

Written evidence from Angling Trust and Fish Legal

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The Angling Trust is the national governing body representing all game, coarse and sea anglers, and angling in England. It campaigns on environmental and angling issues and runs national and international competitions. With anglers the Trust fights pollution, commercial over-fishing at sea, over-abstraction, poaching, unlawful navigation, local bans, and a host of other threats to angling and the water environment.

Anglers have been at the forefront of fighting to protect our water environment since the Anglers Co-operative Association (later known as the Anglers Conservation Association) was set up in 1948. Since 2009 the Angling Trust (an amalgamation of various angling bodies) has campaigned against pollution on behalf of anglers in England and Wales. Fish Legal has carried on the work of the Anglers Conservation Association by taking legal action on behalf of its members clubs and fishery owners when their waters are threatened with pollution or other environmental threats and damage.

Executive summary of our response to the inquiry

The key issue that underpins our response to the questions in this inquiry is that it must address the complete inadequacy of effective water quality monitoring. This is a failure caused by a gross lack of funding, and from a poorly designed and managed monitoring regime which fails to properly assess the true state of our rivers. Therefore, policy and investment decisions are made on inadequate and misleading information, and the public are given information which does not reflect the true state of the rivers and gives the impression of an improving environment which cannot be verified due to the inadequacies of monitoring. Therefore, all the questions posed by this inquiry have an underlying assumption that is flawed. Put simply, we do not know and cannot say with any level of confidence, what the true state of our rivers is.

In making this submission we have not attempted to answer all 11 questions, only those we feel we can contribute to the inquiry as set out at <https://committees.parliament.uk/call-for-evidence/338/water-quality-in-rivers/>

Our submission

- 1. What are the best indicators for river water quality that could be used as targets being developed under the Environment Bill?*

Under the Water Framework Directive (WFD), targets such as for phosphates and nitrates, are defined for certain water bodies. However, we feel broader targets are needed that can generate a more comprehensive view of the river and consider more complex factors. For example, there are currently no targets for sediments (we have several cases involving polluting sediment) nor the variance of impacts on the ecology of rivers as a result of flow factors, including low and high flows, and prevailing conditions such as seasonal variations, rainfall, the river type, etc.

There needs to be a closer link between water quality targets and the health of the ecology of a river (which can be impacted by a range of factors). Therefore, a target or targets that better define the condition of a river, or a section of river, when referenced to its natural state, would be valuable and give a true picture of the river's condition.

This will mean targets may need to vary depending on the type of river. For example, a blanket achievement of WFD good status may not reflect the unique characteristics of many rivers, such as chalk streams. The UK contains 85% of the world's chalk streams, recognised for their good quality water. Crucially, a chalk stream could meet 'good' chemical and ecological status under WFD but still not be in a state that fully supports the biodiversity that is unique to these habitats. The government supported CaBA Working Group on Chalk Streams is currently looking at a range of factors and options to provide protection for chalk streams, this includes issues around water quality. We recommend the EAC inquiry incorporates the outcomes of this group's work in its recommendations.

2. How could drainage and sewage management plans, introduced by the Environment Bill, play a role in reduced sewer discharges?

The development of Drainage and Sewage Management Plans (DSMP) is welcome. However, they need to be comprehensive in nature and look at the full range of challenges in dealing with sewage impacts on the freshwater environment.

While the recent emphasis on discharges from Combined Sewer Overflows (CSOs) is welcome, dealing with them and establishing proper monitoring of them will only address part of the problem.

There are still a substantial number of small sewage treatment works that do not have tertiary treatment facilities, such as phosphate stripping. These can often be found in headwaters and/or serve small communities. Bringing them up to a higher standard through the addition of phosphate stripping (for example) may not be appropriate or economical for all locations. There is, therefore, a need to ensure where possible DSMPs make more use of nature-based solutions, e.g. constructed wetlands, and systems such as sustainable drainage systems (SUDS). This will require a more flexible monitoring approach that is able to account for variances with the discharges, with a clearly defined range over a period of time.

The current draft of the Environment Bill inserts a new section, 94A, into the Water Industry Act 1991 (WIA), creating drainage and sewage management plans, being plans of how the undertaker will manage and develop its drainage and sewage systems so as to be able and continue to be able to meet its obligations under the WIA. The existing S95ZA already empowers the Minister to prescribe performance standards and S95A WIA requires reporting of this performance only in terms of breaches.

Whilst the new S94A (3) is quite granular in specifying the constituents of the management plans, nothing particularly stresses that any programme of maintenance or ongoing improvement necessary to avoid (what is overall) an aged sewage network continuing to make unacceptable discharges. Any such plan needs to be anchored to the overall objectives in S1 of the Bill. In this way investment is not in danger being skewed purely to meet the requirements of any given management plan at a particular time.

In our work we have encountered cases where poorly performing sewage assets have infiltration and misconnection problems at their core. An example of this is the Trebanos STW near Swansea where an aged system is suffering multiple infiltration sources as well as significant misconnection from surface water drainage causing discharge events regularly into water that is fished in and used recreationally by the public.

