

INVESTIGATION REPORT

addressed to the Environment Agency in relation to its compliance with the Urban Waste Water Treatment (England and Wales) Regulations 1994, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and the Environmental Permitting (England and Wales) Regulations 2016 regarding the regulation of network combined sewer overflows

December 2025

Contents

Executive Summary	3
1. Introduction	12
2. Legal framework	18
3. Factual background.....	26
4. Analysis and findings	37
5. Conclusion and recommendations	51
Annex: Glossary.....	56



Executive summary

Executive summary

Water pollution is a serious challenge, driven by multiple factors, including discharges from combined sewer overflows (CSOs). Our principal objective in exercising all our functions, including enforcement, is to protect and enhance the natural environment. Through our investigation function, we tackle serious non-compliance with environmental law and ensure accountability where failures are identified. We are outcomes focused, and our goal is to deliver sustainable, long-term improvements in water quality.

This report concludes the Office for Environmental Protection's (OEP) investigation into whether the Environment Agency has failed to comply with environmental law in relation to its regulation of network CSOs in England. It is published alongside similar reports addressed to Ofwat, and the Secretary of State for Environment, Food and Rural Affairs (Defra). Together, the three reports examine whether these public authorities have fulfilled their respective legal duties in overseeing, permitting, and enforcing the operation of CSOs by Water and Sewerage Companies (WaSCs).

Combined sewers are designed to carry both sewage and surface water to wastewater treatment works. In England, while many areas have separate systems, these often connect into older combined networks prior to treatment. During heavy rainfall, the system's capacity can be exceeded, risking sewage backing up into homes and streets. CSOs act as safety valves, discharging into rivers, lakes or coastal waters to prevent flooding. However, frequent or prolonged discharges of untreated sewage pose significant environmental risks, such as damage to ecosystems, degradation of water quality, harm to biodiversity, and create risks for human health and recreation. Effective regulation is therefore essential to protect waterbodies and the communities that depend on them. Our investigation aimed to ensure that the legal framework governing CSOs (figure 1) is not only properly understood but also complied with, properly implemented, monitored, and enforced by the authorities responsible.

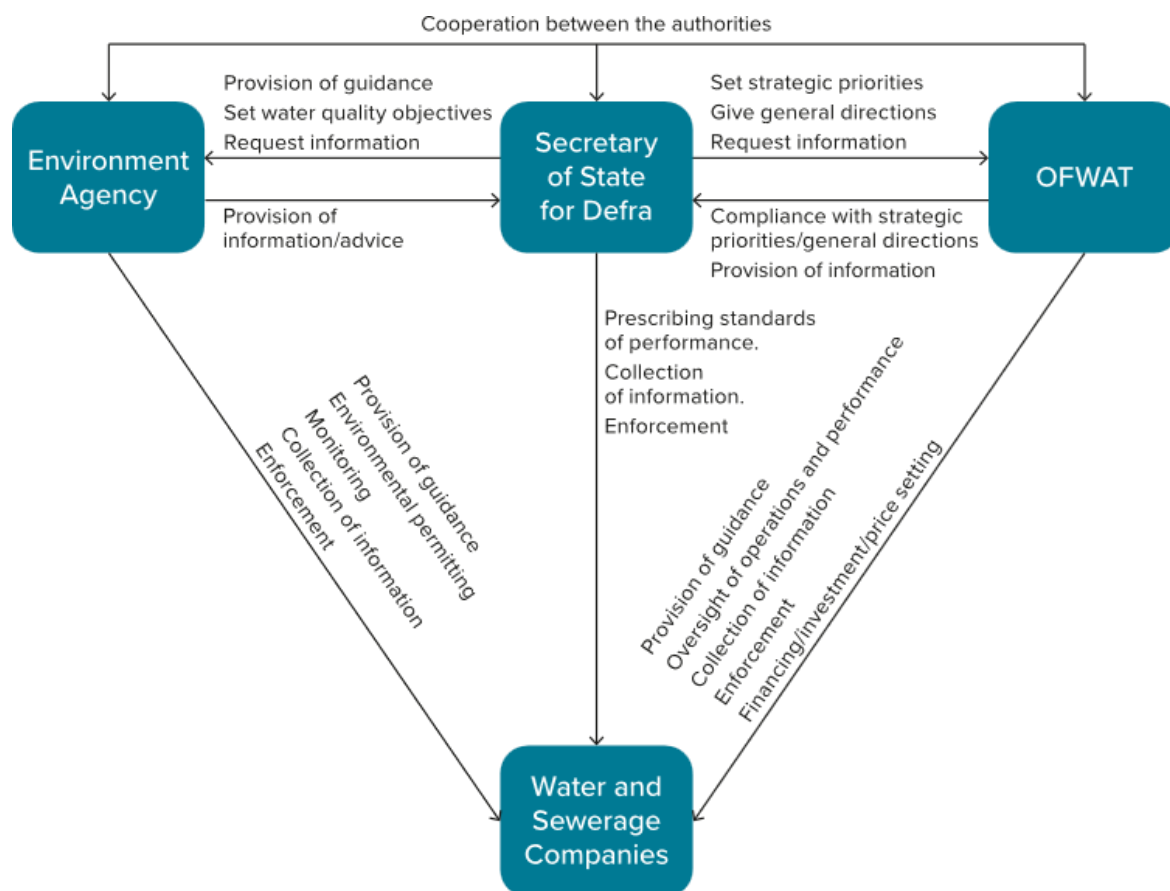


Figure 1: Overview of the interactions between the authorities and the WaSCs

The Water Industry Act 1991 (the '1991 Act') sets out the core duties on WaSCs to provide and maintain effective sewerage systems. The Urban Waste Water Treatment (England and Wales) Regulations 1994 (the '1994 Regulations') build on these duties by requiring public sewers and waste water treatment works to be designed and maintained using a form of cost-benefit analysis referred to as best technical knowledge not entailing excessive costs ('BTKNEEC') and to limit pollution from storm overflows.

The Environment Agency is responsible for securing these outcomes through permitting, monitoring compliance and enforcement if necessary.

Ofwat, while primarily an economic regulator, also has environmental responsibilities and enforcement duties under the 1991 Act. Defra sets national policy and has enforcement duties under the 1991 Act.

In 1997, Defra issued guidance on CSO operation, defining what constituted satisfactory and unsatisfactory performance (the '1997 Guidance'). This guidance focused on the environmental impact of CSOs on receiving waters and relied heavily on regulatory monitoring. Critically, it described discharges in dry weather as unsatisfactory, alongside other predominately impact-based criteria. The Environment Agency continued to apply these principles in discharge permits and later embedded them in its own guidance on the operation of CSOs.

In 2012, the Court of Justice of the European Union (the ‘CJEU’) ruled that the UK was in breach of the Urban Waste Water Treatment Directive in respect of two specific sites (Case C-301/10). The judgment clarified that CSOs should discharge only in exceptional circumstances, such as unusually heavy rainfall, unless preventing such discharges would impose disproportionate costs. This established the “two-stage test”: first, assess whether a discharge is exceptional; second, apply a cost-benefit analysis approach (‘BTKNEEC’) to determine proportionality of any intervention.

Despite this, the UK Government’s framework for regulating CSOs remained largely unchanged. The 1997 Guidance was not updated, and Environment Agency permits were not revised to reflect the two-stage test. As public concern grew, regulators introduced Event Duration Monitoring (‘EDM’) to track CSO activity. By 2018, EDM data was beginning to demonstrate that many CSOs were discharging far more frequently than they should have been.

In 2018, the Environment Agency introduced the Storm Overflow Assessment Framework (‘SOAF’) to specifically assess spill frequency. However, the thresholds used to satisfy the first stage of the two-stage test remained too lenient and failed to align with any reasonable definition of “exceptional circumstances”. Where CSOs did progress to the second stage, there were inconsistencies and gaps in cost-benefit assessments undertaken by WaSCs, undermining the integrity of the test and the overall outcome.

Ofwat, meanwhile, interpreted its enforcement duties as applying only in cases of systemic company failure. It placed a heavy reliance on Environment Agency permits, appearing to operate on the basis that compliance with a permit equated to legal compliance with the 1991 Act and 1994 Regulations. This was an incorrect position given Ofwat’s own duties under section 18 of the 1991 Act and the permissive standards described above. Ofwat failed to act on evidence of discharges from network CSOs until at least June 2022 and did not exercise its enforcement powers despite having both the authority and a duty to do so.

Defra, which shares enforcement responsibilities under the 1991 Act, also failed to intervene when Ofwat did not act, allowing these breaches to persist and contributing to ongoing environmental harm and public dissatisfaction.

Our Investigation

We launched our investigation in June 2022 following a complaint submitted by the Salmon and Trout Conservation Trust (now WildFish). After a period of evidence gathering, information requests and analysis, we issued Information Notices to each public authority in September 2023, setting out our concerns and requesting detailed responses and supporting evidence. Our approach is designed to resolve issues effectively, often starting with dialogue and cooperation to help narrow the issues and clarify any differences of opinion. Where necessary, we will escalate through our formal enforcement functions to secure compliance and protect the environment. After reviewing submissions, we considered that serious failures to comply with

environmental law had occurred and issued Decision Notices to each public authority in December 2024, describing the failures and recommending corrective steps. Throughout this process, all public authorities engaged constructively, with a focus on the outcome of protecting the environment.

Findings

We found that there had been three failures to comply with environmental law by Defra:¹

1. Failing to take proper account of environmental law by:
 - Drafting guidance for WaSCs and regulators which did not reflect the true legal extent of sewerage undertaker duties
 - Failing to amend or replace the guidance after a relevant CJEU decision in 2012
 - Misunderstanding its legal duty under environmental law to make enforcement orders.
2. Failing to exercise its duty under environmental law to make enforcement orders.
3. Failing to discharge its duty to secure compliance with environmental law relating to emissions controls. (NB the OEP's view is that this ceased to be an issue in 2020 due to a change in the law).

We found that there had been three failures to comply with environmental law by the Environment Agency:²

1. Failing to take proper account of environmental law in devising guidance relating to permit conditions.
2. (As a result of the point above) setting permit conditions that were insufficient to comply with environmental laws.
3. Failing to exercise permit review functions in relation to discharges from CSOs.

¹ Sections 18 and 94 of the Water Industry Act 1991 (as supplemented by the Urban Waste Water Treatment (England and Wales) Regulations 1994 which implement the Urban Waste Water Treatment Directive 1991 ((91/271/EEC)) and the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 which implement the Water Framework Directive 2000 (2000/60/EC).

² The Urban Waste Water Treatment (England and Wales) Regulations 1994, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and the Environmental Permitting (England and Wales) Regulations 2016.

We found that there had been two failures to comply with environmental law by Ofwat:³

1. Failing to take proper account of environmental law with regards to duties on WaSCs and its duty to make enforcement orders.
2. Failing to exercise its duty under environmental law to make enforcement orders.

