

# Pollution from sewer overflows

Briefing, November 2025

## Summary

Based on cases to ERCS's Advice Service, this briefing explores the gaps in regulations covering pollution from sewer overflows and weaknesses in enforcement. Building on the work of Environmental Standards Scotland and others, it then offers recommendations to address them.

- Environmental Quality Standards for surface waters
- Bathing water designation
- Permitting of sewer overflows
- Enforcement of permits for sewer overflows

## Introduction

The Environmental Rights Centre for Scotland (ERCS) is an environmental law charity. We advocate for policy and law reform to improve environmental rights and compliance with the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.<sup>1</sup>

## Evidence from ERCS cases on sewage pollution

Between June 2021 and June 2025, ERCS's Advice Service received twenty-nine enquiries about water quality/pollution and thirteen enquiries about sewage/contamination/sanitation.<sup>2</sup> Three of these enquiries identified systematic issues with surface water pollution from sewer overflows operated by Scottish Water.

The three cases highlight that many sewage pollutants are not covered by the Environmental Quality Standards for surface waters – the legal benchmark for water quality in our rivers, lochs and coasts. Bathing water designation, which offers better protection from sewage pollution, is very difficult to obtain; and despite photographs and water test results demonstrating sewage pollution, the Scottish Environment Protection Agency (SEPA) found that the evidence was insufficient or not covered by the licences for sewer overflows.



Representations on all three cases were made to Environmental Standards Scotland (ESS): River Almond (IESS.22.027 and IESS.25.002), Water of Leith (IESS.23.047), and Eastfield Pumping Station (IESS.23.050). Although the communities affected did not feel their concerns were fully addressed, ESS's 2024 report 'Storm Overflows - An assessment of spills, their impact on the water environment and the effectiveness of legislation and policy' was welcomed in identifying recommendations to improve 'the monitoring, regulatory guidance, and the operation of storm overflows'.<sup>3</sup>

## Review of the gaps in regulations

### Environmental Quality Standards for surface waters

#### Exclusion of some sewage pollutants

Many pollutants that may be present in sewage (e.g. heavy metals) are listed in the Environmental Quality Standards for Scotland's surface waters.<sup>4</sup> However, other pollutants that communities are concerned about, such as faecal pathogens, are not. Additional microbiological quality standards only apply to water bodies with a special protection designation such as bathing waters,<sup>5</sup> leaving most rivers and coastal areas without protection.

### Bathing water designation

#### Barriers to bathing water designation

In January 2023, ERCS made a representation to ESS challenging the 150-bather threshold and other criteria in the bathing water application process as unlawful (IESS.23.005). As a result, the bathing water application form in Scotland was revised in April 2023 and again in May 2024.<sup>6</sup> The new form has made it more difficult to obtain a bathing water designation.

#### Insufficient protections for water quality in designated bathing waters

The additional water quality standards for bathing waters are not comprehensively monitored, and the regulations do not sufficiently require SEPA to address sewage pollution in designated bathing waters.

### CAR licensing of sewer overflows

#### Insufficient discharge standards

SEPA previously regulated sewer overflows through licences under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR licences).<sup>7</sup> From 1 November 2025, these have become permits under the Environmental Authorisation (Scotland) Regulations 2018 (EASR permits).<sup>8</sup>



SEPA does not currently apply discharge standards to Scottish Water's sewer overflows. SEPA's regulatory guidance states that the 'licence conditions for intermittent sewage discharges define the structures required rather than the quality of discharge to be achieved'.<sup>9</sup> Whilst acknowledging that 'applying numeric microbiological limits is possible', SEPA does not consider it practical for most cases.<sup>10</sup>

### Lack of sewer overflow monitoring

SEPA's licence conditions for Scottish Water require it to monitor only a limited number of overflows. There has been some progress with Scottish Water recognising the importance of monitoring and investing in more monitoring equipment.<sup>11</sup> Understanding the health risks of a sewage discharge also requires knowing its pollutant contents and their concentration. However, Scottish Water's CAR licences do not require them to regularly monitor or report on this for all sewer overflows.

