits to support farmers and reduce nutrients reaching the river are ongoing across the catchment.
- Water Company improvements are managed through the WINEP (Water Industry National Environment Programme). The next iteration of this is currently sitting with OFWAT for final determination. Spans 2025-2030.
- The WINEP is a multi-billion pound investment programme of environmental improvements (the EA cannot comment on the content of this WINEP until January 2025). Details of the Water Company expectation for the WINEP is set out in their Business Plan.
- Further investigation and monitoring throughout the catchment underway to inform further actions.



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Contacts and Further Information

- **The Environment Agency** (<https://www.gov.uk/government/organisations/environment-agency>) the main body responsible for regulating water quality and ecological protection.
 - Martyn Owen – Integrated Environmental Planning Specialist for the East Midlands (Martyn.Owen@environment-agency.gov.uk)
 - Environment Agency incident hotline (24 hour service - Telephone: 0800 80 70 60)
- **Ofwat** (<https://www.ofwat.gov.uk/about-us/ofwat-and-the-environment/>) plays a critical role in driving and enabling the water sector to protect and improve the environment. The Price Review process ringfences investment for environmental initiatives and ensures water companies deliver environmental improvements efficiently.
- **Severn Trent Water** (<https://www.stwater.co.uk/get-river-positive/how-we-can-all-get-river-positive/>) – information about their water quality targets and future plans to protect rivers, plus tips on what we can all do to help.
- **The Rivers Trust** (<https://theriverstrust.org/>) – Campaigning on water quality



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