Actions

Since our investigation began, corrective actions by the public authorities have both commenced and gathered momentum. The Storm Overflow Discharge Reduction Plan (SODRP), published by Defra in August 2022 and most recently updated in September 2023, sets out targets to reduce discharges from CSOs. In line with the steps set out in our Decision Notice, Defra published ‘Storm Overflows: policy and guidance’ in March 2025, expressly withdrawing the relevant parts of the 1997 Guidance and clarifying the legal position and roles of each public authority. A new Memorandum of Understanding, specifically on storm overflows, agreed in September 2025 between Defra, the Environment Agency and Ofwat codifies coordination, escalation routes and respective responsibilities (the ‘MoU’).

The Environment Agency published a revised SOAF in March 2025, reducing spill-count investigation triggers and initiated a Storm Overflow Permit Review Plan to vary permits and embed specific spill-frequency trigger conditions. It also issued updated BTKNEEC practitioner guidance to standardise inputs, benefits valuation, and scenario testing.

In April 2025 Ofwat updated its ‘Approach to Enforcement’ guidance. Between March and September 2025, it completed several investigations against WaSCs, demonstrating that it now treats frequent non-exceptional CSO discharges as within its enforcement remit, aligned to the two-stage test.

Taken together, these steps have addressed the previous failures related to guidance, misunderstandings of the law and exercise of enforcement duties. The Environment Agency’s permit-review programme remains a multi-year effort and will continue to be monitored as the Agency works toward achieving full compliance.

Next Steps

In addition to the specific steps required to address the failures identified, we have made broader recommendations to strengthen regulation and prevent reoccurrence of the failures identified.

³ Sections 18 and 94 of the Water Industry Act 1991 (as extended by the Urban Waste Water Treatment (England and Wales) Regulations 1994).

Defra should:

1. Establish a process to monitor implementation of the new Storm Overflows Guidance and incorporate this into the 5 yearly statutory review of the SODRP.
2. Monitor the implementation of the SODRP requirements through Environment Agency permitting.
3. Together with the Environment Agency and Ofwat, review the MoU in line with the SODRP review cycle, after 12 months, and following any reforms arising from the Independent Water Commission.

The Environment Agency should:

1. Update its document “Water companies: environmental permits for storm overflows and emergency overflows” 13 September 2018 (the ‘September 2018 Guidance’) to properly and adequately set out the revised approach to regulating CSOs following updates to the SOAF, spill frequency threshold permitting and Defra’s 1997 Guidance.
2. Review the SOAF 2025 every five years, or earlier if appropriate.
3. Together with Defra and Ofwat, review the MoU 12 months after the date of signature, or earlier if required.
4. Establish a robust and transparent methodology for consistent data collection and reporting. This framework should enable clear tracking of progress for each CSO and provide structured summaries at each stage of the SOAF process. It must also support accurate reporting of BTKNEEC assessment outcomes, ensuring that data is both reliable and comparable across submissions.
5. Use better data to regularly monitor and review the proportion of CSOs that are not progressed for improvement following BTKNEEC assessments.
6. Strengthen its regulatory oversight of BTKNEEC assessments and their outcomes. Greater scrutiny is needed to ensure that, in cases where CSOs are not improved, the concept of excessive costs is being correctly applied through robust cost-benefit analysis.

Ofwat (or any subsequent authority) should:

1. Together with Defra and the Environment Agency, review the storm overflows MoU 12 months after the date of signature, or earlier if required.
2. Collaborate with the Environment Agency on the above data collection and reporting methodology.

The publication of this report marks the conclusion of our investigation and represents a proportionate and transparent mechanism for accountability. The investigation has reinforced the need for coordinated action, with all three public authorities working together to deliver long lasting improvements and address the issues identified. We will continue to monitor compliance through regular engagement with all three authorities, and through assessment of progress against statutory requirements and the commitments made in response to this investigation. The initial monitoring stage will take place six months after the publication of this

report. We will also remain engaged with sector reforms arising from the government's response to the Independent Water Commission's recommendations and consider how these developments influence our own recommendations.



Introduction

1. Introduction

- 1.1 This report concludes the OEP's investigation into the role of the Environment Agency in the regulation of network combined sewer overflows (CSOs). Reports relating to the conclusion of the concurrent investigations into the Secretary of State for Environment, Food and Rural Affairs (the 'Secretary of State') and Ofwat have been sent to those public authorities and are published alongside this report.
- 1.2 On 13 September 2021, the Interim OEP⁴ received a complaint from the Salmon and Trout Conservation Trust (now WildFish) alleging that the Secretary of State and Ofwat had failed to meet legal duties under the Water Industry Act 1991 (the '1991 Act') and the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (the '2017 Regulations') relating to the monitoring and enforcement of water and sewerage companies' (WaSCs) management of sewage.⁵ The issues were assessed together with other information and, on 28 June 2022, the OEP launched an investigation into the roles of Ofwat, the Environment Agency, and the Secretary of State in regulating CSOs in England. Further detail on the initiation of the investigation is provided in Chapter 3.
- 1.3 We chose to limit the scope of the investigation to network CSOs to minimise regulatory overlap with investigations by Ofwat and the Environment Agency.⁶ Also, discharges from network CSOs are typically untreated and this therefore removed the complexity of evaluating treatment efficacy in our investigation.
- 1.4 In accordance with section 33 of the Environment Act 2021 (the '2021 Act'), we set out our findings in this report that the Environment Agency failed to comply with relevant environmental laws in the regulation of network CSOs.
- 1.5 To do this, we first provide a high level overview below of sewer overflows in the context of the sewerage system and the roles of the different regulators. Chapter 2 outlines the key legislative provisions applicable to the investigation and Chapter 3 provides the factual background to the investigation and relevant contextual information. In Chapter 4 we set out our analysis and

⁴ The OEP was legally formed in November 2021. On 24 January 2022, relevant provisions in the Environment Act 2021 were formally commenced and the OEP's functions came into effect.

⁵ The complaint also alleged that Ofwat had failed to exercise its functions to provide for sufficient investment in sewerage infrastructure but we considered this to be outside the OEP's remit.

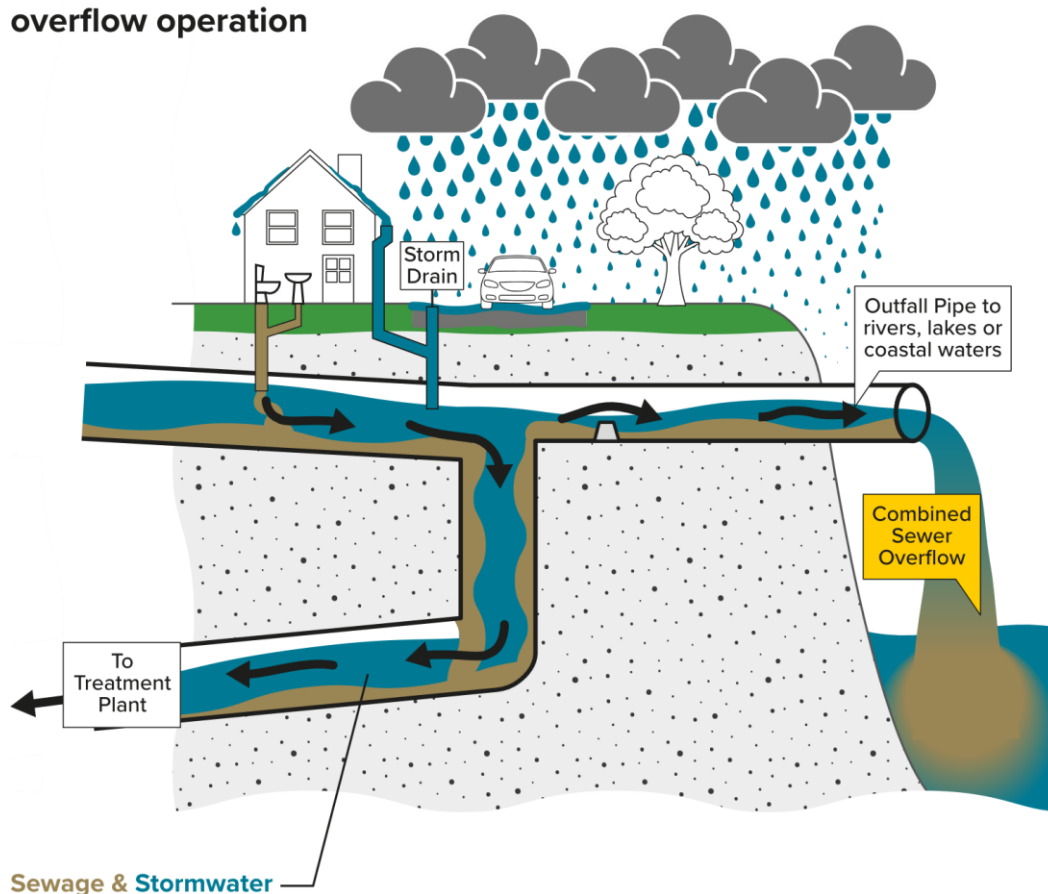
⁶ The complaint and information reviewed related to various issues regarding the regulation of wastewater by WaSCs. In November 2021, Ofwat and the Environment Agency launched investigations into the management of sewage treatment works by all WaSCs - Ofwat, 'Water companies could face legal action after investigation launched into sewage treatment works' (18 Nov 21) < <https://www.ofwat.gov.uk/joint-ofwat-environment-agency-and-defra-announcement-november-2021/> > accessed 03/12/2025; and Department for Environment, Food & Rural Affairs, 'Water companies could face legal action after investigation launched into sewage treatment works' (18 November 2022) <<https://www.gov.uk/government/news/water-companies-could-face-legal-action-after-investigation-launched-into-sewage-treatment-works>> accessed 03/12/2025.

findings, and in Chapter 5 we provide our rationale for concluding the investigation via this report, together with recommendations.

Overflows from the sewerage system⁷

- 1.6 A combined sewerage system carries both sewage and surface water runoff to wastewater treatment works for processing. In England, whilst much of the modern sewerage system is separate, it often connects into older combined systems before reaching wastewater treatment works.
- 1.7 During times of unusually heavy rainfall, wastewater is discharged through CSOs to the water environment to prevent the capacity of the network and wastewater treatment works being overwhelmed, or else sewage backing up and causing flooding of properties, including people's homes. In this way, CSOs are an important part of a combined sewerage system and they are generally effective as a relief mechanism.

Combined sewer overflow operation



⁷ In addition to treated sewage discharges from a wastewater treatment works, sewage can flow into a water body, either untreated or partially treated, from different points in the sewerage system. There are four types of storm overflow of which CSOs as storm overflows on the sewer network (network CSOs) are one type. The other three are storm tank overflows, inlet storm overflows and pumping station storm overflows.