## Review of the weaknesses in enforcement of CAR licences for sewer overflows

### Lack of transparency about enforcement

SEPA has not published compliance data for Scottish Water's CAR licences since 2019.<sup>12</sup>

### Insufficient enforcement of CAR licence conditions

ERCS's cases identify that SEPA does not always enforce CAR licences despite evidence of breaches and sewage pollution. In its report on storm overflows, ESS also discusses evidence of possible non-compliance, such as uncertainty whether Scottish Water is monitoring and reporting on overflows as required,<sup>13</sup> and discharges during dry weather.<sup>14</sup>

ESS also raises the issue of 'unsatisfactory storm overflows'.<sup>15</sup> In 2023-2024, Scottish Water reported to the Water Industry Commission for Scotland that 22% (907 of 4,083) of its intermittent discharges (storm overflows) were in unsatisfactory condition.<sup>16</sup> SEPA states unsatisfactory overflows are to be dealt with through their Enforcement Policy and the agreed investment process.<sup>17</sup> They are prioritised for improvement in Scottish Water's investment process, which is agreed with the Scottish Government Investment Group that includes SEPA.<sup>18</sup> Scottish Water's current investment programme still does not address all unsatisfactory assets,<sup>19</sup> which nonetheless remain licensed. It is unclear if SEPA has taken any further action to address pollution from these overflows.

## Recommendations to address pollution from sewer overflows

Pollution from sewer overflows is a significant human and environmental health risk. Without action it will only increase, with climate change predicted to cause more rainfall in Scotland.<sup>20</sup>



Some progress has been made with Scottish Ministers setting objectives for Scottish Water to reduce pollution from overflows and target investment to address risks to the environment from its assets.<sup>21</sup> Accordingly, Scottish Water has delivered improvements to monitor and reduce overflow discharges, supporting SEPA's River Basin Management Plan.<sup>22</sup>

Notwithstanding, this briefing has highlighted that the current Environmental Quality Standards for surface waters, regulation of designated bathing waters, and the conditions of Scottish Water's CAR licences are inadequate to prevent pollution from sewer overflows. It has also outlined failures in the enforcement of these CAR licences.

In September 2024, ESS published 'Storm Overflows - An assessment of spills, their impact on the water environment and the effectiveness of legislation and policy' which made six recommendations for further improvement.<sup>23</sup>

## ESS's recommendations

ESS made six recommendations to the Scottish Government, SEPA and Scottish Water:

- Recommendations 1 and 2 require publication of data about spills and licence compliance, and improved monitoring particularly of all unsatisfactory overflows.<sup>24</sup>
- Recommendations 3 and 4 call for better guidance about the circumstances in which overflows are permitted to spill and the 'best technical knowledge not entailing excessive costs' requirement for sewer infrastructure.<sup>25</sup>
- Recommendations 5 and 6 call for regular data analysis to find and improve overflows spilling in dry weather, and for publication of timetables for proposed improvement work.<sup>26</sup>

The Scottish Government, SEPA and Scottish Water responded to the recommendations in March 2025,<sup>27</sup> followed by further correspondence with ESS in May-June 2025.<sup>28</sup> They all referred to existing work to install more monitors and improve unsatisfactory overflows. SEPA and Scottish Water also highlighted work in progress to publish information about overflows and identify dry spills,<sup>29</sup> and the Scottish Government said it would assess to what extent guidance could be revised ahead of legislative reform.<sup>30</sup> SEPA and Scottish Water provided an update on the outlined work on 1 September 2025, and will again update ESS in March 2026.<sup>31</sup>

## Recommendations to improve regulation and enforcement

In England and Wales, the Independent Water Commission was established in 2024 to provide recommendations that would clean up waterways and rebuild public trust in the regulation of the water sector.<sup>32</sup> In response, its final recommendations in July 2025 included reform of the regulator and legislative framework for the water environment and industry.<sup>33</sup> In 2025, the UK Government passed legislation requiring water companies to create pollution incident



reduction plans and removing executive bonuses over pollution,<sup>34</sup> increased funding for the Environment Agency,<sup>35</sup> and pledged to half sewage spills by 2030.<sup>36</sup>

ESS's six recommendations address some issues with overflows that fail to comply with current regulatory standards and publishing information about discharges. However, in Scotland, too, more ambitious reforms are needed.

