

Environmental Audit Committee Call for Evidence Water quality and water infrastructure: follow-up

2nd May 2024

The Marine Conservation Society welcomes the opportunity to respond on this important subject. We are the UK's leading ocean charity, working towards cleaner, better-protected, healthier seas. The charity highlights the importance of our ocean, and the life within it, through working with governments, communities, and industry to take action to restore and protect the marine environment. We have provided answers to a sub-section of the outlined questions where as an organisation we have relevant expertise.

What are the priorities for water infrastructure investment? Is Ofwat facilitating adequate investment in improving water quality and water security?

Water infrastructure must be maintained and improved to ensure that it is not negatively impacting the water environment, including estuarine and coastal waters. Good water quality is essential for a healthy marine ecosystem, and for our enjoyment of the coast. Yet, our estuarine and coastal waters are often forgotten when it comes to reducing pollution and many are failing to meet water quality targets. For example, in England, only 19% of estuaries and 45% of coastal waters are at Good Ecological Status, with 0% at good chemical status, and 75% of shellfish waters fail water quality standards.¹

Sewage contains a cocktail of bacteria, viruses, nutrients, harmful chemicals, macroplastics (greater than 5mm e.g. wet wipes and sanitary products) and microplastics (less than 5mm e.g. sources from clothing, cosmetics and tyres). These pollutants negatively impact marine wildlife, including the fish we eat². Crucially, many of these pollutants are highly persistent and therefore will accumulate over time, meaning if we release them into the environment they will pass, or may have already passed, a threshold of harm³.

Therefore, it is vital that sewage is appropriately treated to ensure that it does not impact on the marine environment and wildlife. Appropriate ecological monitoring should be put in place to assess any acute or long-term impacts from treated sewage and from intermittent discharges.

How effective is Ofwat's regulation of water companies and how are they working with the Environment Agency to assess compliance?

From a Freedom of Information request submitted by the Marine Conservation Society to the Environment Agency, we found out that less than 10% (686) of Emergency Overflows in the sewerage network are monitored for sewage discharges, of 7,016 across England. We were expecting the data to show that these types of Emergency Overflows aren't used at all, or at least very rarely. However, the data not only shows that they are being used (with over one in three monitored Emergency Overflows discharging in 2022), but that 60% of those that discharged did so more than once. Emergency Overflows are different to Storm Overflows (or CSOs) and should only be used when there is a mechanical, technical or physical failure in the sewerage network. They are designed to be used as a very last resort. The Environment Agency requires them to have several key protection measures in place to prevent them from ever being used. The fact that they are being used so frequently, and often repeatedly, demonstrates that current measures are inadequate to prevent pollution. The failure to put procedures in place to prevent emergency overflows from discharging repeatedly, which water companies are required to do, is putting marine life, and people, at risk. 100% of Emergency Overflows should be monitored so that the Environment Agency and Ofwat are able to use their powers to ensure that they are only being used as a very last resort under true emergency conditions.

How effective are current sewage discharge monitoring systems and how will 'real-time' data on water quality in receiving waterbodies be monitored, published and used?

There needs to be a wider range of monitoring to fully assess the impact that water companies and other industries have on the water quality of freshwater and marine environments. Monitoring and research programmes must be extended to include a wider range of emerging contaminants and microplastics, to provide an accurate picture of environmental status. This should cover all pathways and sinks, including sewage discharges and storm overflows.

Is water quality at bathing sites being monitored and publicised effectively?

No, water quality monitoring of bathing sites is inadequate and outdated.