- 1.8 During periods of high rainfall, receiving watercourses may be swollen with water runoff, providing additional dilution and thereby tending to reduce the impact of CSO discharges on water quality and ecosystems. If CSOs operate during periods of dry weather, or in response to only light or moderate rainfall, however, the negative impacts can be more significant.
- 1.9 Discharges from network CSOs give rise to a range of impacts to the water bodies themselves and to those who interact with them.⁸
- 1.10 Event Duration Monitoring (EDM) is a system used by WaSCs to measure and record how often and for how long CSOs discharge into the environment. This data enables both regulators and WaSCs to understand the frequency and duration of untreated sewage releases, supporting compliance and transparency. EDM is now deployed across all sewer overflow locations in England, providing valuable insight into how overflows respond to rainfall. Analysis shows a strong positive correlation between rainfall and spill occurrence, with even small variations in rainfall leading to significant changes in discharge patterns.⁹ Throughout this investigation, EDM data has varied considerably, reflecting the complexity of influencing factors. It will take time before the full impact of regulatory actions, company interventions, and measures implemented through this investigation can be determined in reducing spills from CSOs.

The regulatory framework

Secretary of State for Environment, Food and Rural Affairs

- 1.11 The Secretary of State is the minister with responsibility for the water industry in England. The functions vested in this office are somewhat removed from the practical day-to-day operation of the industry. The Secretary of State has the responsibility for setting expectations and the strategic framework within which the other public authorities deliver on their obligations.
- 1.12 Many powers and duties of the Secretary of State are legislative (being exercised or discharged by the making of further subordinate legislation) or strategic (being exercised or discharged by the giving of directions or the issuing of guidance), although the Secretary of State does also have certain regulatory (including enforcement) duties and powers. In addition, the

⁸ The release of treated and untreated wastewater can introduce pollutants such as pharmaceuticals, nutrients, heavy metals and bacteria into water bodies. CSOs only provide basic screening of untreated wastewater, the discharges of which can worsen water chemistry leading to intermittently low levels of oxygen and high levels of ammonia. Whilst discharges from CSOs are typically intermittent, repeated releases can have long term impacts on the recovery of the water environment to a more desirable state. CSO discharges can also increase the levels of bacteria and hazardous chemicals in water bodies which can make bathing (or other recreational uses such as angling) unsafe.

⁹ OEP - Progress in improving the natural environment in England 2023/2024, page 74.

Secretary of State has various appellate functions in the determination of the appropriate practical application of the relevant legislation.

Environment Agency

- 1.13 The Environment Agency is an executive non-departmental public body sponsored by Defra, created by the Environment Act 1995 (the '1995 Act'). The Environment Agency was established to contribute towards sustainable development by protecting or enhancing the environment as a whole. The Environment Agency receives charging income from the industries that it regulates and funding from Defra. It is required by statute to comply with ministerial directions and to have regard to ministerial guidance from Defra. There is also a broad provision allowing the Secretary of State and the Environment Agency to enter into agreements authorising the Environment Agency to exercise any of the Secretary of State's eligible functions on their behalf.¹⁰
- 1.14 The Environment Agency has numerous functions concerning water quality and protection of the water environment. Through its regulatory functions, it is responsible for granting environmental permits and setting conditions for those permits, the inspection of the sites it regulates including CSOs, analysis of data provided by the operators it regulates (including WaSCs) concerning the operation of their sites and infrastructure, and the criminal and civil enforcement of environmental legislation.

Ofwat

- 1.15 Ofwat is a non-ministerial government department responsible for the economic regulation of the water industry in England and Wales. It is responsible for enforcing certain requirements on WaSCs about how, overall, they must operate, manage and report on their performance. While Ofwat does not have a role in monitoring or enforcing environmental permits (which is a matter for the Environment Agency), it may have a role if a WaSC is breaching the conditions of its environmental permits in such a way that suggests that the company might also be breaching its conditions of appointment or failing to comply with other relevant legal requirements which Ofwat is responsible for enforcing.
- 1.16 Through its five-yearly cycle of price controls, Ofwat sets the price, service and incentive package that customers receive from their water company. Ofwat's price control determinations include cost allowances for the efficient delivery of the company's functions and incentives in the form of performance commitments which reflect companies' legal obligations and customers' preferences. The "strategic priorities and objectives" of Ofwat can be set out

¹⁰ Section 38 of the Environment Act 1995.

by the Secretary of State in a statement, and Ofwat must carry out its functions in accordance with the statement.

- 1.17 Figure 1 below provides a high-level view of the interactions between each of the authorities and the WaSCs in relation to the environmental regulation of network CSOs.

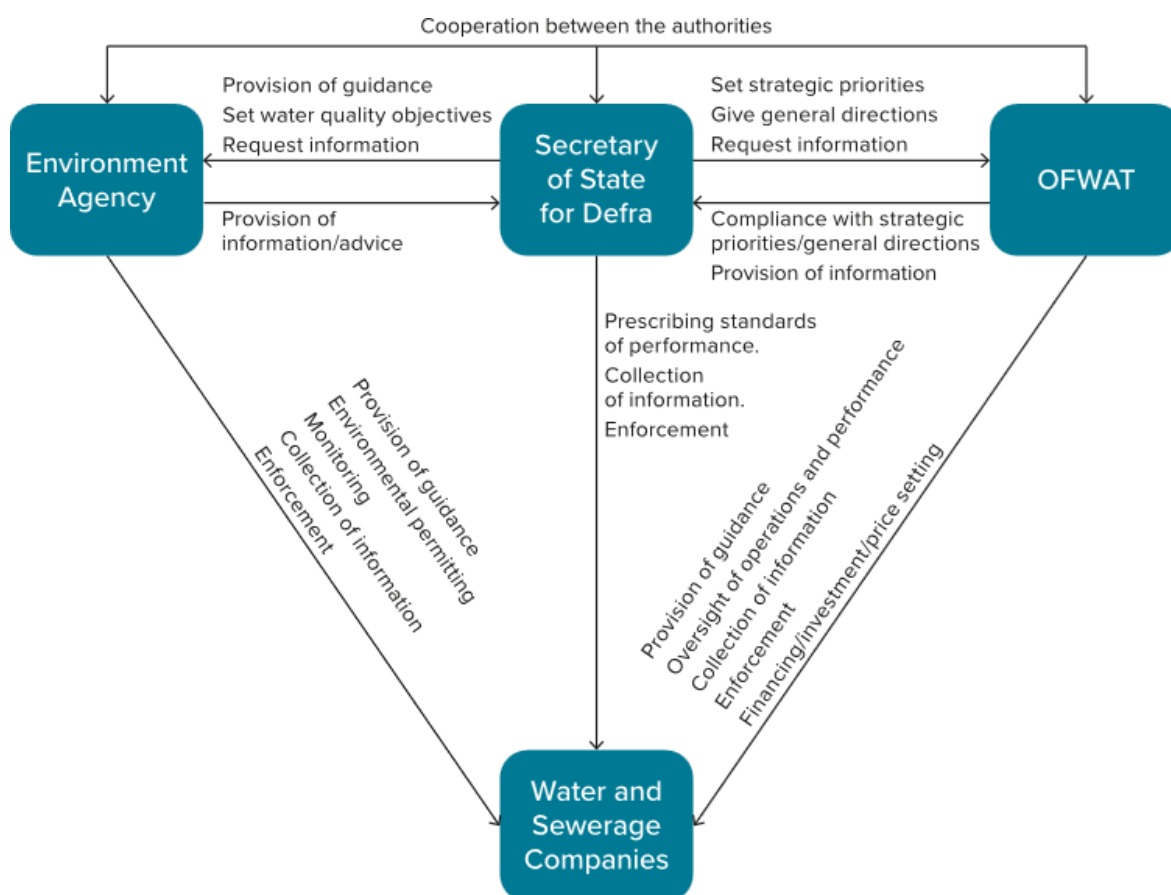


Figure 1: Overview of the interactions between the authorities and the WaSCs



Legal framework

2. Legal framework

- 2.1 In this section we set out the legislative framework and the specific legal provisions relevant to our investigation into the Environment Agency's role in the regulation of network CSOs.

The Water Industry Act 1991

- 2.2 The 1991 Act is a key piece of legislation that was introduced post-privatisation of the water industry in England and Wales. It consolidates previous legislation in relation to water supply and wastewater services and contains the main powers and duties on WaSCs. It also established the modern regulatory framework for the water sector which includes the Water Services Regulation Authority, known as Ofwat.¹¹
- 2.3 Section 94 of the 1991 Act places a general duty on WaSCs to provide, cleanse and maintain a sewer system. In particular, section 94(1) states:

(1) It shall be the duty of every sewerage undertaker -

(a) to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers... as to ensure that that area is and continues to be effectually drained; and

(b) to make provision for the emptying of those sewers and such further provision (whether inside its area or elsewhere) as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers.

The Urban Waste Water Treatment (England and Wales) Regulations 1994

- 2.4 The Urban Waste Water Treatment Directive¹² (the 'UWWTD') was made by the European Union in 1991. The objective of the UWWTD was to protect the environment from the adverse effects of urban waste water and certain industrial discharges.¹³ It sought to do so by setting standards for the collection, treatment and discharge of urban waste water. It was transposed into domestic law in England and Wales through the Urban Waste Water Treatment (England and Wales) Regulations 1994 (the '1994 Regulations').

¹¹ The office of Director General of Water Services was created by the Water Act 1989 which was consolidated into the 1991 Act.

¹² Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment [1991] OJ L 135/40.

¹³ See art. 1 of the UWWTD.

2.5 Regulation 4 of the 1994 Regulations provides so far as relevant that:

- (1) *This regulation supplements the duty imposed on every sewerage undertaker by section 94 of the Water Industry Act 1991 (general duty to provide sewerage system) and any contravention of the requirements of this regulation shall be treated for the purposes of that Act as a breach of that duty.*
- (2) *...the duty imposed by subsection (1)(a) of the said section 94 shall include a duty to ensure that collecting systems which satisfy the requirements of Schedule 2 are provided—*
 - (a) *where the urban waste water discharges into receiving waters which are a sensitive area, by 31st December 1998 for every agglomeration with a population equivalent of more than 10,000; and*
 - (b) *without prejudice to sub-paragraph (a) above-*
 - (i) *by 31st December 2000 for every agglomeration with a population equivalent of more than 15,000; and*
 - (ii) *by 31st December 2005 for every agglomeration with a population equivalent of between 2,000 and 15,000*
- ...
- (4) *The duty imposed by subsection (1)(b) of the said section 94 shall include a duty to ensure that urban waste water entering collecting systems is, before discharge, subject to treatment provided in accordance with regulation 5, and to ensure that—*
 - (a) *plants built in order to comply with that regulation are designed (account being taken of seasonal variations of the load), constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions*
 - (b) *treated waste water and sludge arising from waste water treatment are reused whenever appropriate; and*
 - (c) *disposal routes for treated waste water and sludge minimise the adverse effects on the environment.*

2.6 Regulation 6(2)(c) as amended imposes the following duty on the Environment Agency:

(2) It shall be the duty of the Environment Agency ... in exercising their functions under the Environmental Permitting Regulations, to secure—

...