ERCS proposes recommendations in four key areas to address pollution from sewer overflows. These build on the work of ESS and the following organisations/groups:

- End Sewage Pollution<sup>37</sup>
- Marine Conservation Society<sup>38</sup>
- River Almond Action Group
- Save our Shore Leith
- Scottish Environment LINK Freshwater Group<sup>39</sup>
- Surfers Against Sewage<sup>40</sup>

## Environmental Quality Standards for surface waters

**Long-term objective:** Scotland to keep pace with the European Union's Environmental Quality Standards for surface waters, with the ambition to go further and incorporate emerging pollutants in response to public concern and latest research.

### **Actions for the next regulatory period for Scotland's water environment in 2027 – 2033:**

- Reform Scottish legislation to keep pace with the proposed EU Directive amending the Water Framework Directive, the Groundwater Directive and the Environmental Quality Standards Directive,<sup>41</sup> on which the European Council and European Parliament reached a provisional deal on 23 September 2025.<sup>42</sup>
- Establish a watchlist for contaminants of emerging concern as already implemented by the EU,<sup>43</sup> which would also align with recommendations by the Centre of Expertise for Waters for addressing these contaminants in policy, regulation and monitoring programmes.<sup>44</sup>

## Bathing water designation

**Long-term objective:** Scotland to provide an accessible process for bathing water applications, with improved monitoring to publish more accurate information about water quality at designated bathing waters.

### **Actions for the next regulatory period for Scotland's water environment in 2027 – 2033:**

- Amend the bathing water application criteria so that it is clear and transparent, and permit all recreational water users to be counted in applications.



- Introduce all year-round monitoring to capture actual recreational use and risks to users.

## Permitting of sewer overflows

**Long-term objective:** Scotland to establish accurate and publicly accessible monitoring data for all sewer overflows by 2030. Implement green and blue sewer infrastructure by drawing on Scottish and European best practice, and reduce discharges through investment programmes.

### **Actions for the next regulatory period for Scotland's water environment in 2027 – 2033:**

- Issue guidance on the exceptional circumstances in which sewer overflows can be permitted to discharge as well as up-to-date information on the requirement to use best technical knowledge not entailing excessive costs (BTKNEEC).<sup>45</sup>
- Update the Urban Waste Water Treatment (Scotland) Regulations 1994 to keep pace with the recast EU Urban Waste Water Directive, including its requirements that:
  - Sewer overflows are monitored for pollutant concentrations (Article 21(2)).
  - Plans are created for settlements with over 100k population and under certain conditions above 10k population that set objectives and measures to reduce pollution from overflows, prioritising green and blue infrastructure (Article 5).<sup>46</sup>
- Review SEPA's regulatory guidance and Scottish Water's EASR permits for sewer overflows to reflect these updates as well as:
  - Agree a review cycle of permit conditions.
  - Require all overflows to be screened and have event monitors installed. Require reporting of data from all monitored overflows.
  - Require the publication of accessible and real-time overflow monitoring data that is linked with reasons for discharges, rainfall and permit compliance data.
  - Review whether discharge standards should be applied to sewer overflows.

## Enforcement of permits for sewer overflows

**Long-term objective:** Scotland has more accountability and urgency in how public bodies respond to communities who are concerned about sewage pollution. SEPA is adequately resourced to carry out its legal duties to monitor and enforce EASR permit compliance.

### **Actions for the next regulatory period for Scotland's water environment in 2027 – 2033:**

- SEPA must address its long-standing breach and comply with its duty to publish data on permit compliance.
- SEPA should make full use of its enforcement powers when addressing permit breaches, not only by requiring infrastructure improvements but by issuing enforcement notices, penalties and requiring pollution damage to be remediated with specific timelines and targets which are accessible to the public.



- SEPA must ensure that Scottish Water publishes an action plan with clear timelines to address discharges from unsatisfactory and non-compliant sewer overflows.
- The Scottish Government must ensure that in line with environmental justice principles, the cost of infrastructure investment and pollution remediation is not disproportionately experienced by lower income households. For example, Scottish Water's charges to households rose by 9.9% in April 2025 because of infrastructure investments.<sup>47</sup>

## ERCS manifesto asks to Scottish parties

ERCS is calling on all Scottish parties to enshrine our right to a healthy environment and clean up Scotland's sewage:

**1. Make pollution visible**

**2. Stop routine pollution**

**3. Hold polluters to account**

**4. Build in resilience**

See the campaign and petition to [Clean Up Scotland's Sewage](#) for more information.

