

Storm Overflows Discharge Reduction Plan Consultation

Summary of responses and government response

25 September 2023

We are the Department for Environment, Food and Rural Affairs. We are responsible for improving and protecting the environment, growing the green economy, sustaining thriving rural communities and supporting our world-class food, farming and fishing industries.

We work closely with our 33 agencies and arm's length bodies on our ambition to make our air purer, our water cleaner, our land greener and our food more sustainable. Our mission is to restore and enhance the environment for the next generation, and to leave the environment in a better state than we found it.



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Introduction

The Storm Overflows Discharge Reduction Plan (the Plan) is the most ambitious plan to reduce sewage discharges from storm overflows in water company history. It outlines stringent targets to protect people and the environment, backed up by an estimated £60 billion capital investment – the largest infrastructure programme in water company history.

Between 12 June and 24 July 2023, the government consulted on the Storm Overflows Discharge Reduction Plan. This consultation sought views on the expansion of the Plan to cover coastal and estuarine waters, which had not been specifically included in the Plan as published on 26 August 2022. This consultation builds on the measures already in the Plan and we have always been clear we would continue to look for ways to go further and faster in tackling pollution caused by sewage spills.

The consultation covered three main areas:

- 1. Including the coastal and estuarine storm overflows which were not already covered in Target 3 of the Plan
- 2. Expanding the 'high priority sites' list
- 3. Developing an ecological standard for monitoring storm overflows' impact on coastal and estuarine waters.

By ecological standard we mean a common test to determine adverse ecological impact.

This report summarises the main themes from the consultation responses, and how the government intends to respond.

The report seeks to reflect the views offered but, inevitably, it is not possible to describe all the responses in detail. Many respondents provided detailed comments and views and many simply agreed or disagreed, without providing detailed comments. A thematic analysis was undertaken to identify the key issues raised.

Executive summary

Themes

The consultation was hosted on the online platform Citizen Space. Responses were also collected via email.

In total, 846 responses to the consultation were received, consisting of 836 via Citizen Space and 10 responses via email.

- Respondents via Citizen Space were given the option to choose from a pre-defined list of identities. There were 795 individuals who responded to the consultation in addition to 31 organisations and 10 companies.
- Of the 10 responses via email, 7 were from organisations.

The majority of responses (97% (711) of responses) supported the inclusion of all storm overflows, including those discharging into coastal and estuarine waters, to be in the scope of the Storm Overflows Discharge Reduction Plan.

Almost half of responses supported the addition of Marine Protected Areas and/or Shellfish Water Protected Areas to the list of 'high priority sites.' A total of 69% (581) respondents included a comment in response to this question, of those, 49% (288) made reference to the inclusion of Marine Protected Areas and/or Shellfish Water Protected Areas.

The majority of responses (98% (831) of responses) supported exploring the development of an ecological standard for coastal and estuarine waters.

Government response

The government will revise the Storm Overflow Discharge Reduction Plan to extend the protections of the Plan to all storm overflows, including coastal and estuarine waters. The government will also add Marine Protected Areas and Shellfish Water Protected Areas to the 'high priority sites' list, which are prioritised for early action. The government will explore the development of an ecological standard for estuarine waters. Additionally, the government will consider the application of the rainfall target and its effectiveness for preventing ecological harm at coastal sites and subject to the results of that consideration may explore the development of an ecological standard for coastal waters. As part of the government's review of the Plan in 2027, the government will consider whether any developments pertaining to ecological standards in estuarine and coastal waters require the Plan to be further updated. We will be able to establish if companies can go further and faster to achieve the storm overflow targets in the Plan without having a disproportionate impact on consumers bills. Water companies will need to ensure their programmes are deliverable, affordable and capable of being financed.