(c) with respect to any discharge from a collecting system described in regulation 4 or an urban waste water treatment plant described in regulation 5, the limitation of pollution of receiving waters due to storm water overflows."

2.7 Regulation 6(3) states that the Environment Agency:

“...shall at regular intervals review and, if necessary for the purpose of complying with this regulation, modify or revoke consents granted under the said Chapter II.”

The relevant provisions in Chapter II of Part III of the Water Resources Act 1991 have been repealed and re-enacted, currently in the Environmental Permitting (England and Wales) Regulations 2016.

2.8 Schedule 2 provides that:

1. *Collecting systems shall take into account waste water treatment requirements.*
2. *The design, construction and maintenance of collecting systems shall be undertaken in accordance with the best technical knowledge not entailing excessive costs, notably regarding:-*
 - (a) volume and characteristics of urban waste water;*
 - (b) prevention of leaks;*
 - (c) limitation of pollution of receiving waters due to storm water overflows.*

The concept of ‘best technical knowledge not entailing excessive costs’ is referred to hereinafter as ‘BTKNEEC’.

2.9 By 31 December 2005:

- (1) the UK was required by the terms of the UWWTD to have achieved full compliance with the requirements of the UWWTD;
- (2) sewerage undertakers were required pursuant to their duties:
 - (a) under regulation 4(2) of the 1994 Regulations (as part of their general duty of effectual drainage under section 94(1)(a) of the 1991 Act), to have ensured that collecting systems which satisfied the requirements of Schedule 2 to the 1994 Regulations were provided in urban areas;
 - (b) under regulation 4(4) of the 1994 Regulations (as part of their general duty of effectual treatment under section 94(1)(b) of the 1991 Act), to have ensured that waste water entering those collecting systems was, before discharge, subject to treatment at a treatment works in accordance with regulation 5.

Relevant case law

2.10 The relevant provisions of the 1994 Regulations set out above are based on equivalent provisions in the UWWTD. These provisions of the UWWTD were interpreted by the Court of Justice of the European Union (‘CJEU’) in 2012, in

the case of *Commission v United Kingdom* (the ‘2012 Case’).¹⁴ Although the facts of the case related to discharges from specific CSOs in London and at Whitburn, Tyne and Wear, it is nevertheless an important authority of general application to the interpretation of the UWWTD. It set out a methodology to be followed for assessing compliance with the UWWTD that is applicable to all sewer overflows.

2.11 In its judgment, the CJEU interpreted the provisions of the UWWTD in relation to waste water treatment plants and found that to meet the environmental objectives of the legislation there must be a general obligation in ordinary circumstances to treat all waste water.¹⁵ Further, the CJEU stated that it would run counter to the Directive if “overflows of untreated urban waste water occurred regularly”.¹⁶

2.12 The Court also noted that the legislation allowed for situations when it would not be possible to collect and treat all urban waste water, such as “unusually heavy rainfall”.¹⁷ However, it clarified and reinforced that this cannot occur in normal circumstances.¹⁸

2.13 The BTKNEEC requirement, noted at 2.8 above, was also considered by the CJEU. It was described by the Court as a concept that enabled compliance with the Directive without imposing unachievable obligations.¹⁹ However the CJEU also stated at paragraph [65] of the judgment:

“... in order not to undermine the principle set out in paragraph 53 of the present judgment that all waste water must be collected and treated, the Member States must invoke disproportionate costs of that kind by way of exception only.”

2.14 At paragraph [73] of the judgment, the CJEU set out a methodology to follow when considering whether discharges are compliant with the UWWTD:

“Accordingly, for the purpose of examining the present action, the Court must, first of all, examine whether the discharges from the collecting systems or the treatment plants of the various agglomerations in the United Kingdom are due to circumstances of an exceptional nature, and then, if that is not the case, establish whether the United Kingdom has been able to demonstrate that the conditions for applying the concept of BTKNEEC were met.”

2.15 Therefore, when assessing whether individual discharges are compliant with regulation 4(2) or 4(4) of the 1994 Regulations, it is necessary to consider the

¹⁴ Case C-301/10 *European Commission v United Kingdom of Great Britain and Northern Ireland* [2012] OJ C 379.

¹⁵ *ibid* [52].

¹⁶ *ibid* [54].

¹⁷ *ibid* [56].

¹⁸ *ibid* [58].

¹⁹ *ibid* [64].

above two-stage test. The questions asked by the test can be summarised as follows:

- (i) is the discharge occurring only in exceptional circumstances?
- (ii) if it is not, can a solution be found by applying the BTKNEEC concept?

2.16 This approach was acknowledged and accepted in the decision of the High Court in *R (WildFish) v Secretary of State*²⁰ (the ‘WildFish Judgment’). This case considered the legality of the Government’s Storm Overflow Discharge Reduction Plan (‘SODRP’)²¹ but the judgment includes a summary of the 2012 Case and concludes that the two-stage test should be applied on a case-by-case basis.²²

Water Environment (Water Framework Directive) (England and Wales) Regulations 2017

2.17 The Water Framework Directive (the ‘WFD’)²³ is an important piece of environmental legislation in relation to water and was also relevant to our investigation. The WFD was transposed into domestic law and in its latest form is found in the 2017 Regulations.

2.18 Regulation 3 of the 2017 Regulations provides that:

- (1) *The Secretary of State, the Welsh Ministers, the Agency and NRW must exercise their relevant functions so as to secure compliance with the requirements of the WFD, the [Environmental Quality Standard Directive²⁴] and the [Ground Water Directive²⁵].*²⁶
- (2) *Without prejudice to the generality of paragraph (1), the Secretary of State, the Welsh Ministers, the Agency and NRW must determine an authorisation so as, in particular—*
 - (a) *to prevent deterioration of the surface water status or groundwater status of a body of water (subject to the application of regulations 18 and 19), and*

²⁰ *R (on the application of WildFish Conservation) v Secretary of State for Environment, Food and Rural Affairs; R (on the application of Marine Conservation Society and others) v Secretary of State for Environment, Food and Rural Affairs* [2023] EWHC 2285 (Admin).

²¹ Defra, *Storm Overflows Discharge Reduction Plan* (26 August 2022)

<https://assets.publishing.service.gov.uk/media/631063778fa8f5448a3836e4/Storm_Overflows_Discharge_Reduction_Plan.pdf> accessed 03/12/2025. See 3.35 of this report for a summary of the SODRP.

²² WildFish Judgment, [63] – [70].

²³ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [2000] OJ L 327/1.

²⁴ Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy [2008] OJ L 348/84.

²⁵ Directive 2006/118/EEC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration [2006] OJ L 372/19.

²⁶ Prior to the 2017 Regulations coming into force, regulation 3 of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 was in similar terms.

(b) *otherwise to support the achievement of the environmental objectives set for a body of water (subject to the application of regulations 16 to 19).*²⁷

- 2.19 The ‘relevant functions’ of the Environment Agency are defined as functions under the legislation listed in Schedule 2 and include those under the 1994 Regulations²⁸ and the 2016 Regulations.²⁹
- 2.20 Article 10(2)(a) of the WFD requires that Member States ensure the establishment and/or implementation of emissions controls based on best available techniques contained in measures including the UWWTD.
- 2.21 The requirements of the UWWTD concerning the limitation of pollution from storm water overflows are “emission controls based on best available techniques” within the meaning of article 10(2)(a) of the WFD.
- 2.22 Paragraph 1.3.3 of Annex V of the WFD requires that Member States carry out investigative monitoring for surface waters to ascertain the magnitude and impacts of accidental pollution.
- 2.23 On 31 December 2020 the obligation to comply with Article 10 of the WFD ceased to apply in the UK following amendments made to the 2017 Regulations by the Floods and Water (Amendment etc.) (EU Exit) Regulations 2019.³⁰
- 2.24 The Environment Agency was therefore required by regulation 3(1) of the 2017 Regulations, and earlier versions of these regulations, to comply with Article 10(2)(a) of the WFD from the 2 January 2004³¹ until 31 December 2020 when this obligation was no longer in force in the UK.

The Environmental Permitting (England and Wales) Regulations 2016

- 2.25 The Environmental Permitting (England and Wales) Regulations 2016 (the ‘2016 Regulations’) set out an environmental permitting regime that applies to various activities and industries, including the regulation of network CSOs, replacing earlier provisions to similar effect.
- 2.26 Regulations 12 and 38 of the 2016 Regulations are as follows:

²⁷ Prior to the 2017 Regulations coming into force, regulation 3 of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 (revoked) was in similar terms.

²⁸ Paragraph 13, sch 2 of the 2017 Regulations.

²⁹ Paragraph 31, sch 2 of the 2017 Regulations.

³⁰ Paragraph 6, sch 5 of the 2017 Regulations.

³¹ Commencement date of the equivalent provision in the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 (revoked).

Requirement for an environmental permit

12.— (1) A person must not, except under and to the extent authorised by an environmental permit—

- (a) operate a regulated facility, or*
- (b) cause or knowingly permit a water discharge activity or groundwater activity*

and

Offences

38.— (1) It is an offence for a person to—

- (a) contravene regulation 12(1), or*
- (b) knowingly cause or knowingly permit the contravention of regulation 12(1)(a).*

(2) It is an offence for a person to fail to comply with or to contravene an environmental permit condition.

2.27 Regulation 34 of the 2016 Regulations requires the Environment Agency to review permits:

- (1) The regulator must periodically review environmental permits.*
- (2) The regulator must make appropriate periodic inspections of regulated facilities*

The Environment Act 1995

2.28 The Environment Agency was established under the 1995 Act and is empowered by section 37(1) to institute criminal proceedings generally. It is responsible for the enforcement of the 2016 Regulations, including the criminal offences created therein, by both the acceptance of enforcement undertakings and the prosecution of criminal offences.

The background of the slide is a solid blue color with a repeating pattern of stylized, light blue leaves or feathers. The pattern is symmetrical and covers the entire area.

