ICE submission to the Department for Environment, Food & Rural Affairs consultation on the Storm Overflows Discharge Reduction Plan

July 2023

Introduction

Established in 1818 and with over 95,000 members worldwide, the Institution of Civil Engineers exists to deliver insights on infrastructure for societal benefit, using the professional engineering knowledge of our global membership.

This response has been informed by experts on the ICE's Water & Sanitation Community Advisory Board.

For more information, please contact:

David Hawkes, Head of Policy, ICE
policy@ice.org.uk

Questions:

- **Would you like your response to be confidential?** No
- **Are you responding:**
  - ~~As an individual~~
  - ~~On behalf of a business~~
  - On behalf of an organisation – The Institution of Civil Engineers
- **Do you know who provides your water and sewerage service?** Not applicable

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

Yes.

Coastal and estuarine waters provide a wide range of benefits to people and wildlife, including:

1. Recreation: Coastal and estuarine waters are popular locations for fishing, boating and other recreational activities.

2. Food production: Coastal and estuarine waters support important food production, such as fisheries and aquaculture industries.
3. Habitat: Coastal and estuarine waters provide habitats for a wide variety of animals and plants, including many which are ecologically threatened.
4. Water quality: coastal and estuarine ecosystems help to filter pollutants from rivers and streams and provide a buffer against storm surges and flooding.

However, coastal and estuarine waters are also facing a number of threats, such as:

- Pollution from a variety of sources, including agricultural and highways runoff, industrial wastewater, and sewage.
- Development of coastal and estuarine areas for housing, industry, and tourism, which can have a negative impact on the ecosystem and environment.
- Sea level rise caused by climate change and increasing global temperatures is threatening coastal and estuarine areas.

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.

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.

The development of an ecology standard for coastal and estuarine overflows should take into account the following considerations:

1. Types of pollutants discharged into coastal and estuarine waters. This should include pollutants such as persistent chemicals, microplastics and pharmaceutical chemicals (e.g., endocrine disruptors, antibiotics, etc.)
2. Impact on the visual amenity of coastal and estuarine waters. Coastal and estuarine waters are important for visual amenity both for local communities and as a stimulus for tourism.
3. The presence of special ecological areas, such as marshes, in coastal and estuarine waters. Such ecological areas are important habitats for a variety of marine life and can be impacted by storm overflows, in both positive and negative ways.
4. Impact on fisheries and other aquaculture businesses. Discharges from storm overflows can have a negative impact on fish populations.
5. Impact of tides and currents on the distribution of pollutants in coastal and estuarine waters. Tides and currents can transport pollutants from overflows to different parts of the waters, which can make it difficult to assess the impact.
6. The lack of knowledge about the behaviour of water in coastal and estuarine waters. More research is needed to understand the impact of pollutants and their movement and effects. This makes limit-setting difficult.
7. Net zero carbon considerations. Works undertaken as part of the reduction of storm overflows should take into account and be balanced with the benefits provided by carrying out the works, measured against the roadmap to net zero.

It should be noted that prevention is better than a cure: it is better to eliminate the root cause of pollutants than to remove pollutants subsequently.

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

Other high priority sites to be considered for inclusion in the plan are:

1. Amenity and tourism sites: These areas are important for the public's enjoyment of the coast and countryside. Storm overflows can have a negative impact on the visual amenity of these areas, and make them unsafe for swimming and other recreational activities.

2. Fish farms, shellfish sites and aquaculture sites: Fish farms and shellfish sites are often located in coastal areas and can be affected by storm overflows, which can cause pollution leading to the death of fish and other marine life. As shellfish are filter feeders, they can accumulate pollutants from the water, which can make shellfish unsafe to eat.

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

Firstly, all overflows have the potential to pollute watercourses, and it is important to understand the impacts of this pollution on the environment, public health, and the economy, whether positive or negative.

Second, by including all overflows in the scope of the plan, Defra can ensure a more comprehensive and effective approach is taken to reducing discharges.

Additionally, the inclusion of all overflows will assist in allowing for better planning and prioritisation of work for programming. This will also allow the identification of areas most at risk of pollution and prioritise efforts to reduce discharges in those areas, ensuring maximum resource efficiency.

Furthermore, it is important to make information about overflows more transparent in line with the Storm Overflows Discharge Reduction Plan, and the inclusion of all overflows in the scope of the plan would help to maintain public awareness of the issue of discharges.

Finally, it should be noted that the measurement of discharges is the key first step of the plan and will facilitate the identification of next steps.