Summary of consultation responses and government response

Extending the Plan

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

Key Themes

87% (735) respondents answered this question. Of those that responded:

- 97% (711) supported the addition of all storm overflows in the scope of the Storm Overflows Discharge Reduction Plan.
- Comments include:

Some respondents suggested that if all storm overflows were not included, this may act as a loophole for water companies to discharge in these areas instead. This was mirrored by the Wildlife and Countryside Link and Surfers Against Sewage, for example, who suggested there is a risk that any storm overflows excluded from the Plan could be exploited as a legal loophole. The Institute for Civil Engineers stated that the inclusion of all storm overflows will assist in allowing for better planning and prioritisation of work, as well as the opportunity to identify areas most at risk of pollution and prioritise efforts to reduce discharges in those areas, ensuring maximum resource efficiency.

All water and sewerage companies that responded to the consultation were supportive of the expansion of the plan.

South West Water stated that stakeholders and members of the public will not recognise the difference between inland discharges and coastal discharges.

Southern Water highlighted the need for the Plan to prioritise driving investment to where potential or actual harm is caused to nature or people.

Government response

The government's preferred option is to extend the protections of the Plan to all storm overflows, including coastal and estuarine waters. This will be achieved by extending the application of the rainfall target to all storm overflows.

Question: "Should any other areas be added to the current list of 'high priority sites' in the Plan?"

Key Themes

86% (500) of respondents were in support of adding areas to the current 'high priority sites' in the Storm Overflows Discharge Reduction Plan, with 2% (11) against adding areas.

69% (581) of respondents included a comment in response to this question. Comments often contained multiple themes, so, the percentages sum to more than 100%. Thematic analysis was undertaken to identify the key issues raised.

Of the comments that were supportive:

- 48% (279) made reference to Marine Protected Areas
- 7% (42) made reference to specific geographic sites
- 6% (37) made reference to sites used for recreation and leisure
- 4% (22) stated they did not know.

Wildlife and Countryside Link stated that all Marine Protected Areas (MPAs) should be included in the list of 'high priority sites', as well as the breeding and feeding grounds of priority and sensitive species, and sites with particular significance for human health.

Northumbrian Water suggested that consideration could be given to the inclusion of specific marine protection areas, such as Marine Conservation Zones (MCZs). Surfers Against Sewage also stated that areas with high recreational use should be prioritised, as well as MPAs being included as priority sites. The Institute for Civil Engineers proposed that amenity and tourism sites, as well as fish farms, shellfish sites and aquaculture sites be included in the Plan. South West Water also proposed shellfish sites.

Of those respondents who suggested specific geographic sites, some cited migratory routes for spawning and nursery areas for fish species as well as seagrass beds.

South West Water proposed seagrass beds and kelp beds be added to the list of 'high priority sites' as well as sites for breeding and feeding of mobile species.

Wildlife and Countryside Link also stated seagrass habitats and breeding and feeding grounds of priority and sensitive species.

Government response

The government will add Marine Protected Areas and Shellfish Water Protected Areas, an umbrella term covering a range of protected areas, to the list of 'high priority sites.' This 'high priority sites' list is intended to drive faster action in these areas to meet all applicable targets.

The additions to the list of 'high priority sites' are as follows: Shellfish Water Protected Areas, Special Protection Areas (SPAs), Marine Conservation Zones (MCZs), and Ramsar sites.

Nature Conservation Marine Protected Areas have not been added to the priority list as they are a type of marine protected area that can only be designated in Scottish territorial and offshore waters, not in English territorial and offshore waters and is therefore not covered by the Storm Overflows Discharge Reduction Plan. Areas of Special Scientific Interest (ASSIs) are already covered as part of Sites of Special Scientific Interest, which were included in the original 'high priority sites' list.

More evidence is needed to assess implications of overflows at other areas raised by respondents. The government will review the Plan in 2027.

Ecological Standard

Question: "Should the government explore developing an ecological standard for coastal and estuarine waters? - Please provide further comments for your answer."

Key Themes

98% (831) of respondents agreed with the proposal to explore the development of an ecological standard for coastal and estuarine waters. 75% (637) respondents added a comment to this question.

Some respondents recognised that having a standard could allow for effective monitoring of adverse ecological impacts and for regulation of water and sewerage companies. These respondents also suggested the negative impacts of polluted water on wildlife and the health of the public and felt that waterways and coastlines provide space for leisure, physical activity, and tourism.