Factual background

3. Factual background

Background to the investigation

- 3.1 In Chapter 1 we note that a complaint was received by the Interim OEP on 13 September 2021 from the Salmon and Trout Conservation Trust (now known as WildFish).
- 3.2 Between April 2021 and November 2021, we also received complaints alleging failures by the Environment Agency to enforce permit conditions at two specific CSO sites.³² We assessed the issues raised by these complaints together with those in the complaint from WildFish. We noted the commencement of a joint investigation by the Environment Agency and Ofwat into sewage treatment works in November 2021.³³ Also, in March 2022, Defra launched a consultation on the SODRP.³⁴ Tackling storm overflows in England was noted as a government priority and producing such a plan was a legal requirement introduced under section 80 of the 2021 Act.
- 3.3 The OEP published its first strategy and enforcement policy on 23 June 2022.³⁵
- 3.4 We considered the complaints noted above and other publicly available information and determined that there were indications of potential failures to comply with environmental law by the Secretary of State, Ofwat and the Environment Agency in relation to monitoring and enforcement of the management of sewage by WaSCs. We also determined that, if they had occurred, those failures would be serious given that the issues were of public importance, had been on-going for many years, and the pollution of watercourses by untreated sewage causes serious harm to the environment.
- 3.5 On 28 June 2022, the OEP launched an investigation under section 33 of the 2021 Act into potential failures to comply with environmental law by Ofwat, the Environment Agency and the Secretary of State in the regulation of CSOs in England. For the Environment Agency, there was an indication of failures to comply with regulation 6(2)(c) of the 1994 Regulations and with ensuring compliance with the WFD under regulation 3(1) of the 2017 Regulations.

³² Hendon Wastewater Treatment Works and Whitburn CSO.

³³ Ofwat, 'Water companies could face legal action after investigation launched into sewage treatment works' (18 Nov 21) <<https://www.ofwat.gov.uk/joint-ofwat-environment-agency-and-defra-announcement-november-2021/>> accessed 03/12/2025; and [Department for Environment, Food & Rural Affairs](#), 'Water companies could face legal action after investigation launched into sewage treatment works' (18 November 2022) <<https://www.gov.uk/government/news/water-companies-could-face-legal-action-after-investigation-launched-into-sewage-treatment-works>> accessed 03/12/2025.

³⁴ Defra, 'Consultation on the Government's Storm Overflow Discharge Reduction Plan' (2022) <<https://consult.defra.gov.uk/water-industry/storm-overflows-discharge-reduction-plan/>> accessed 03/12/2025.

³⁵ OEP, 'Our Strategy and Enforcement Policy' (23 June 2022) <<https://www.theoep.org.uk/report/our-strategy-and-enforcement-policy>> accessed 03/12/2025.

- 3.6 From June 2022 to September 2023 we engaged with the public authorities, via meetings and correspondence, to gather information and further assess the issues. We received and reviewed a significant amount of detailed information from multiple information requests.
- 3.7 We can give an information notice where we have reasonable grounds for suspecting a serious failure to comply with environmental law by a public authority.³⁶ Public authorities must respond in writing to such notices and must provide the information requested so far as it is reasonably practicable to do so.
- 3.8 Having considered the evidence available, we determined that we had reasonable grounds for suspecting failures to comply with environmental laws by all three of the public authorities.
- 3.9 We issued information notices to each of the public authorities on 7 September 2023 ('the Information Notices') setting out the details of those alleged failures.
- 3.10 A copy of the Information Notice sent to the Environment Agency is published alongside this report. In summary, the notice set out the following grounds:
- i) Misunderstanding of the 1994 Regulations in devising guidance relating to permit conditions
 - ii) (as a result of (i)), setting permit conditions that were insufficient to comply with the 1994 Regulations and the 2017 Regulations
 - iii) failure to exercise, in relation to discharges from CSOs, the Environment Agency's functions of:
 - a. investigative monitoring under the 2017 Regulations
 - b. permit review under the 1994 Regulations and the 2016 Regulations
 - c. enforcement under section 37 of the 1995 Act.
- 3.11 The recipients of an information notice are required to respond within two months. The Environment Agency responded to the Information Notice on 7 November 2023 and denied that there had been any failure to comply with environmental law as set out in the notice, with reasons.
- 3.12 As set out in our Enforcement Policy, we take a proportionate approach and aim to resolve any non-compliance through cooperation, dialogue and agreement at every stage of the investigatory and enforcement processes. We held several meetings with the public authorities between March and September 2024 to understand in greater detail the respective positions of the parties in relation to the legal issues identified in the Information Notices.

³⁶ Section 35 of the Environment Act 2021.

- 3.13 The OEP may give a decision notice to a public authority if the OEP is satisfied, on the balance of probabilities, that the public authority has failed to comply with environmental law, and it considers that the failure is serious.³⁷ A decision notice may only be given after an information notice.³⁸ It must contain a description of the failure to comply, an explanation as to why the OEP considers it to be serious and steps the OEP considers the authority should take in relation to the failure identified.³⁹
- 3.14 Having considered the evidence available and the responses from the public authorities, we determined that on the balance of probabilities, all three public authorities had failed to comply with environmental law and that these failures were serious and mostly ongoing. The OEP gave decision notices accordingly to each of the public authorities on 12 December 2024 (the 'Decision Notices').
- 3.15 A copy of the Decision Notice given to the Environment Agency is published alongside this report. The notice made findings of failure to comply with environmental law in relation to each of the three grounds set out in the Information Notice except in relation to those sub-grounds identified at paragraph 3.10(iii)(a) and (c).
- 3.16 Following consideration of information provided by the Environment Agency in response to the Information Notice, we determined that on the balance of probabilities, the Environment Agency had not failed to comply in an unlawful manner with investigative monitoring requirements under the 2017 Regulations (paragraph 3.10(iii)(a)) or with enforcement powers under section 37 of the 1995 Act (paragraph 3.10(iii)(c)). We considered that the evidence of investigative monitoring and enforcement provided by the Environment Agency was sufficient to show that it was lawfully exercising these functions.
- 3.17 The Decision Notice also explained why we considered the remaining identified failures to be serious. This related to points of law of general public importance, the risk of harm to the natural environment, the frequency of conduct over time, and the behaviour of the public authority:
- i) We considered that the Environment Agency's misunderstanding or misapplication of environmental law influenced how it developed guidance and set permit conditions. Ensuring that these conditions accurately reflected the obligations under the UWWTD and the 1994 Regulations is a core responsibility of the Environment Agency. Its failure to do so represented a serious breach of environmental law, as permit conditions are the primary mechanism for controlling the performance of CSOs. As a result, CSOs were allowed to discharge untreated sewage in circumstances where such discharges were not appropriate.

³⁷ Section 36(1) of the Environment Act 2021.

³⁸ Section 36(5) of the Environment Act 2021.

³⁹ Section 36(2) of the Environment Act 2021.

- ii) We considered the conduct to be frequent and long-standing, not only because it spanned the entire period referenced in the notice, but also because its effects were embedded in the current regulatory framework. This systemic and long-standing failure applied across all network CSOs that the Environment Agency authorised through environmental permits.
- iii) The Environment Agency did not accept that it had failed to comply with environmental law at any stage of the investigation. Any proposed changes to address the issues identified had been made without acknowledging that any legal error occurred.
- iv) We considered that the discharge of untreated sewage from CSOs posed risks to the environment, human health, and the amenity value of water bodies. Any failure to provide accurate guidance and to act on a correct understanding of the law has the potential to cause serious environmental harm. The consequences for the environment are likely to persist for a significant period.

3.18 The recipients of a decision notice are required to respond within two months. The Environment Agency responded to the Decision Notice on 12 February 2025 and denied that it had failed to comply with environmental law as described in the notice.⁴⁰

3.19 Chapter 4 of this report sets out more detailed analysis of our findings in the Decision Notice together with key points from the response of the Environment Agency.

Key Documents and Evidence

3.20 In this section, we identify and summarise key documents and evidence and explain their relevance to this investigation.

Documents - The 1997 Guidance

3.21 In July 1997, Defra's predecessor, the Department for Environment, Transport and the Regions, and the Welsh Office issued guidance (the '1997 Guidance') to WaSCs and regulators on the practical implementation of the 1994 Regulations. Much of the guidance was drawn up with the assistance or advice of the National Rivers Authority,⁴¹ the Environment Agency, Ofwat, other government departments and representatives of the WaSCs.⁴²

⁴⁰ The Environment Agency also noted in its response that the Annex to the Decision Notice was not agreed.

⁴¹ The National Rivers Authority was subsumed into the Environment Agency on 1 April 1996.

⁴² Department for Environment, Transport and the Regions and the Welsh Office, *The Urban Waste Water Treatment (England and Wales) Regulations 1994 – Working Document for Dischargers and Regulators – A Guidance Note Issued by the Department for Environment, Transport and the Regions and the Welsh Office* (July 1997), paragraph 2.1.

- 3.22 During the investigation, Defra stated that the 1997 Guidance was drafted to advise organisations, in particular operators of sewage treatment works and the regulators, on the implementation of the 1994 Regulations, including the provision of appropriate collection systems by specified dates.
- 3.23 The 1997 Guidance covers many aspects of water regulation including discharges from CSOs. Annex 8 of the Guidance is entitled “Framework for Consenting Intermittent Discharges” and it sets out a framework for the limitation of pollution from storm water overflows. This includes criteria for the identification of CSOs which are “unsatisfactory”.
- 3.24 Paragraph 4.1 of Annex 8 is as follows:
- 4.1 *The following criteria are to be used in deciding which CSOs are unsatisfactory and, therefore, subject to consent review to drive improvements:*
- (i) causes significant visual or aesthetic impact due to solids, fungus and has a history of justified public complaint;*
 - (ii) causes or makes a significant contribution to a deterioration in river chemical or biological class;*
 - (iii) causes or makes a significant contribution to a failure to comply with Bathing Water Quality Standards for identified bathing waters;*
 - (iv) operates in dry weather conditions;*
 - (v) operates in breach of consent conditions provided that they are still appropriate; and/or*
 - (vi) causes a breach of water quality standards (EQS) and other EC Directives.*
- 3.25 An earlier version of the same criteria appeared in guidance prepared by the National Rivers Authority (the Environment Agency’s predecessor) in 1993.⁴³
- 3.26 These criteria are important because the Guidance only requires the consents for “unsatisfactory” CSOs to be reviewed. Indeed, the Guidance positively states that satisfactory CSOs “will therefore meet the requirements of the [1994] Regulations”.⁴⁴
- 3.27 The 1997 Guidance received minor updates in April 2009, but these were not materially significant. At the time of commencing this investigation, Defra confirmed that the 1997 Guidance had not been withdrawn and had not been updated since 2009.

⁴³ National Rivers Authority, *AMP(2) / Effluent Quality, NRA Guidance Note for Preparation work for AMP(2)* (March 1993).

⁴⁴ Department for Environment, Transport and the Regions and the Welsh Office, *The Urban Waste Water Treatment (England and Wales) Regulations 1994 – Working Document for Dischargers and Regulators – A Guidance Note Issued by the Department for Environment, Transport and the Regions and the Welsh Office* (July 1997), paragraph 5.1 of Annex 8.

