Water Quality Management Network (WQMN)

This is an update 1 year on from the launch of WQMN by the Angling Trust (AT). The AT have invested time, effort, and resource into this because those who should be doing this (mainly the Environment Agency - EA) have failed in their legal responsibilities. WQMN is robust evidence collection; evidence that will be a cornerstone in the process of forcing those responsible (the government, regulators, and the water companies) to deliver the environment that the public expect and ultimately is necessary to sustain a healthy country. HPoWAS was among the first clubs to undertake this evidence gathering following the national rollout of WQMN in July 2022.

One year on from the WQMN national rollout there are now 200+ clubs signed up, over 500 volunteers, and they have logged nearly 2500 samples from 59 rivers and more catchments in England and Wales. In the 3 months before the launch AT started a pilot project on the Severn. It chose the Severn because such evidence that it had revealed it to be the most polluted river in England and Wales. In 2022 an average of 46 (recorded) sewage discharges occurred each day, every day throughout the whole of 2022 into the Severn.

For the past 15 months WQMN monitoring from 30 sites on the Severn from the headwaters in Wales down to the lower Severn at Gloucester has been undertaken. From these sites: 11 of 30 had a mean average of phosphate above the legal maximum 9 of 30 had a mean average of nitrate above the legal maximum 8 of 30 had a mean average of both phosphate and nitrate above the legal maximum.

What does this mean?

High phosphate levels are indicative of raw or untreated sewage, high nitrate levels are indicative fertiliser run off (although nitrate increases are also related to sewage and phosphate increases are also related to fertiliser run off). Both nitrate and phosphate contribute to eutrophication - that is the process in which a water body becomes overly enriched with nutrients, leading to the plentiful growth of simple (i.e. algal and not oxygenating) plant life.

Eutrophication coupled with the sediment discharges accompanying raw sewage, slowly degrades and kills an ecosystem. It cuts out light through the water body, and stifles healthy oxygenating plant growth, it dumps sediment on otherwise scoured gravels, destroying spawning grounds and through the silting on the gravels, kills the natural fauna; a vital food source for fish and other life. It makes clear water grey and opaque. It promotes sewage fungus growth on gravels, further degrading habitat. Early signs in faster rivers are marked by the disappearance of ranunculus (water crows foot) the long green fronds we used to see waving in the current with white flowers above the surface throughout summer. This is a vital oxygenator.

Eutrophication is ecosystem genocide by stealth. Because no water company has increased the supply of water through new reservoirs since privatisation, the increased demand for water over the past 35 years has been met by ever increasing abstraction, reducing river flows, and therefore concentrating the impact of eutrophication.

Why has this been permitted to happen?

The reasons for this are many and complex, but in simple terms it is illegal to discharge untreated sewage (except in emergency circumstances and only then under special permit). Those charged with enforcing the law have not done so, and with no evidence of consequence, private water companies do what all profit-driven organisations do without effective regulation; they maximise profit by minimising costs. Over the last decade those who care to look and fact find know what is happening and why. If you choose not to find out the facts, you won't recognise that a problem exists

and in response to those who do, you'll dismiss such claims as scaremongering, by casting aspersions on the reliability of the messenger. All these features have been present in the present situation.

In the absence of corrective action we are now well down the road to environmental disaster which will impact on the health and well being of us all. WQMN is evidence gathering on a national scale to support the case for change and providing the necessary data which should have been collected by the EA as a matter of course.

So what is happening because of the work the AT and others are doing?

To confine any response to direct outcomes misunderstands the process of change. The reality is more nuanced.

An important feature of the WQMN initiative is to foster and contribute to a greater public awareness of the problem because public pressure is the key to getting political action. If something matters to voters they express their views - through the ballot box and all political parties are wedded to public opinion and trying to satisfy it. It is creating a climate of awareness where change is more likely. That is easy to dismiss but is vital in achieving necessary change.

The past year has seen significantly increased media coverage of this issue. The Times is running a campaign about it, and all media has become much more aware of the issues and causes and increased coverage as a result. In the week commencing 5 August the 2000th sample was recorded from the national WQMN rollout and this gained terrestrial TV coverage.

Water companies (through their industry body Water UK) have started a steady stream of defensive press releases stressing how much they invest in the industry (fact, not publicised: the investment since privatisation precisely matches pound for pound the dividends paid to shareholders over the same period and industry debt has gone from zero in 1989 to £57bn today). Such action is the result of increased pressure to which they now feel they must respond.

The AT is mounting a criminal prosecution against Southern Water. There has not been a criminal prosecution of a water company for over 20 years. It concerns the deliberate degradation of the River Test through discharge and abstraction. The prosecution is being brought under competition law. Such actions are costly and lengthy and the resources of privatised water companies (many with hedge fund ownership) are massive so the AT must be confident in its case or be risking financial ruin.

The EA has been forced to send in investigators to all water companies to gather evidence of noncompliance with legal discharge permits; something they should have been doing for years. The fact they are now doing so is evidence of change.

In a separate but important development, the solicitors Leigh Day have launched a class action against Severn Trent (ST) PLC on behalf of 8m bill payers, for £330m for failing to disclose the true scale of raw sewage discharges and abusing their position as a privatised monopoly. If successful this will result in a refund for ST bill payers. It is the first of what Leigh Day describe as 7 similar class actions against the other privatised companies and estimates a total bill of between £800m - £1bn if successful. This has been brought about because Leigh Day - profit seeking legal practice is responding to the changes in public opinion and the climate and growing public awareness. If successful and the water companies lose this will be evidence of consequence, and an effective warning shot over their bows, and should be important in forcing a change of approach.

As for WQMN sampling at Little Stoke, all samples taken to date have been within legally acceptable levels.