

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) aims to harness the power of angling clubs and anglers to understand the quality of water across England and to establish a solid foundation of data. This data will be used to better understand the factors affecting water quality, aid in the development of effective solutions to improve water quality, and will provide the Angling Trust with evidence to support its campaigning.

Methodology

The WQMN will be formed from angling clubs, anglers and other volunteers who will undertake regular monitoring activities on rivers across England and Wales. Angling clubs, with the support of an Angling Trust Coordinator, will recruit and organise teams of local monitors who will be allocated monitoring sites. Monitors will gather a range of data for each site on a regular and consistent basis.

This will include as a minimum:

At a local level clubs may also choose to measure:

- Phosphates
- Nitrates
- Electrical Conductivity
- Temperature

- pH
- Turbidity
- Ammonia

Monitors will also be asked to note:

- Water levels
- Flow rates

- Presence of algal blooms
- Presence of pollution

Monitors will record data in situ using the Epicollect5 data gathering platform on their mobile phone with the option to record data at home using a PC. Epicollect5 is a proven solution which is free and easy to use (<u>five.epicollect.net</u>). 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 (<u>Water Quality - The Wye Salmon Association</u>) with the help and support of Cardiff University.

Monitoring Equipment

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

• Nitrates NO₃-N Hach Nitrate Test Strips

Phosphates (PO₄³-)
Hanna HI-713 Phosphate Handheld Colorimeter

• Electrical Conductivity and Temperature HM Digital EC-3 Handheld Tester

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 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 WQMN 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.