Environment Agency guidance

- 3.28 The importance of the criteria set out in the 1997 Guidance can also be seen in how it was subsequently used by the Environment Agency as it took a more direct role in regulating CSOs. In October 2012 the Environment Agency produced guidance entitled “Additional guidance for: Water Discharge and Groundwater (from point source) Activity Permits (EPR 7.01)”, which remained in force until 8 May 2018. This guidance used a very similar methodology and set of criteria regarding the categorisation of CSOs as “unsatisfactory”.
- 3.29 In 2018, the EA withdrew the above guidance and published two documents: “Storm Overflow Assessment Framework v.1.6” June 2018 (the ‘SOAF’) and “Water companies: environmental permits for storm overflows and emergency overflows” 13 September 2018 (the ‘September 2018 Guidance’). These documents addressed the identification and classification of CSOs in need of improvement and were intended to enable WaSCs to demonstrate compliance with relevant legislation including the 1994 Regulations.⁴⁵
- 3.30 The SOAF and the September 2018 Guidance reproduced, in some cases word-for-word, the criteria for identifying “unsatisfactory” CSOs which are set out in the 1997 Guidance. These criteria were not the only method used to identify CSOs in need of improvement, but they nevertheless formed a key part of the process.
- 3.31 The SOAF details the approach that should be taken where a CSO is found to be spilling ‘too frequently’.⁴⁶ At Stage 1 it uses EDM data to determine if a CSO discharges above a threshold for further investigation. The spill thresholds used in the SOAF were as follows:

Stage 1: overflows will be identified for investigation using the following spill frequency triggers depending on the number of years for EDM data collected (Table 1);

Table 1. Spill frequency investigation triggers,

No. of years EDM data	Investigation trigger (average no. spills/year)
1	>60
2	>50
3	>40

- 3.32 The same spill thresholds first appeared in 2017 guidance published by the EA.⁴⁷ We did not find any evidence prior to this that suggested the number of

⁴⁵ Environment Agency, *Storm Overflow Assessment Framework v.1.6*. (June 2018) p 1.

⁴⁶ *ibid* p 2.

⁴⁷ Environment Agency, ‘PR19 Driver Guidance Frequently Spilling Storm Overflows (WINEP)’ 24 February 2017.

discharges was relevant to an assessment of the performance of a CSO (save for the criterion in the 1997 Guidance of “operates in dry weather conditions”).

- 3.33 If a CSO met one of the above spill triggers due to a lack of hydraulic capacity,⁴⁸ the remaining stages of the SOAF would consider its environmental impact and potential improvements based on a cost benefit assessment.
- 3.34 However, if a CSO did not meet these spill trigger thresholds then it likely would not be considered for improvement under the SOAF.⁴⁹

The Storm Overflow Discharge Reduction Plan

- 3.35 The Secretary of State published the SODRP, as required under section 141A of the 1991 Act, on 26 August 2022 (updated 25 September 2023). It primarily set new targets for WaSCs to reduce sewage discharges from storm overflows. According to the plan, by 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm.⁵⁰ To achieve this, storm overflows will not be permitted to discharge above an average of 10 rainfall events per year by 2050.⁵¹

Evidence

- 3.36 In Chapter 2 we set out the importance of the 2012 Case in respect of interpreting the UWWTD. On the facts of the case, the CJEU found that the UK had failed to fulfil its obligations under that directive. However, following this case, no subsequent enforcement action was taken domestically against the relevant WaSCs. In 2023, the EU Commission remained of the opinion that the UK was not in compliance with the 2012 Case at one of the original sites.⁵²
- 3.37 On 18 November 2021 Ofwat and the EA announced investigations into all WaSCs in England and (in relation to Ofwat only) Wales.⁵³ The Environment

⁴⁸ CSOs that meet the trigger due to exceptional rainfall or asset maintenance are usually dealt with outside the SOAF process.

⁴⁹ Section 7 of the SOAF contained additional reasons that a CSO may be investigated, other than exceeding the spill trigger thresholds, though these were discretionary and required the EA to establish its impact on receiving waters.

⁵⁰ Defra, *Storm Overflows Discharge Reduction Plan* (25 September 2023)

<https://assets.publishing.service.gov.uk/media/631063778fa8f5448a3836e4/Storm_Overflows_Discharge_Reduction_Plan.pdf> accessed 03/12/2025, p 11.

⁵¹ *ibid* p 14.

⁵² Letter from the Directorate-General Environment of the European Commission to the original complainant (3 February 2023).

⁵³ Ofwat, ‘Water companies could face legal action after investigation launched into sewage treatment works’ (18 Nov 21) < <https://www.ofwat.gov.uk/joint-ofwat-environment-agency-and-defra->

Agency's investigation relates to potential breaches of permit conditions at wastewater treatment works and an initial assessment indicated that there may have been widespread and serious non-compliance with the relevant regulations by all WaSCs. As at the date of this report, the investigation remains ongoing.

Event Duration Monitoring Data

- 3.38 EDM was rolled-out to all network CSOs beginning in 2015 and 100% coverage of all known network CSOs was achieved by the end of 2023. Prior to this, EDM had only been required for storm overflows associated with designated bathing waters and shellfish waters. EDM is intended to record the frequency (i.e. the number of times a discharge occurs) and duration (i.e. the length of time for which the discharge continues) of spills. This allows WaSCs to collect and report data to the regulators about the operation of CSOs.
- 3.39 By 2020, the Environment Agency began to publish EDM data on an annual basis. According to data provided by the Environment Agency in response to our Information Notice, the number of monitored network CSOs that discharged more than 60 times per year (i.e. the upper investigation trigger threshold under the SOAF) between 2020 – 2022 was as follows:

Year	No of CSOs
2020	955
2021	787
2022	526

- 3.40 Further information and data in relation to discharges from network CSOs can be found in the Annex to our Decision Notice.

BTKNEEC Assessments Data

- 3.41 As part of our investigation, we received multiple datasets detailing the number of CSOs for which improvement schemes were identified following a BTKNEEC assessment.
- 3.42 The WildFish Judgment cited evidence from the Environment Agency that in 2022, cost benefit analysis had been carried out on 598 overflows⁵⁴ in accordance with the 1994 Regulations.⁵⁵ The evidence stated that improvement schemes passing the cost benefit test had been identified for

[announcement-november-2021/](#)> accessed 03/12/2025; and [Department for Environment, Food & Rural Affairs](#), 'Water companies could face legal action after investigation launched into sewage treatment works' (18 November 2022) <<https://www.gov.uk/government/news/water-companies-could-face-legal-action-after-investigation-launched-into-sewage-treatment-works>> accessed 04/12/2025.

⁵⁴ Including all storm overflows not limited to CSOs only.

⁵⁵ *R (on the application of WildFish Conservation) v Secretary of State for Environment, Food and Rural Affairs*; *R (on the application of Marine Conservation Society and others) v Secretary of State for Environment, Food and Rural Affairs* [2023] EWHC 2285 (Admin), at [140].

472 overflows, representing 78.9% of those storm overflows assessed. However, this figure, and the percentage of cases in which BTKNEEC solutions were identified, differed significantly across data provided by the Environment Agency at various stages of our investigation.

- 3.43 Following a detailed review by the Environment Agency, it confirmed to us that between 2022 and May 2025, a total of **851** BTKNEEC assessments have been completed across all storm overflows, with **149** schemes identified as cost-beneficial (**17.5%**). Of these, **616** assessments relate specifically to network CSOs, resulting in **99** cost-beneficial solutions (**16.1% of network CSOs, 11.6% of total**).
- 3.44 The Environment Agency attributed this discrepancy to differences in data collection and processing methodologies. Some sources included all types of storm overflow, while others focus only on CSOs. Submission errors by WaSCs also contributed.⁵⁶ The final figure is based on a comprehensive analysis of multiple data sources relating to SOAF progress and outcomes.⁵⁷

Permit reviews

- 3.45 The Environment Agency provided evidence during the investigation regarding permit review and suggested that it had a system of permit reviews in place. It advised that permits were reviewed in one of two ways; either a full review of permit conditions to ensure statutory compliance or a partial review of specific conditions. A full review could be triggered either as part of a regime specific review programme or for site specific reasons. A partial review could be triggered as a result of compliance problems, appeals or changes to standards.
- 3.46 With regard to storm overflow permits, including network CSOs, a review is triggered by Environment Agency water quality planning activity which prioritises permit review informed by the water industry price review cycles (five year periods).
- 3.47 The Environment Agency informed us that between January 2015 and September 2023 there were 6,653 permit reviews that resulted in new conditions or limits on storm overflows. It also advised that the majority of these included adding EDM monitoring and reporting conditions and that they were reviewed to ensure conditions and limits were up to date. The

⁵⁶ Removal of 53 AMP7 WINEP schemes: These were included in the WildFish case total but excluded from other returns in our investigation. The correction of significant data errors: Yorkshire Water and Northumbrian Water reported inflated figures in their 2022 EDM returns. Their combined total was reduced from 373 to 36—a correction of 337.

⁵⁷ Data on SOAF progress and outcomes, requests to companies to identify their SOAF v2 investigation programme, the 2023 and 2024 EDM returns, the PR19 and PR24 WINEP programmes, the Green Recovery programme and Ofwat's notices to enforce.

Environment Agency stated that by the end of 2026, all 14,480 storm overflow permits would have been subject to review and variation.

- 3.48 According to the Environment Agency, it takes a risk-based approach to permit reviews and focuses on those discharges with the highest level of environmental risk. It also advised that approximately 4,000 reviews were commenced between 2020-2023 in relation to storm overflows (including CSOs). 1,100 reviews were completed by 31 December 2023 based on outputs from SOAF investigations, resulting in 104 permit variations to be completed.



Analysis and findings

4. Analysis and Findings

- 4.1 In this chapter we set out our legal analysis of the relevant environmental laws and our findings in this investigation. We set out our understanding of the law first and then deal with each of the three grounds set out in the Decision Notice summarised broadly as follows: (i) Environment Agency Guidance; (ii) Permit Conditions; and (iii) Permit Reviews.

The 1994 Regulations and the 2012 Case

- 4.2 In Chapter 2 we set out the two-stage test, as articulated in the 2012 Case, which provides a methodology to follow when considering whether discharges are compliant with the 1994 Regulations.⁵⁸

First stage – exceptional circumstances

- 4.3 The first stage of the test is to consider whether the discharge is occurring only in exceptional circumstances.
- 4.4 The UWWTD does not define, or even use, the term “exceptional circumstances”. The judgment in the 2012 Case used the term to interpret a footnote in the UWWTD that accepts it will not be possible to collect and treat all waste water during situations “such as unusually heavy rainfall”.⁵⁹ The judgment did not provide a definition of ‘exceptional’, and the Commission did not propose a strict 20 spills per year rule, but pointed out that the more an overflow spills, particularly during periods when there is only moderate rainfall, the more likely it is that the overflow’s operation is not in compliance with the Directive.⁶⁰
- 4.5 An analysis of the first stage of the two-stage test was set out in the Decision Notice.⁶¹ The Environment Agency agreed with the position that as regards the first stage, the test is whether the discharges under examination are occurring only in “exceptional” circumstances.