Developing an ecological standard

Some respondents highlighted the complexities involved in developing an ecological standard. This concern was also raised by Yorkshire Water, noting the challenges of defining a single standard given varying environments for ecology and local factors that will need to be considered. Northumbrian Water note the challenge in applying an ecological standard for coastal and estuarine waters in different situations, citing tide-locked waters and unconstrained waters and the movement of marine life within each of these waters.

Utilising other standards

Some respondents made reference to adopting or using other standards to inform an ecological standard, including reference to European Union and Blue Flag standards.

The Chartered Institution of Water and Environmental Management proposed combining an ecological standard with microbiological standards for bathing and shellfish waters to create a suite of standards against which to manage estuarine and coastal water quality.

Anglian Water Services also welcomed a consistent standard, suggesting the use of modelling coastal waters to inform a standard.

Yorkshire Water made reference to utilising the Water Framework Directive UK TAG UK Environmental Standards and Conditions (Phase 1) as a starting point to developing an ecological standard for coastal and estuarine waters. The Wildlife and Countryside Link also suggested classification under the Water Framework Directive should be explored in developing an ecological standard.

The Worshipful Company of Water Conservators agreed that the government should explore the development of an ecological standard, but also highlighted that setting such a standard will provide greater challenges compared to freshwater standards.

Defining an ecological standard

Some respondents suggested that there should be specific measure of harm and that monitoring should focus on quantifying the volume of bio-accumulative substances from storm overflows, stating this would allow for prioritisation of storm overflows based on harmful chemical load modelling. Further details on chemical parameters and volumes of discharges were provided by various respondents.

The Marine Conservation Society suggested an ecological standard should take into consideration emerging pollutants to future-proof a standard, highlighting the need for a standard to be proactive as opposed to retrospective. This was mirrored by the Wildlife and Countryside Link who suggested an ecological standard should be reviewed and updated to cover emerging chemicals and contaminants of concern. Wildlife and Countryside Link also suggested that a standard should be used for monitoring to keep pollution below thresholds and not used to justify pollution.

The Marine Conservation Society and Dorset Council also suggested utilising a specific ecological standard to help maintain favourable conservation status in areas that could be affected.

Southern Water made a similar point and stated that marine systems would benefit from improved ecological standards that encompass benthic habitat, macroalgae, algae in the water column, invertebrate and vertebrate standards.

The Institute for Civil Engineers also had the same view and stated how an ecological standard for coastal and estuarine waters would help to protect these ecosystems and ensure that they can continue to provide environmental and societal benefits for the coming years.

Government response

The government agrees that the development of an ecological standard should be explored for coastal and estuarine waters. It is important that standards are carefully developed and backed by scientific evidence.

The government's preferred option is to use the expertise of its Environment Agency to explore the development of an ecological standard for estuarine waters. Additionally, the government will consider the application of the rainfall target and its effectiveness for

preventing ecological harm at coastal sites and subject to the results of that consideration may explore the development of an ecological standard for coastal waters. As part of the government's review of the Plan in 2027, the government will consider whether any developments pertaining to ecological standards in estuarine and coastal waters require the Plan to be further updated.

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

Key Themes

73% (616) respondents included a comment in response to this question.

Comments often contained multiple themes, so percentages sum to more than 100%. A thematic analysis was undertaken to identify the key issues raised.

Of the comments submitted:

- 50% (311) of respondents mentioned ecological/wildlife considerations were relevant to developing an ecological standard for coastal and estuarine storm overflows
- 31% (193) of respondents mentioned microbiological considerations
- 30% (187) of respondents mentioned human health/leisure as a consideration
- 28% (170) of respondents mentioned chemical considerations
- 13% (83) of respondents mentioned plastics and microplastics as a consideration
- There were repeat concerns that standards should be localised, and that the standard should be a high standard

Parameters

Wildlife and Countryside Link suggested that a standard should consider both immediate and long-term impacts and that this standard must be reviewed and updated to incorporate findings from the latest research and evidence. Wildlife and Countryside Link also suggested the following be explored during development of the standard: indicator species that are sensitive to water quality and wastewater pollution, algae and algal blooms, water chemistry, the presence and levels of harmful chemicals, the presence, and levels of microplastics, turbidity of water, and visual indicators.