The Bathing Water Regulations should be reviewed to take into account the latest research on bathing water monitoring, health effects and pollution mitigation (including on emerging pollutants), alongside advice from the World Health Organisation⁴, including the following actions:

- The annual minimum number of water quality samples taken at bathing waters is inadequate to assess bathing water quality. Some bathing waters in England will have only 10 water quality samples taken during the bathing season, this equates to about one a fortnight. Considering that water quality has been shown to change not only daily, but even hourly, this is far from adequate. As a minimum, sampling should immediately be reinstated to 20 samples per bathing season which was the policy before the monitoring programme was reduced. In addition to this, research should be conducted to establish what is the most effective sampling frequency to protect public health and should include looking into the possibility of continuous water quality monitoring.
- All samples collected should be used to assess the quality of the bathing water. Discounting samples because of bad weather or unexpected events should not be allowed, regardless of whether bathers have been notified, since this does not provide an accurate picture.
- The definition of a bather should be widened to include all recreational users of the water and immediate area.
- Bathing waters which are used all year round should continue to be monitored outside of what is considered the traditional bathing season.
- Research should continue into future viral and/or pathogen indicators, and antimicrobial resistance.
- Research and monitoring on microplastics and chemical contaminants, under other legislation, such as the Marine Strategy Framework Directive, should be aligned to take into consideration any potential health risks to water users.

How far will new Government plans contribute to restoring the health of rivers?

Often the downstream impact of inputs to rivers on coastal waters are not considered when determining plans for pollution reduction. This was demonstrated in the recent Storm Overflows Discharge Reduction Plan for England which initially did not include all overflows in coastal and estuarine environments (we estimated that around 600 overflows were excluded⁵). It was not until the Marine Conservation Society, and others, raised these concerns, that the plan was amended to include all coastal and estuarine overflows. This highlights the lack of joined up thinking in Government plans when it comes to protecting our environment. All plans which could have an impact on downstream estuarine and coastal environments must take the marine environment into consideration at the beginning of the process. Healthy, clean coasts are vital for us to enjoy and coastal habitats provide an important role in storing carbon and helping tackle the climate emergency.

Government plans to restore the health of rivers, and the marine environment, do not go far enough with regards to implementing upstream solutions to stop harmful chemicals and microplastics at source. For example, Targets in the Storm Overflows Discharge Reduction Plan were aimed only at water companies and missed the opportunity to

include all stakeholders responsible for delivering the changes needed to address the impact of overflows. For example, targets could have been included for the separation of surface water through the implementation of sustainable urban drainage (SUDs) and nature-based solutions. There could have been additional targets requiring the appropriate treatment of surface water before it is discharged back into the environment since urban and highway run-off can contain high levels of harmful chemicals and microplastics. There should also have been targets for identifying and rectifying misconnections of foul discharges to the surface water network since this would cause additional sources of pollution when separating surface waters from the sewer network in the future.

The plan anticipates an 80% reduction in discharges by 2050, leaving 20% to continue to discharge to the environment (or 80,000 discharges annually). These untreated discharges are known to contain high amounts of microplastics and harmful chemicals. Therefore the plan should have included targets for Government to implement upstream solutions to stop harmful chemicals and microplastics at source so that the amount entering the wastewater system in the first place is absolutely minimised. Specifically, further actions should be taken to address items which are mis-flushed directly into sewers, such as wet wipes and other sanitary items. Please see the full recommendations in our policy position⁶ (NB: this was written prior to the recent announcement that the UK Government and devolved administrations will introduce legislation to ban wet wipes containing plastic).

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References:

1. [State of the water environment indicator B3: supporting evidence - GOV.UK \(www.gov.uk\)](https://www.gov.uk/state-of-the-water-environment-indicator-b3-supporting-evidence)
2. [CLE-Jan-2024_Chemical_pollution_in_UK_seas.pdf](#)
3. <https://pubs.rsc.org/en/content/articlelanding/2019/em/c8em00515j>
4. [WHO recommendations on scientific, analytical and epidemiological developments relevant to the parameters for bathing water quality in the Bathing Water Directive \(2006/7/EC\)](#)
5. [Storm overflows discharge reduction plan Marine Conservation Society response.pdf](#)
6. [MCS Policy Position Statement - Sewage Related Debris Aug 2022.pdf](#)