Second stage – BTKNEEC (exceptionality)

⁵⁸ See 2.14 – 2.15.

⁵⁹ Footnote 1 to Annex 1 Sections A & B UWWTD.

⁶⁰ The 2012 Case, at [28]. The idea of a 20 spill rule was raised by the EU Commission in pre-litigation and before the CJEU. However, the Commission did not propose a strict 20 spill rule but instead indicated that discharges over this number would be a cause for concern and indicate a possible failure to fulfil obligations.

⁶¹ Decision Notice, paragraph 24. In the Decision Notice, the 2012 Case is referred to as Case C-301/10.

- 4.6 If a CSO is found to be discharging outside of exceptional circumstances, the second stage of the two-stage test is to consider whether a solution, or partial solution can be found by applying the BTKNEEC concept.
- 4.7 The importance of the BTKNEEC test is that the result of applying a cost-benefit analysis may determine whether a discharge is compliant with the law or requires remediation to become compliant.
- 4.8 In the 2012 Case, the CJEU held that:

[64] The concept of BTKNEEC thus enables compliance with the obligations of Directive 91/271 to be secured without imposing upon the Member States unachievable obligations which they might not be able to fulfil, or only at disproportionate cost.

[65] However, in order not to undermine the principle set out in paragraph 53 of the present judgment that all waste water must be collected and treated, the Member States must invoke disproportionate costs of that kind by way of exception only.

- 4.9 We understand the words ‘by way of exception only’ to mean ‘rarely’, so that non-exceptional discharges for which there is no cost-beneficial solution, are the exception rather than the rule.
- 4.10 Advocate General Mengozzi in his Opinion in the 2012 Case described the BTKNEEC clause as a “safety valve” that “operates by way of exception”.⁶² He also stated at [61] that:
- “...The BTKNEEC clause in fact requires, always and in any event, a comprehensive assessment of all the circumstances of each specific case and must necessarily be adjusted to take account of those circumstances.”*
- 4.11 However, in the WildFish Judgment, the High Court interpreted the 2012 Case and the Advocate General’s Opinion as follows:

“It is important to keep in mind that, according to the principles laid down in the UK case, the mere fact that a storm overflow discharges to a waterway in non-exceptional circumstances does not necessarily involve a breach of the 1994 Regulations. If there is no remedy for that occurrence which satisfies the BTKNEEC test, then the discharge is lawful under the 1994 Regulations”.⁶³

and

⁶² Paras [59]-[60].

⁶³ The WildFish Judgement, at [162].

“CJEU did not indicate that discharges will only satisfy BTKNEEC exceptionally. The Advocate General stated that there must be a comprehensive assessment of the circumstances of each case...”⁶⁴

4.12 We agree that a comprehensive assessment of each case is necessary but if disproportionate costs are found to exist other than “by way of exception” then, in our view this would be inconsistent with the proper interpretation of the UWWTD.

4.13 The WildFish Judgment concerned the legality of the SODRP and concluded that since the plan did not purport to detract from the existing regulatory requirements and in one respect exceeded them, it could not be and was not unlawful.⁶⁵ The decision did not consider whether the existing law had been properly understood and implemented to date.

4.14 The Decision Notice states at paragraph 30:

“The OEP... holds the view that the judgment in WildFish does not answer the question of how the second stage of the two-stage test should be interpreted or how it should be implemented in practice.”

4.15 The Environment Agency disagreed with this position in its response to the Decision Notice and submitted that the WildFish Judgment sets out the correct legal position in relation to the 2012 Case. Further, the Environment Agency interpreted the paragraphs of the Judgment quoted at 4.11 as countering the argument that an “exceptionality” criterion applied to the consideration of BTKNEEC.

4.16 We conclude that CSOs spilling outside of exceptional circumstances and for which there is no cost-beneficial solution must be the exception rather than the rule i.e. that this must be the outcome in only a minority of cases. If otherwise, it is suggestive of too conservative an approach to the exercise of cost-benefit assessment.

Second stage – BTKNEEC (as a defence)

4.17 The judgment in the 2012 Case established that, at a European level, it is for an EU Member State to demonstrate why CSO improvements do not satisfy the BTKNEEC requirement. Therefore, in the domestic context, this must mean that if a CSO is discharging outside of exceptional circumstances, it is evidently not compliant with the 1994 Regulations and it is up to the discharger to satisfy the regulator that there is no BTKNEEC solution.⁶⁶

⁶⁴ Ibid, [172].

⁶⁵ Decision Notice, para 32.

⁶⁶ Decision Notice, para 33.

- 4.18 The Decision Notice determined accordingly that the BTKNEEC concept is limited in operation to a form of “defence”.⁶⁷ In response to the Decision Notice, the Environment Agency agreed that it is for the discharger to investigate whether a BTKNEEC solution exists.
- 4.19 In practical terms the OEP and the Environment Agency agree that if a storm overflow is, or is likely to be, discharging outside exceptional circumstances the relevant WaSC has a duty to investigate by undertaking a BTKNEEC assessment in a timely way.

Environment Agency Guidance

- 4.20 In Chapter 2 we set out the relevant law in relation to network CSOs. This includes the duty on the Environment Agency under regulation 6(2)(c) of the 1994 Regulations, when it is exercising permitting functions, to secure the limitation of pollution of receiving waters due to storm water overflows. We also set out above the findings of the 2012 Case and the two-stage test.
- 4.21 In Chapter 3 we explain the context and relevance of the current guidance issued by the Environment Agency in relation to the permitting of network CSOs, including the criteria used to identify unsatisfactory CSOs.
- 4.22 We reviewed the September 2018 Guidance and found legal errors in the approach taken. We determined that the criteria used to identify unsatisfactory CSOs in the September 2018 Guidance were essentially the same as existed in the 1997 Guidance.⁶⁸ We detailed our findings in the Decision Notice by reference to the legal errors in the 1997 Guidance:

“The 1997 Guidance therefore requires the application of a pragmatic system of classification founded largely upon impact on receiving waters rather than the quality, quantity or frequency of discharges. The OEP holds the view that such considerations, which cannot easily be established, can be relevant only to the second stage of the CJEU two-stage test as part of a BTKNEEC assessment. To require them to be established as part of the identification of a CSO as “unsatisfactory” renders it inevitable that many CSOs which are not compliant with the UWWTD and 1994 Regulations will not be so identified, so long as they merely do not discharge in dry weather and are not demonstrably in breach of the conditions of their permits. Such criteria taken alone are manifestly inadequate to demonstrate UWWTD/1994 Regulations compliance.”⁶⁹

- 4.23 The Decision Notice also stated at paragraph 55:

⁶⁷ Decision Notice, para 26.

⁶⁸ Decision Notice, para 44.

⁶⁹ Decision Notice, para 53.

“The methodology adopted in the 1997 Guidance is plainly not in accordance with the UWWTD, as interpreted in Case C-301/10, and is therefore unlawful. While the criteria set out in Annex 8 may identify some unsatisfactory CSOs this is irrelevant as it does not amount to a legally correct approach to assessing unsatisfactory CSOs.”

- 4.24 The practical effect of these criteria may have led to CSOs being identified as satisfactory despite discharging outside of exceptional circumstances and potentially being unlawful. For example, in relation to the first stage of the two-stage test discussed above, the only criteria in the September 2018 Guidance (or Annex 8 of the 1997 Guidance) relating to the operation of a CSO are those asking whether it is discharging in dry weather or in breach of consent conditions. These are clearly inadequate for determining legal compliance with the 1994 Regulations and at the opposite end of the performance scale from “exceptional circumstances”.
- 4.25 Following the CJEU’s decision in the 2012 Case, it should have been apparent that the methodology set out in the 1997 Guidance was not sufficient to achieve compliance with the 1994 Regulations. However, the September 2018 Guidance and the SOAF do not refer to the judgment in the 2012 Case or the two-stage test. Therefore, the errors in the 1997 Guidance were not remedied and the Environment Agency’s guidance never contained an accurate interpretation of the law.
- 4.26 The September 2018 Guidance makes no reference to the SOAF, which appears to have been an additional, discrete driver for the improvement of CSOs. In Chapter 3 we note the spill thresholds used in the first stage of the SOAF (average of 60/50/40 spills per year depending on the timespan of EDM data) to determine if a CSO required further investigation. However, when reviewed against the two-stage test approach detailed above we found in the Decision Notice that:

“The SOAF methodology does not set out an approach which deems that non-exceptional spills mean that a CSO is non-compliant. It instead requires, as a first step, identifying for investigation only those CSOs which spill very frequently.”⁷⁰

- 4.27 Paragraph 66 of the Decision Notice stated that:

“The trigger levels above require a spill every six days on average with only one year of event duration monitoring (‘EDM’) data and up to a spill every nine days on average when there is three or more years of EDM data. These are not, by any stretch of the imagination, uncommon, far less “exceptional”, events.”

⁷⁰ Decision Notice, para 65.

4.28 The next stage of the SOAF excludes all spills from an entire year where there has been exceptional rainfall. The Environment Agency advised that a wet year is defined as effectively the annual rainfall that would occur in 1 in 20 years on average (i.e., a 5% probability).

4.29 In the Decision Notice, we found this to be an irrational approach to the first stage (“exceptional circumstances”) of the two-stage test, particularly when coupled with such high investigation thresholds. Paragraph 68 of the Decision Notice explained that:

“... this approach does not differentiate between, on the one hand, a CSO that is spilling only because it is a wet year and, on the other hand, a CSO that is spilling regularly because it is a wet year and because the drainage system in that area is hydraulically inadequate (or because the CSO has not been adequately maintained etc.). Given that the Environment Agency’s approach to excluding all spills on wet years on this block basis does not and cannot differentiate between these two types of discharges from CSOs, that approach is irrational.”

4.30 In summary, we found in the Decision Notice that the combination of the SOAF and the September 2018 Guidance did not constitute a comprehensive and coherent method of identification and improvement of CSOs capable of achieving compliance with the requirements of the UWWTD and the 1994 Regulations.⁷¹ However, the Environment Agency relied upon these documents to achieve that purpose⁷² and did not refer to any alternative guidance that it had produced to identify and set permit conditions for CSOs.⁷³

4.31 The legal errors in the SOAF and the September 2018 Guidance thus inevitably contributed to the failure of the Environment Agency to discharge its duty under regulation 6(2)(c) of the 1994 Regulations.⁷⁴

4.32 Paragraph 3(a) of the Decision Notice concluded that the Environment Agency had committed a serious failure to comply with environmental law, by:

“(a) unlawfully failing to take proper account of environmental law when exercising its functions, in devising guidance on setting permit conditions for combined sewer overflows on the sewerage network (‘network CSOs’) without proper understanding of and/or regard to the requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (‘the 1994 Regulations’) and/or the Urban Waste Water Treatment Directive 1991 (91/271/EEC) (‘the UWWTD’), in particular regulation 6(2)(c) and/or Schedule 2 of the 1994 Regulations.”