Additionally, the 'resilience' criteria in S94(3) (c) should be taken in its widest context not just to include resilience to extreme environmental events but systemic resilience built into systems whereby a simple pump failure, such as occurred at Maple Cross STW on 24 December 2020 does not result in

significant fish death. 'Resilience' should include thought to failsafe and back-up mechanisms, as well as maintenance and operational requirements. It is worth constantly bearing in mind a single catastrophic discharge can destroy eco-systems that not only takes years to re-establish but often represent years of painstaking work by Rivers' Trusts or angling clubs going to waste. It ought also to be noted that Maple Cross suffered pollution incidents in 2013, 2015, 2016, 2018 and three times in 2020. It serves as a model example of why sewage plans could make a difference.

Whilst it is proposed in the Bill that the plans are renewed every 5 years, they are reviewed annually. The mechanisms contained in S's 94 A to E are potentially nimble enough to respond to any regional or indeed local adjustments required for an emergent problem. It is important that they do not replicate the leviathan nature of the AMP process where reactive change is difficult if not impossible.

Something needs to be done, a good example is presented by the problems on the river Wey in Surrey with phosphates levels from STW's although flagged up as an issue in 2014, the EA currently propose to allow the Undertaker until 2027 to just come up with proposals to address the issue at the Elstead works, one of the main problem sites. This means thirteen years of preventable pollution.

3. *How adequate are the monitoring and reporting requirements around water company discharges? How can technology improve and assist with transparency and enforcement?*

This question is based on two incorrect assumptions. First, the monitoring and reporting requirements alluded to are totally inadequate, and second, monitoring and reporting should not be confined to water company discharges if we are to truly understand the full range of factors that impact on the water quality in our rivers.

Our biggest concern is the inadequate nature of the Environment Agency's monitoring programme. Despite spending well over £1.1m of increasingly sparse funds on the strategic monitoring review of how they monitor, the EA still have not got the methodology right. In addition, Sir James Bevan (CEO of the EA) told the Environment, Farming and Rural Affairs Select Committee on 21st January 2021 that monitoring air and water, enforcing regulations, prosecutions, tackling waste crime, planning and advice, and responding to incidents among other things, has fallen from "£120m to around £50m today" and that the number of visits to sights to collect water quality samples had fallen from 20,000 visit taking 127,000 samples in 2014, to fewer than 15,000 visits and fewer than 95,000 samples in 2020. There are now major gaps in the data available across many rivers, making it extremely difficult to get a true picture of the quality of the water.

Added to this, we contend the over reliance on "spot sampling" presents a major weakness in the monitoring approach used by the EA. The limitations of spot sampling in practice are acknowledged in a recently published Natural Resources Wales (NRW) report concerning phosphate pollution on the River Wye, where it openly states: *"Many water bodies showed a pattern of episodic poor water quality. Detecting such episodes is a particular challenge for a programme based on spot sampling, since relatively rare events can have a major impact on the outcome of assessments. Inevitably, not all such episodes will be detected by such sampling, and it is also not possible to know with any certainty whether these occur on a regular basis, or are genuine one-offs."*

As a result, the bank of data held by the EA going back decades is limited in its application.

The new River Surveillance Network (introduced in January 2021) will compound the failings of the monitoring system as it is over reliant on the flawed spot sampling approach the Environment Agency has previously relied upon. The sites sampled are also considerable reduced and will only gradually increase.

These failings in the monitoring approach have a direct impact on water quality, both in terms of what they fail to detect, but also, because policy, enforcement and investment decisions are made using this flawed methodology and data.

Having an effective monitoring system is a pre-requisite to tackling water quality in our rivers and the data collected by an effective monitoring system should be publicly available in real time, via a single point of information. An effective monitoring programme must include:

- Bespoke monitoring for individual sites known to be at environmental risk;
- Targeting the times and situations when sites are at greatest risks to ensure sampling is best able to capture meaningful data;
- Vastly increase the use of continuous monitoring, either permanently or for set durations, depending on the nature of the environmental risk posed;
- Allow external environmental and river groups to participate in the monitoring of individual sites or stretches of river; and
- That monitoring needs to look beyond just the impact of sewage discharges (either via CSOs or from STWs) and look more broadly at diffuse pollution impacts and other forms of point pollution (e.g., the release of de-icer into the local water courses from East Midlands Airport).

This submission fully support the more detailed submission regarding the failings of the EA monitoring programmes by Mr Peter Lloyd.

Water companies themselves, as part of their Operator Self-Monitoring (OSM), also rely on intermittent sampling, the majority of which are taken during working hours, at their treatment works. Any exceedances in various parameters outside of the OSM sampling regime will not count as a failure for purposes of compliance with the relevant permit.

