

Storm Overflows Discharge Reduction Plan Consultation

Wildlife and Countryside Link response – July 2023

Wildlife and Countryside Link is a coalition of 76 organisations working for the protection of nature. Together we have the support of over eight million people in the UK and directly protect over 750,000 hectares of land and 800 miles of coastline.

This response is supported by the following Link members:

- Angling Trust
- British Canoeing
- Friends of the Earth
- Institute of Fisheries Management
- Marine Conservation Society
- National Trust
- ORCA
- Seal Research Trust
- Surfers Against Sewage
- The Rivers Trust
- The Wildlife Trusts
- Whale and Dolphin Conservation
- ZSL

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Summary

Wildlife and Countryside Link welcomes this consultation from Defra on the Storm Overflows Discharge Reduction Plan (SODRP).

Wildlife and Countryside Link [responded to](#) the first consultation on the draft SODRP in May 2022. In our response, we reflected that whilst the SODRP had potential to drive action to tackle sewage pollution and improve the water environment, the draft plan fell short and failed to capture the severity and urgency of the water quality crisis. These concerns were not sufficiently addressed in the published plan,

and despite the welcomed later announcement that the SODRP targets will be enshrined in law, [further action](#) is needed.

The SODRP as published is too narrow in scope. It fails to include all transitional, coastal and shellfish waters alongside inland waters and designated bathing waters and excludes some coastal and estuarine protected sites from the 'high priority sites' target. This leaves some areas of the coast unprotected from storm overflow pollution and means that some Marine Protected Areas (MPAs) designated to protect sensitive habitats and species could be subjected to high numbers of discharges containing harmful chemicals, microplastics and nutrients.

We therefore welcome proposals to include all coastal and estuarine waters within the Storm Overflows Discharge Reduction Plan. All Marine Protected Areas and protected shellfish waters should be added to the list of high priority sites within the plan, to ensure that these sites of vital importance to nature and to public health are prioritised in efforts to address sewage pollution. This should be supported by the development of an ecological standard for coastal and estuarine waters, which should consider both the immediate and longer-term impacts of sewage, litter and microplastic pollution on the environment. It is essential that this ecological standard must be used to monitor and understand the environmental impact of storm overflows in coastal and estuarine waters, not to justify pollution.

Pollution from storm overflows is one of many interacting pressures on the health of our coastal and estuarine waters. Efforts to improve overflows and reduce sewage pollution must form part of wider holistic action to tackle threats and improve the state of the water environment.

We would be pleased to discuss any of the points in our response further.

Questions

Respondent information questions

Would you like your response to be confidential? [Yes/No] [If yes] Please give your reason.

No.

Are you responding: As an individual/On behalf of a business (if yes, which one)/On behalf of an organisation (if yes, which one)

On behalf of an organisation.

[Wildlife and Countryside Link](#) is the largest environment and wildlife coalition in England, bringing together 76 organisations to use their strong joint voice for the protection of nature. Our members campaign to conserve, enhance and access our landscapes, animals, plants, habitats, rivers and seas. Together we have the support of over eight million people in the UK and directly protect over 750,000 hectares of land and 800 miles of coastline.

Do you know who provides your water and sewerage service? Yes/No/Not applicable

Not applicable.

Questions on the scope of the plan

1. Should the government explore developing an ecological standard for coastal and estuarine waters? Yes / No

Yes. In doing so, Government should build upon existing standards already in place under the Water Framework Directive (WFD). We discuss this further in our response to Q2.

2. What considerations do you think may be relevant to developing an ecology standard for a) coastal overflows and b) estuarine overflows? Please make reference to any specific types of harm that you believe should be taken into account.

Spills from storm and emergency overflows will introduce pollutants to the water environment that threaten both ecological and human health. For example, excess nutrients, toxic and long-lasting chemicals such as PFAS, microplastics, and bacteria and viruses. These pollutants decrease water quality, harming wildlife and threatening human health – for example, at commercial fisheries and shellfisheries, and for recreational water use such as bathing and water sports. Both human and ecological health should therefore be considered in assessing the harm caused by storm overflows.

