



Water Quality Monitoring Network



Aims & Objectives

Anglers are passionate about the places they fish and have long been working on the preservation and restoration of freshwater habitats. Whether it's club work parties, volunteering on Rivers Trust projects, undertaking riverfly monitoring, litter picks or bailiffing, anglers are a potent force for good and often unsung heroes. The Water Quality Monitoring Network (WQMN) harnesses the power of angling clubs and anglers to understand the quality of water across England and Wales, and to establish a solid foundation of data. This solid foundation of data will be used to better understand the factors affecting water quality, aid in the development of effective solutions to improve water quality, and provide the Angling Trust with evidence to support its campaigning work.

Methodology

The WQMN is formed from angling clubs, anglers and other volunteers who undertake regular monitoring activities on rivers across England and Wales. Angling clubs recruit and organise teams of local volunteers who will be allocated monitoring sites. On a regular and consistent basis volunteers will gather a range of data for each site, we ask for a minimum of one site, once per month for at least two years but clubs can monitor more sites / more frequently at their discretion.

This will include as a minimum:

- Phosphates
- Nitrates
- Electrical Conductivity
- Temperature
- Ammonia (optional)

At a local level clubs may also choose to measure:

- pH
- Turbidity

Monitors will also be asked to note:

- Water levels and flow rates
- Presence of algal blooms and pollution

Monitors record data in situ using the Epicollect5 data gathering platform on their mobile phone. Epicollect5 is a proven solution which is free and easy to use (five.epicollect.net). Observations will be measured against Statutory and Water Framework Directive standards for levels of chemicals. The methodology is based upon a proven approach developed by the Wye Salmon Association ([Water Quality - The Wye Salmon Association](#)) with the help and support of Cardiff University.

Monitoring Equipment

Monitors will use a range of affordable equipment to gather data on water quality:

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| • Nitrates (NO ₃ -N) | Hach Nitrate Test Strips |
| • Phosphates (PO ₄ ³⁻) | Hanne HI-713 Phosphate Pocket Colorimeter |
| • Electrical Conductivity & Temperature | HM Digital EC-3 Handheld Tester |
| • Ammonia (NH ₄ ⁺) | Hanne HI-733 Ammonia Pocket Colorimeter (optional) |

The Angling Trust will supply monitoring kits and consumables at cost and some funding may be available to subsidise monitoring kits.

Uses of Data

The data gathered is not to replace the statutory monitoring undertaken by the Environment Agency, NRW or Water Companies or to directly challenge this data. Statutory monitoring is extremely limited both spatially and temporally meaning there are significant gaps in our understanding of water quality. The WQMN data will help to fill these gaps. The data can be used by the local networks but will also be made available to other organisations to help inform the wider understanding of water quality. Data will be shared across the Network and with other organisations through the Catchment Monitoring Cooperative (monitoring.catchmentbasedapproach.org). The data will help to show us patterns in water quality across a wide area, trends in water quality over time and potential problem sites or regions.