### For more information contact

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- <sup>1</sup> United Nations Economic Commission for Europe (1998) [Convention on access to information, public participation in decision-making and access to justice in environmental matters](#).
- <sup>2</sup> Environmental Rights Centre for Scotland (August 2025) [Snapshot of advice service –500 enquiries](#).
- <sup>3</sup> Environmental Standards Scotland (May 2025) [Storm Overflows – ESS’ Statement on SG, Scottish Water and SEPA responses](#), p1; Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#).
- <sup>4</sup> [The Scotland River Basin District \(Standards\) Directions 2024](#), Schedule 2(Part C).
- <sup>5</sup> [The Bathing Waters \(Scotland\) Regulations 2008](#), Schedule 3.
- <sup>6</sup> Environmental Standards Scotland (November 2024) [The Designation of Bathing Waters in Scotland](#), p5; Scottish Environment Protection Agency (accessed 1 May 2025) [Proposal in relation to the designation of a bathing water under the Bathing Waters \(Scotland\) Regulations 2008](#).
- <sup>7</sup> [Water Environment \(Controlled Activities\) \(Scotland\) Regulations 2011](#)
- <sup>8</sup> [The Environmental Authorisations \(Scotland\) Regulations 2018](#); Scottish Environmental Protection Agency (accessed 17 November 2025) [Moving to the new Regulations](#).
- <sup>9</sup> Scottish Environmental Protection Agency (2024) [Regulatory Method \(WAT-RM-07\) Sewer Overflows](#), p6.
- <sup>10</sup> Scottish Environmental Protection Agency (2024) [Regulatory Method \(WAT-RM-07\) Sewer Overflows](#), p6.
- <sup>11</sup> Scottish Water (2024) [2022-23 Annual Return to Water Industry Commission for Scotland: Overview](#), p8.
- <sup>12</sup> Scottish Environment Protection Agency (accessed 21 February 2025) [Compliance Assessment Scheme - Assessment Reports](#).
- <sup>13</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), pp17-18.
- <sup>14</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), p42.
- <sup>15</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), p43.
- <sup>16</sup> Water Industry Commission for Scotland (2024) [Scottish Water 2023-24 Annual Return to Water Industry Commission for Scotland: B Tables](#); Water Industry Commission for Scotland (2024) [Scottish Water 2023-24 Annual Return to Water Industry Commission for Scotland: H Tables](#).
- <sup>17</sup> Scottish Environmental Protection Agency (2024) [Regulatory Method \(WAT-RM-07\) Sewer Overflows](#), p8.
- <sup>18</sup> Scottish Government (accessed 19 November 2024) [Water industry: Scottish Government Investment Group](#).
- <sup>19</sup> Scottish Water (accessed 19 February 2025) [Prioritisation of Sewer Overflows in Scotland](#).
- <sup>20</sup> Chan, Kendon, Fowler, Youngman, Dale & Short (2023) [‘New extreme rainfall projections for improved climate resilience of urban drainage systems’](#), *Climate Services*, 30: 100375.
- <sup>21</sup> [The Scottish Water \(Objectives: 2021 to 2027\) Directions 2020](#), 7(1) & 8(2).
- <sup>22</sup> Scottish Water (December 2024) [Improving Urban Waters Routemap Annual Update 2024](#); Scottish Environment Protection Agency (December 2021) [The River Basin Management Plan for Scotland 2021 - 2027](#).
- <sup>23</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#).
- <sup>24</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), p2.
- <sup>25</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), p3.
- <sup>26</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), pp4-5.