An ecological standard for coastal and estuarine overflows should consider both immediate and longer-term impacts, for example the impacts of bioaccumulation and biomagnification of persistent pollutants within the environment. It therefore needs to be recognised within the monitoring regime of the standard that the impact from the discharge will not be limited to the local environment and should instead be assumed that the wider environment will also be negatively impacted. It is important that sensitive habitats are afforded additional monitoring to understand impacts of discharges – e.g., seagrass beds are thought to be particularly sensitive to water quality. Other habitats listed as ‘higher sensitivity’ in [guidance](#) on assessing the impact of activities on estuarine and coastal waters should also be included where they are particularly sensitive to pollution.

The ecological standard must be reviewed and updated to incorporate findings from the latest research and evidence, and any updates made to emerging chemicals and contaminants of concern. It is also crucial that any ecological standard developed for coastal and estuarine overflows is used to monitor discharges and understand the environmental impact, **not** to justify pollution. The goal must always be for pollution to stay well below thresholds set within the ecological standard.

We suggest that the following should be explored by the government in developing an ecological standard for coastal and estuarine overflows – many of which are already considered under WFD classifications, providing a strong basis from which to develop a standard for overflows.

- Indicator species that are sensitive to water quality and wastewater pollution – for example, considering abundance, diversity and the presence and/or absence of pollution-tolerant and

disturbance-sensitive invertebrate taxa using a subset of those species assessed via the 'Infaunal Quality Index' used to assess the biological quality element 'benthic invertebrate fauna' for TRaC waters under WFD.

- Algae and algal blooms – excess nutrient input from storm overflows can result in eutrophication and harmful algal blooms, a clear indicator of ecological harm.
- Water chemistry, including the monitoring of nutrients such as Dissolved Inorganic Nitrogen (as a pollutant), dissolved Oxygen (as an indicator of pollution), and ammonia. These metrics are considered under Ecological Status in WFD due to their specific impacts on ecology.¹
- The presence and levels of harmful chemicals – including persistent chemicals which accumulate in the environment over time such as PFAS and brominated flame retardants, endocrine disrupting chemicals, pharmaceuticals, and pesticides – and specifically those chemicals known to be present in sewage or in urban runoff as key components of storm overflow discharge. This can be measured directly, or by considering levels in biota or sediment. Chemicals taken into consideration must keep up to date with any new evidence on emerging chemicals of concern. The mixture effect should also be taken into account when developing the standard, as the impacts of these chemicals do not necessarily equate to the sum of their parts. It should be noted that marine species have considerably greater longevity than those in freshwater, and therefore bioaccumulation of persistent chemicals will be much higher. Therefore, solely monitoring short-lived species is not appropriate to understand adverse harm on the ecosystem.
- The presence and levels of microplastics.
- Turbidity of water – high turbidity indicates a large quantity of suspended matter in the water, which can indicate poor quality.
- Visual indicators, such as visible litter and human waste (e.g., faeces, toilet paper) in the water. This could also include customers complaints or reported observations, for example, via citizen science apps.²

Whilst these latter elements do not give a direct indication of the ecological impacts of poor water quality, their visual signature means that they can easily be monitored, and can be directly attributed to overflows – as opposed to other point or diffuse sources of pollution - with greater certainty. They should therefore be considered in the development of an ecological standard.

The potential complexity and cost of developing and monitoring ecological standards must not be used to justify delays in taking action. If detailed ecological monitoring were to raise customer bills such that investment in tackling pollution was then precluded, or if billpayers' money was spent on extensive monitoring to demonstrate that 'there's no need to take action to prevent spills' when it instead could have simply funded that 'no-regrets' action, this would amount to a failure of the SODRP to prioritise the outcomes that the public expect.

¹ <https://environment.data.gov.uk/catchment-planning/images/help/surface-waters-classification-hierarchy.svg>

² For example: <https://www.ceh.ac.uk/our-science/projects/bloomin-algae>

3. Should any other areas be added to the current list of high priority sites in the Plan?

The SODRP currently fails to include all shellfish water protected areas as high priority sites, and all Marine Protected Areas (MPAs) - including SPAs, SACs, MCZs (including HPMAAs), and Ramsar sites.

