

## Overview of NRW Water Quality Monitoring

Below is a table summarising NRW's current water quality monitoring across Wales under the Water Environment (Water Framework Directive) Regulations 2017 and related regulations.

Additional information is available at [Water Watch Wales \(naturalresourceswales.gov.uk\)](https://naturalresourceswales.gov.uk).

This monitoring is compliant with the Water Environment (Water Framework Directive) Regulations and in line with the standards set out by the UK Technical Advisory Group on the Water Framework Directive.

Also included in the table are other non-Water Framework Directive monitoring programmes. In addition, we run an annual programme of investigative monitoring. In 2024, across Wales this includes 409 sites monitored for water chemistry, 35 sites monitored for ecology and six sites for fish as part of 49 investigations.

NRW also carries out sampling as required as part of our response to individual pollution incidents.

**Number of sampling sites and frequency of sampling for the primary river monitoring programmes in Wales**

Status	Status component	Water body type	No. sampling sites (approx.)	Variable type	Frequency
Water Environment (Water Framework Directive) Ecological Status	Biology	Rivers	750 (total number: not all listed variables are recorded at all sites)	Macrophytes Diatoms Macro-invertebrates Fish	1x every (1 or) 3 years 2x every (1 or) 3 years 2x every year 1x every (1or) 6 years
	Phys-chem	Rivers	465	pH Ammonia Nitrate Nitrite Orthophosphate Dissolved oxygen Temperature Specific pollutants	Quarterly
Water Environment (Water Framework Directive) Chemical Status		Rivers	135	Nonylphenols, tributyl tin, pH, hardness, dissolved organic carbon, As, Ca, Cd, Cr, Cu Fe, Mn, Mg, Ni, Pb, Zn (not all listed variables are recorded at all sites)	Monthly or quarterly every year
Habitats Regulations		Rivers	103	BOD Ammonia Nitrate Orthophosphate Dissolved oxygen pH Temperature	Monthly
Regulatory		Permitted discharges to rivers	300	Temperature BOD Ammonia Suspended solids Oil and Grease	Variable (annual to monthly)