In combination, a lack of effective monitoring of final effluent in environmental permits and a lack of in-river monitoring effective monitoring means it is not possible to have confidence in the stated quality of our rivers at any one time.

5. How can consumers be persuaded to change their behaviour to minimise pollution?

Whilst public information and education campaigns aimed at consumers are important, we believe it is not enough to rely on consumers taking voluntary actions in this area. Relying solely on a voluntary approach will not deliver the improvements required in the timescale they are needed. Legislation is required to ensure manufactures and retailers are supplying products to consumers that do not contribute to poor water quality. This could include changes to the manufacture of white goods, e.g., washing machines, to ensure more effective prevention and filtering of wastewater to ensure the removal of microplastics.

In January 2019, the water industry introduced the voluntary “Fine to Flush” specification in response to misleading claims by wet wipe manufactures that certain of their products were flushable. Through powers such as Extended Producer Responsibility (EPR) the “Fine to Flush” specification should be set as a minimum standard that manufactures should achieve before they are able to offer their products for sale to UK consumers. Products not meeting this minimum specification should be banned.

6. What is the required investment level needed to minimise storm overflows vs the scope for sustainable drainage and nature-based solutions?

We should not accept that resources will always be limited. This should not be a choice government or society should be required to make. There is a clear concern among the public around water quality, evidence from water company customer surveys show people have a “willingness to pay” for cleaner rivers and a better environment. Action to tackle the problem of CSO discharges and broader nature-based solutions are, at root, tackling different problems, (though they are not exclusive) i.e., identifiable sources of pollution as opposed to more diffuse pollution. Both need to be addressed as a matter of urgency.

8. How effective is Ofwat’s remit and regulation of water companies? Does it facilitate sufficient investment in improvements to water quality, including sustainable drainage systems and nature-based solutions such as constructed wetlands?

Through the 2014 Water Act, a resilience duty was placed on OFWAT. This has been interpreted in terms of business resilience and the resilience of the resource and supply. Through the Environment Bill this duty needs to be expanded to encompass environmental resilience. This will allow water companies to make sufficient investment in tackling water quality failings via improvement to, or new investment in STWs, addressing the problems such as ground water infiltration, which causes sewage overflows on a regular basis, and through the development and deployment of nature-based solutions and sustainable drainage systems.

Too often, water companies’ investment plans are scaled back by OFWAT due to a perceived impact upon customers’ bills. This is despite evidence that customers want to see greater impact in tackling water quality issues and their associated environmental impacts.

10. Is adequate investment being made in adapting water treatment systems to future climate change?

We are addressing this question as one of asset management not one of research and development. And we choose to do so simply by citing an example.

In 2015 Storm Desmond ravaged the North West of England, the floods that ensued were described by Rory Stewart MP as “horrendous in their intensity”. Three rivers were simultaneously in flood in one area. One of these Rivers was the River Kent. The Kendal STW is operated by United Utilities (UU) and is sited at a relatively low-lying position on the Kent. The works was completely flooded out and we understand that the EA issued a regulatory position statement enabling the untreated sewage that would normally go through this facility to be discharged into the swollen River Kent, this situation we understand carried on for six months by which time the river had returned to levels approaching normal. Kendal STW is not a new facility yet UU decided, rather than rebuild this at a place offering greater resilience to flooding, to simply refurbish the works and bring them back into commission.

We believe that where works are shown to be subject to persistent failure or are exposed as being particularly at risks to the effects of climate change, these should be flagged up in the management plans and a presumption of replacement be made, with the onus on the Undertaker to present a sufficient argument to support any other course proposed by them.

11. How could the designation of inland bathing waters by water companies affect the costs of achieving the associated water quality standards?

We are concerned the current emphasis on inland bathing water designations at a limited number of sites could have unintended negative consequences for the rest of the freshwater environment. We have three areas of concern.

1. It will skew investment into the wrong places, and in doing so may not tackle the most serious ecological impacts of poor water quality. This approach fails to recognise the catchment-scale of water quality issues, and risks resources and management efforts being concentrated into localised areas rather than tackling the issue at the appropriate strategic scale.
2. For the purposes of the Bathing Water Regulations, the bathing season in England and Wales is from May to September. Working on the basis that the majority of CSO discharges occur in wet weather, monitoring in the drier bathing season is unlikely to make a substantial contribution towards identifying and therefore addressing CSO discharges. In short, promoting bathing water as a driver for water quality improvement will narrow the focus both temporally and geographically.
3. It will encourage demand for the designation of sections of rivers to categorised as inland bathing waters in places and on rivers that are wholly unsuitable for such designation and subsequent recreation.

An example would be on chalk streams, which may see less investment directed to tackling the pressing flow, quality, and ecological threats on these globally important habitats. Or pressure to designate certain areas of chalk stream as inland bathing water areas due to their location near to centre of population, which could have a severe impact of the ecology and integrity of the chalk stream.

The Angling Trust/Fish Legal would be willing to provide further evidence on the matters outlined in our response at an oral evidence session.

February 2021