MPAs are designated to protect sensitive habitats and species, and as such should be prioritised within efforts to tackle sewage pollution under the SODRP. Failing to do so will undermine Government's legal commitment to halt the decline of nature by 2030. Pollution from coastal and estuarine overflows also has potential to undermine the achievement of targets under the Environment Act. For example, The Environmental Targets (Marine Protected Areas) Regulations 2023 require that 48% of MPA features should be in favourable condition by 2028,³ and 70% by 2042,⁴ with the remainder of features in recovering condition.

All MPAs should therefore be included in the list of high priority sites under the SODRP:

- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)
- Marine Conservation Zones (MCZs)
- Highly Protected Marine Areas
- Sites of Special Scientific Interest (SSSIs)
- Ramsar sites

The breeding and feeding grounds of priority and sensitive species should also be considered high priority sites under the SODRP. For example, seagrass habitat, and nursey areas and migratory routes for fish species such as salmon and trout are also covered by the Habitats Directive, and should therefore be reflected as high-priority sites within the SODRP.

Sites with particular significance for human health should also be listed as high-priority sites under the SODRP. For example, storm overflows impacting shellfish waters should be prioritised in order to protect public health and the shellfish industry, as should commercial fisheries. Though bathing waters are already prioritised within the SODRP, we know in practice that recreational users enjoy waterways at sites that are not formally designated. Data on recreational hotspots – including, for example, bathing, paddleboarding, kayaking and surfing – should therefore also be assessed for inclusion as high-priority-sites. At a minimum, these sites should be prioritised for wherever there is scope for companies to 'go further and faster' in meeting the targets.

³ Environmental Improvement Plan interim target: <https://www.gov.uk/government/publications/environmental-improvement-plan>

⁴ The Environmental Targets (Marine Protected Areas) Regulations 2023: <https://www.legislation.gov.uk/uksi/2023/94/contents/made>

4. Should all overflows, including those discharging into coastal and estuarine waters, be included in the scope of the Storm Overflows Discharge Reduction Plan?

Yes. We strongly support the inclusion of all storm overflows, including those discharging into coastal and estuarine waters, within the scope of the SODRP.

To exclude some coastal and estuarine overflows would seem to imply that these overflows do not cause ecological harm or threaten public health, and therefore do not need to be improved. This is not the case. Our inland, transitional and coastal waters are an interconnected water system, requiring a holistic approach to management from source to sea. All sources of wastewater pollution must be addressed in order to improve the health of this interconnected water environment.

For example, coastal overflows should not be excluded on the assumption that this pollution will be diluted by large volumes of ocean water and is therefore insignificant. Sewage pollution is an input of highly persistent PFAS and microplastic pollution; these persistent pollutants accumulate in the environment over time and will not be diluted by ocean water – research has shown that they will in fact continue to cycle through the environment.⁵

There is also the risk that any storm overflows excluded from the SODRP could be exploited as a legal loophole. Upstream sewage could be diverted to these excluded overflows to allow industry to meet the SODRP targets whilst wastewater pollution continues to enter the environment.

Storm overflows are not the only source of pollution entering the coastal and estuarine environment, nor indeed is sewage pollution solely responsible for the poor health of these waters. Tackling sewage alone will not be sufficient to drive better environmental outcomes. Indeed, progress could be made against targets under the Plan whilst the overall water quality and environmental condition does not improve. The Storm Overflows Discharge Reduction Plan – with expanded scope, to ensure that all overflows will be improved in line with targets – must work alongside wider, holistic action to manage all sources of pollution and to address all drivers of poor environmental condition.

Furthermore, actions to improve storm overflows and mitigate the ecological harm caused should not simply rely on concrete and chemicals. For example, disinfectants to tackle bacterial problems from sewage pollution must not be applied to the marine environment, given the potential for ecological harm – these problems must instead be tackled at source. Nature and catchment-based solutions to manage and mitigate sewage pollution should be used wherever possible.

⁵ For example: <https://www.theguardian.com/environment/2021/dec/17/pfas-forever-chemicals-constantly-cycle-through-ground-air-and-water-study-finds>