

FOCUS ON THE OUSEBURN

Using an Evidence and Measures Approach to taking the P out of the river



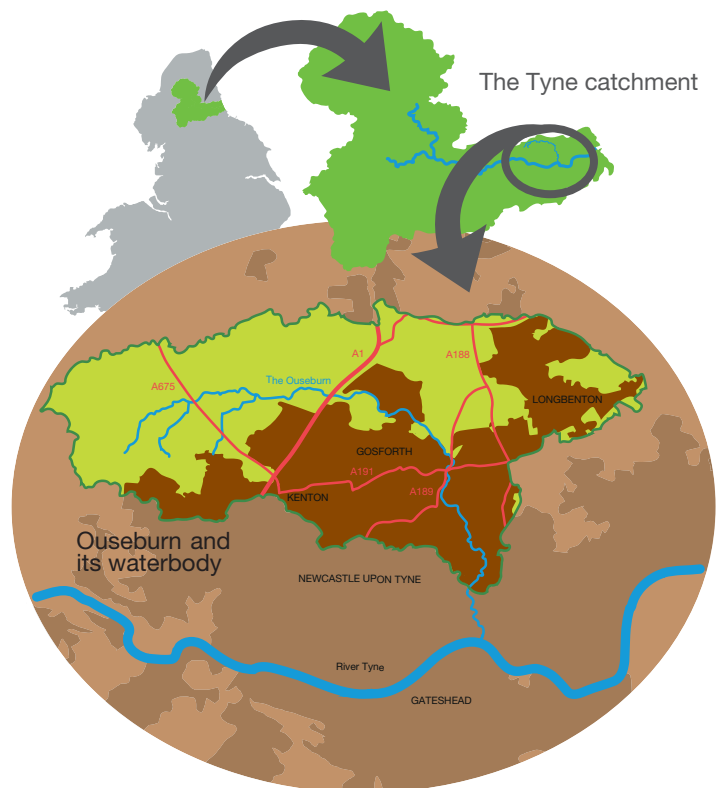
For the past year, a number of partners have been working together to identify the main causes of high phosphate (P) levels in the Ouseburn. Actions have now been identified. We need your commitment and support to put them in place.

IMPORTANCE OF THE OUSEBURN

The Ouseburn is a major tributary of the River Tyne. Its catchment area covers large areas of urban Newcastle and North Tyneside. The river and its tributaries provide many ecosystem services, including surface water drainage and recreational opportunities, to a population of 166,000 people in 70,000 households.

ISSUES

- The Ouseburn currently fails to meet EU Water Framework Directive (WFD) water quality targets for Good Status, due to high phosphate levels which impact on the river's ecological health (invertebrates, fish and diatoms).
- Multiple suspected causes of pollution contribute to poor water quality. These include agricultural sources, golf courses, sewage discharge, and sewer misconnections. The airport used to be a problem but this was addressed in the 1990s.
- The variety of potential pollution sources and their dispersed nature means the Ouseburn is perceived as a complex and challenging waterbody which is very difficult to address.
- Water quality and drainage pressures on the catchment are expected to increase, with over 6000 new homes planned and around 130 ha (1.3 km²) of business developments proposed by 2030.



OUR EVIDENCE AND MEASURES APPROACH

- A number of partners, committed to working together as the Tyne Catchment Partnership, agreed to contribute to and seek funding for a project to trial a new Evidence and Measures approach to improving water quality in complex catchments.
- The project covers the whole of the Ouseburn catchment, but partners agreed early on in the project to focus just on phosphate as the main water quality issue.
- The approach involves the use of a variety of existing data sources, rather than commissioning new surveys. Data are collated and interpreted prior to two workshops at which stakeholders consider first the evidence for pollution sources, and then the measures needed to address or understand these.
- Between July 2014 and May 2015, the lead partner (Tyne Rivers Trust) worked with others to gather existing information about phosphate inputs to the river over the past 25 years. These data were analysed by our consultants pjHydro and rUKhydro and used to inform two workshops held a few weeks apart in summer 2015.



ASSESSING THE EVIDENCE

Six partner organisations took part in the Evidence Workshop. An 'Evidence Pack' was presented to partners in which the catchment was broken down into six manageable reaches. Three main pressures were identified:

- Diffuse agricultural pollution particularly in the upper catchment;
- Sewer misconnections leading to surface water outfalls contributing pollution directly into the Ouseburn;
- New developments, including house building and urban creep.



ACTION FOR THE OUSEBURN

The Measures Workshop built on the shared understanding and impetus gained in the Evidence Workshop. Discussion on what actions could be taken to address the phosphate issues took place in three groups, formed around the three main pressures.

Three principal areas of action were identified:

1. Engagement with rural land managers and follow-up investigations/joint-agency work around manure and nutrient management, together with assessments of stream bed sediments and field soils in specific rural locations and priority tributaries;
2. Investigations at specific locations for industrial and domestic sewer misconnections when identified, together with increased monitoring and new continuous water quality monitoring locations;
3. A strategic approach between Local Authorities, the Environment Agency and Northumbrian Water towards development sites in the Ouseburn catchment.

LESSONS LEARNED

- The Evidence and Measures approach is very effective for building consensus and can be applied in other 'difficult' catchments.
- There is a real need for a designated project leader with time allowed to ensure the right people are engaged with the project, to organise the data collection process, and to coordinate meetings and workshops.
- Partners need to be aware that effective working can be hampered by organisational language differences, but these can be overcome by providing time and space for discussion and by ensuring simple explanations are provided for technical concepts.
- Providing a solid, transparent evidence base really aids fact-based discussions, but the time and cost of the data and information gathering and analysis should not be underestimated.
- A small amount of seed funding can act as a catalyst to initiate work and attract additional funding.
- Working in partnership in catchments has significant benefits for partner organisations.

BENEFITS OF THE PROJECT

Some of the benefits already realised on the Ouseburn as a result of the Evidence and Measures approach include:

- A greater awareness of current issues among partners in the Ouseburn catchment.
- A joint commitment from partners to improving the river and its tributaries and support for focused action on the ground;
- Reputational benefits for partners, including the ability to challenge preconceptions and to raise awareness of the importance of day-to-day operational and 'business-as-usual' impacts;
- Improved relationships, contact networks and better liaison between partners, which may prove to be even more beneficial in future.

OUR NEXT STEPS

- The Tyne Catchment Partnership is keen to improve the Ouseburn through delivery of the actions identified. In some cases, this is just 'business-as-usual' with more attention paid to the Ouseburn, but other actions require funding, investment or even a change in policy.
- We need your support to help us link up and coordinate current initiatives and projects on the Ouseburn.
- We need to identify joint project opportunities on the Ouseburn in alignment with individual partner aims and needs.
- Subject to funding, we plan to undertake Evidence and Measures projects for other waterbodies in the Tyne catchment, including the Team and the Don. The process will be more efficient in future projects, as partners have a shared understanding of the approach and have developed good working relationships.

The project was led by the Tyne Rivers Trust and jointly funded by Defra, the Environment Agency, Northumbrian Water Group, and LEAF at the Community Foundation Tyne & Wear and Northumberland. Additional in-kind contributions were provided by the Tyne Rivers Trust, the consultants pjHYDRO and rUKhydro and the CaBA mentoring project.

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