Surfers Against Sewage proposed that an ecological standard for coastal and estuarine regions must consider a wide range of biotic and abiotic parameters and include in-depth monitoring to understand changes over time.

Southern Water suggested that ecological standards relevant to eutrophication impacts would be beneficial, for example standards looking at benthic algae, intertidal algae and water column algae (blooms). Further to this, Southern Water also suggested

development of ecological standards based on the usual parameters which are included in the fluvial parts of the Urban Pollution Management (UPM) such as: dissolved oxygen, ammonia (total and un-ionised) and Biological Oxygen Demand (BOD). Additionally, Southern Water considered demonstrating a negative hypothesis to be extremely challenging for water companies to deliver, and that it has the potential to be very costly for their customers.

Definition of "local adverse ecological impact"

A definition of "local adverse effect" was stated as a concern for developing a standard by Fylde Council. Additionally, a quantification of a rainfall event was requested as Fylde Council suggested storms often inundate infrastructure within an hour and suggested a twelve-hour period would appear to allow more storm overflow events. The Marine Conservation Society suggested that if a standard is to confirm "no adverse ecological impact", there must be consideration that chemical mixtures at levels considered safe can still "trigger adverse effects".

The Marine Conservation Society also noted confusion regarding the definition of "local", agreeing that sampling of discharges should be taken as close to storm overflows as possible, suggesting "However, there must also be acknowledgement 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."

Yorkshire Water noted considerations in developing an ecological standard for coastal and estuarine waters, including dilution levels in water bodies, the definition of mixing zones and the ecology at different outfall locations.

The Marine Conservation Society also noted an ecological standard should consider a spill metric that includes volume and suggested a need for targeted monitoring due to the differing water flow and presence of pollutants in each environment.

Collaborative development of an ecological standard and utilising other standards

The Chartered Institution of Water and Environmental Management and Dorset Council suggested a standard should be developed in partnership with specialists. Yorkshire Water also suggested the development of an ecological standard should be a collaborative project.

Wessex Water suggested an ecological standard should "be relevant to existing ecological standards and should be set to meet existing applicable legislative target outcomes, for example, those set by the Water Framework Directive (for estuarine) and Marine Strategy Framework (for coastal, where not covered by the Water Framework Directive)".

Northumbrian Water suggested that consideration of the Water Environment Regulations should be a starting point in developing a standard, and that the assessment of dispersion, mixing and dilution through modelling techniques at different tidal states is also relevant.

Sedimentation and sediment build up were also detailed as considerations by some respondents.

Government response

The government will take into account these responses when exploring the development of an ecological standard.

38 Degrees ran an email campaign concurrent to the government consultation, asking similar questions. These responses were received and considered by government.

Next steps

We will proceed to revise the Storm Overflows Discharge Reduction Plan. The revisions will:

- Extend target 3 (the rainfall target) to apply to all storm overflows, including those discharging into coastal and estuarine waters.
- Clarify that target 1 applies to inland storm overflows only, because the current
 ecological standard can only be used in inland waters (i.e., not in coastal and
 estuarine waters). As well as this, set out that the government will explore the
 development of an ecological standard for estuarine waters. Additionally, the
 government will consider the application of the rainfall target and its effectiveness
 for preventing ecological harm at coastal sites and subject to the results of that
 consideration may explore the development of an ecological standard for coastal
 waters.
- Add Shellfish Water Protected Areas, Special Protected Areas, Marine Conservation Zones and Ramsar Sites to the list of 'high priority sites.' This list is intended to drive faster action in these areas to meet all applicable targets.
- Update the Storm Overflows Discharge Reduction Plan, to clarify the prioritisation of targets and to update figures which have changed in the Plan as a result of the changes outlined here.

The government welcomes the responses to the Storm Overflows Discharge Reduction Plan consultation which highlight the strength of feeling amongst the public and stakeholders on this issue.