- <sup>27</sup> Scottish Environment Protection Agency (4 March 2025) [SEPA response to ESS Analytical Report: “Storm overflows – an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy”](#); Scottish Government (4 March 2025) [Letter from Gillian Martin MSP to Mark Roberts – Scottish Government Response to Storm Overflows Report](#); Scottish Water (4 March 2025) [Scottish Water’s response to Recommendations within the report ‘Storm Overflows - An assessment of spills, their impact on the water environment and the effectiveness of legislation and policy’](#).
- <sup>28</sup> Environmental Standards Scotland (15 May 2025) [Statement on the Scottish Government, Scottish Water and SEPA’s response to Environmental Standards Scotland’s report ‘Storm Overflows - An assessment of spills, their impact on the water environment and the effectiveness of legislation and policy’](#); Scottish Government (10 June 2025) [Letter from Gillian Martin MSP to Mark Roberts – ESS’ Storm Overflows analytical report recommendations](#); Scottish Water (30 May 2025) [Re ESS’ Storm Overflow Analytical Report Recommendations](#).
- <sup>29</sup> Scottish Environment Protection Agency (4 March 2025) [SEPA response to ESS Analytical Report: “Storm overflows – an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy”](#); Scottish Water (4 March 2025) [Scottish Water’s response to Recommendations within the report ‘Storm Overflows - An assessment of spills, their impact on the water environment and the effectiveness of legislation and policy’](#).
- <sup>30</sup> Scottish Government (10 June 2025) [Letter from Gillian Martin MSP to Mark Roberts – ESS’ Storm Overflows analytical report recommendations](#), p1.
- <sup>31</sup> Scottish Environmental Protection Agency (1 September 2025) [SEPA Update on ESS Analytical Report: “Storm overflows – an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy”](#), p4; Scottish Water (1 September 2025) [Storm Overflows – An Assessment of Spills](#), p3.
- <sup>32</sup> Independent Water Commission (June 2025) [Independent Water Commission: Interim report](#), p6.
- <sup>33</sup> Independent Water Commission (July 2025) [Independent Water Commission: Summary Report](#), pp12 & 22.
- <sup>34</sup> [Water \(Special Measures\) Act 2025](#), s1 & s3; Department for Environment, Food & Rural Affairs (6 June 2025) [Government's new law sees unfair bonuses banned for six water companies with immediate effect](#).
- <sup>35</sup> Department for Environment, Food & Rural Affairs and The Rt Hon Steve Reed OBE MP (8 July 2025) [Largest ever budget for water regulation](#).
- <sup>36</sup> Department for Environment, Food & Rural Affairs and The Rt Hon Steve Reed OBE MP (19 July 2025) [Reed: Government to cut sewage pollution in half by 2030](#).
- <sup>37</sup> End Sewage Pollution (September 2023) [The End Sewage Pollution Manifesto](#).
- <sup>38</sup> Marine Conservation Society (May 2023) [Tackling the environmental impacts of Storm Overflows or Combined Sewer Overflows \(CSOs\) in Scotland](#).
- <sup>39</sup> Scottish Environment LINK (May 2024) [LINK Parliamentary Briefing: Tackling sewage pollution, from source to sea](#); Scottish Environment LINK (November 2025) [Restoring Scotland’s Waters LINK’s priorities for Scotland’s next River Basin Management Plan](#), p7.
- <sup>40</sup> Surfers Against Sewage (2024) [The Ripple Effect: Citizen science insights into bathing water regulation](#).
- <sup>41</sup> European Commission (October 2022) [Proposal for a Directive amending the Water Framework Directive, the Groundwater Directive and the Environmental Quality Standards Directive](#).
- <sup>42</sup> European Council (23 September 2025) [Water pollution: Council and Parliament reach provisional deal to update priority substances in surface and ground waters](#).
- <sup>43</sup> European Union (2025) [Commission Implementing Decision \(EU\) 2025/439 of 28 February 2025 establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC of the European Parliament and of the Council \(notified under document C\(2025\) 1244\)](#).
- <sup>44</sup> Helwig K, Cooper A, Pagaling E, Henderson F, Avery L, Roberts J, Mattar S, Devalla S, Hunter C, Frascaroli G, Pahl O, Escudero A, Shortall O, Zhang Z, Troldsborg M (2024) [‘Emerging Contaminants: Informing Scotland’s strategic monitoring and policy approaches on substances of increasing concern’](#), Centre of Expertise for Waters.



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<sup>45</sup> Environmental Standards Scotland (2024) [Storm overflows - an assessment of spills, their impact on the water environment and the effectiveness of legislation and policy](#), pp27-28.

<sup>46</sup> European Union (2024) [Directive 2024/3019 concerning urban wastewater treatment \(recast\)](#).

<sup>47</sup> BBC (accessed 21 February 2025) [Scottish Water bills set to rise 9.9% in April](#).