⁷¹ Decision Notice, para 76.

⁷² Decision Notice, para 39.

⁷³ Decision Notice, para 61.

⁷⁴ Decision Notice, para 77.

- 4.33 At paragraph 104 of the Decision Notice, we recommended that the Environment Agency revise and update the SOAF and any additional guidance which it used to identify non-compliant network CSOs and to set permit conditions for network CSOs. We stated that this was a necessary step to remedy and prevent reoccurrence of the identified failure to comply with environmental law.
- 4.34 We also recommended that the Environment Agency agree and publish new memoranda of understanding (MoUs) with Ofwat and the Secretary of State which reflected proper regulation of discharges from network CSOs and included arrangements for improved cooperation.⁷⁵ This step was included in the Decision Notice to prevent reoccurrence of various failures set out in the Decision Notice and to clarify the roles and responsibilities of the public authorities more generally in relation to the regulation of discharges from network CSOs.
- 4.35 The Environment Agency responded to the Decision Notice and denied that it had failed to comply with environmental law as described.
- 4.36 The Environment Agency in response, stated that the SOAF and September 2018 Guidance were not devised for the purpose of setting permit conditions but to identify when investigations needed to be undertaken. It noted that the Environment Agency is not obliged to issue guidance about the setting of permit conditions. The Environment Agency disagreed that it had any responsibility for the 1997 Guidance but claimed that the SOAF and the September 2018 Guidance were produced to supplement the 1997 Guidance. It also stated that the SOAF was developed in response to the 2012 Case and involves consideration of spill frequency.
- 4.37 It was not accepted by the Environment Agency that its guidance contained any legal error and it claimed that the various pieces of guidance (including the 1997 Guidance) operated together.
- 4.38 Nevertheless, the Environment Agency noted in its response to the Decision Notice that it was consulting upon an updated version of the SOAF to improve the process of identifying non-compliant CSOs. Without prejudice to its position noted at paragraph 4.35 above, the Environment Agency also agreed to use its best endeavours to agree with Ofwat and the Secretary of State updated MoUs which properly and adequately reflect the law.
- 4.39 On 24 March 2025 the Environment Agency published an updated SOAF, the “Storm overflows assessment framework 2025” (the ‘SOAF 2025’).
- 4.40 We have reviewed the SOAF 2025 and consider that it reflects the recommended step noted at 4.33 above, and further set out in the Decision

⁷⁵ Decision Notice, para 105.

Notice, to prevent reoccurrence of the failure. The updated framework reduces the thresholds that trigger an investigation into a CSO, based on spill data: from 60 spills over one year, 50 over two years, and 40 over three years, to new thresholds of 30, 20, and 10 spills respectively. The new guidance properly and adequately sets out the Environment Agency's approach and requirements in a manner which is consistent with the law.

- 4.41 On or around 10 September 2025, Defra, the Environment Agency and Ofwat signed an MoU with respect to the regulation of storm overflows in England. We acknowledge that the MoU reflects proper regulation of discharges from CSOs so as to fulfil the recommended step and should help to avoid reoccurrence of the failures identified in the Decision Notice.
- 4.42 We accept that the SOAF and September 2018 Guidance may not have been devised for the purpose of setting permit conditions in the sense that they did not together constitute a complete code for determining site-specific parameters in individual permits. They did however contain the legally flawed criteria set out above which inadequately informed the process of identifying “unsatisfactory” CSOs for improvement. In the event, we conclude that the Environment Agency failed to comply with environmental law as set out in the Decision Notice in relation to its guidance. The publication of the new SOAF 2025 has brought this failure to an end and, together with updates to other guidance as noted in Chapter 5, will prevent the failure from reoccurring.

Permit conditions – failure to exercise permit setting functions to achieve compliance with environmental law

- 4.43 In Chapter 2 we note the duty on the Environment Agency under regulation 6(2)(c) of the 1994 Regulations, when it is exercising permitting functions, to secure the limitation of pollution of receiving waters due to storm water overflows. Schedule 2 of the 1994 Regulations relates to the design, construction and maintenance of sewer systems and contains the same objective, the “limitation of pollution of receiving waters due to storm water overflows”.
- 4.44 At paragraphs 2.18 and 2.19 we note that the Environment Agency is under a duty to exercise its relevant functions under the 1994 Regulations and the 2016 Regulations so as to secure compliance with the WFD. Article 10(2)(a) of the WFD requires EU Member States to ensure the establishment and/or implementation of emission controls based on best available techniques, found in measures including the UWWTD. In the context of CSOs, this requires that they are permitted to discharge only in “exceptional circumstances” unless the absence of a BTKNEEC solution is demonstrated.
- 4.45 At paragraph 2.26 we note that discharging in breach of the conditions imposed in a permit is an offence under regulation 38 read with regulation 12

of the 2016 Regulations. If a CSO is spilling too frequently, the regulatory tools available to the Environment Agency include the imposition of a new condition in the CSO's permit stipulating that the CSO is only permitted to spill in circumstances (including frequency) compatible with UWWTD compliance.

- 4.46 The Environment Agency's misunderstanding of the UWWTD and the 1994 Regulations is revealed in its guidance as set out above. In the Decision Notice, we found that this inevitably led to it also failing to set permit conditions which were in accordance with the UWWTD and the 1994 Regulations.⁷⁶ We also summarised data provided by the Environment Agency in relation to SOAF investigations, in particular the number of CSOs for which an improvement scheme was required following cost-benefit analysis, and concluded that hundreds of CSOs were currently demonstrably non-compliant with the UWWTD and the 1994 Regulations.⁷⁷
- 4.47 As a result, we determined that the Environment Agency, when exercising its permitting functions, was failing to comply with (i) its duty under regulation 6(2)(c) of the 1994 Regulations to secure the limitation of pollution of receiving waters; and (ii) its duty under the 2017 Regulations to exercise certain functions so as to comply with the WFD.
- 4.48 Paragraph 3(b) of the Decision Notice concluded that the Environment Agency had committed a serious failure to comply with environmental law, by:
- “(b) As a result of (a), unlawfully exercising or failing to exercise its function of setting permit conditions for discharges from network CSOs pursuant to the Environmental Permitting (England and Wales) Regulations 2016 (‘the 2016 Regulations’) and their predecessors, by setting or allowing to persist conditions which were in fact insufficient to achieve compliance:*
- (i) with the requirements of the 1994 Regulations, in particular regulation 6(2)(c) and/or Schedule 2*
- (ii) (as a result of (b)(i)), with the requirements of regulations 3(1) and/or 3(2) of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (‘the 2017 Regulations’)*”
- 4.49 At paragraph 106 of the Decision Notice, we recommended that the Environment Agency set, vary and modify permit conditions for network CSOs in a manner consistent with lawful guidance to achieve compliance with the 1994 Regulations and the UWWTD. Regarding network CSOs already subject to the SOAF process, we recommended that permit conditions were modified and BTKNEEC solutions implemented, where necessary, to avoid discharges in breach of the law.⁷⁸

⁷⁶ Decision Notice, para 84.

⁷⁷ Decision Notice, para 85.

⁷⁸ Decision Notice, para 107.

- 4.50 The Decision Notice also recommended that the Environment Agency should consider when updating its guidance and setting or modifying permit conditions, the imposition of a global single annual spill limit above which a CSO is deemed 'unsatisfactory' for the purpose of further investigation and improvement.⁷⁹ The recommendation further considered that such a spill limit should have regard to the two-stage test and could be incorporated into permit conditions by the Environment Agency as creating a specific trigger for investigation. It was noted that the Environment Agency had already proposed changes to its SOAF and the OEP confirmed in the Decision Notice, that if the SOAF was amended to set trigger thresholds of 30/20/10 spills per year this would represent an appropriate remediation of the failure identified.
- 4.51 In response to the Decision Notice, the Environment Agency denied that it had failed to comply with environmental law as described.
- 4.52 As noted above, the Environment Agency did not accept that its guidance was concerned with the setting of permit conditions. Therefore, it also did not agree that it was inevitable that it failed to set permit conditions in accordance with the 1994 Regulations. The Environment Agency stated in its response to the Decision Notice that the ground set out at 4.48 above was unsupported by evidence as no specific permit condition had been identified as being unlawful. In relation to compliance with the WFD, the Environment Agency described this ground as historic given that the obligation to comply with article 10(2)(a) of the WFD (in relation to the establishment of the emission controls set out in the UWWTD) ceased to apply on 31 December 2020.
- 4.53 The Environment Agency responded to the recommendations in the Decision Notice by noting its targeted technical consultation on 'Spill Frequency Threshold Permitting for Storm Overflows'.⁸⁰ This revealed the Environment Agency's plan to supplement existing permit conditions by focusing on spill frequency performance of storm overflows. The Environment Agency noted that this approach would allow the SODRP and SOAF requirements to be protected directly through permit conditions. On 28 November 2025, the Environment Agency notified all WaSCs that its spill frequency threshold permitting approach will apply to improvements completed from 1 January 2026.
- 4.54 Regarding the recommendation to set, vary and modify permit conditions in compliance with the law, the Environment Agency advised that it was undertaking a permit modernisation project and a permit review project, further details of which are provided below at paragraph 4.65.

⁷⁹ Decision Notice, para 108.

⁸⁰ November 2024. This consultation was a targeted technical engagement for 8 weeks with WaSCs, and other stakeholders within government, the sector and environmental NGOs.

- 4.55 We conclude, that as a result of the failure in relation to its guidance, the Environment Agency had failed to comply with environmental law by unlawfully exercising or failing to exercise its permit setting functions to achieve compliance with the 1994 Regulations and regulation 3(1) of the 2017 Regulations. The failure to comply with the 2017 Regulations ended on 31 December 2020 when the obligation to comply with article 10 of the WFD ceased to apply in the UK following its departure from the EU.
- 4.56 As noted at paragraph 4.50 above, the Decision Notice acknowledged that the spill thresholds in the revised SOAF would remedy the failure in respect of compliance with the 1994 Regulations. Therefore, publication of the new SOAF 2025 has brought this failure to an end. In addition, the introduction of spill limit permit conditions, noted at paragraph 4.53 above, will incorporate the requirements of the 1994 Regulations into environmental permitting and this will help to prevent reoccurrence of the failures identified.

Permit review – failure to exercise

- 4.57 In Chapter 2 we note that regulation 6(3) of the 1994 Regulations requires the Environment Agency to “*review and if necessary for the purpose of complying with the regulations, modify or revoke consents.*” Also, regulation 34(1) of the 2016 Regulations requires the Environment Agency to periodically review environmental permits.
- 4.58 In Chapter 3 we set out a summary of evidence provided by the Environment Agency during the investigation in relation to its permit review functions.
- 4.59 We found in the Decision Notice that the Environment Agency had not demonstrated any evidence of a system for carrying out the review of permits for network CSOs specifically in order to discharge its duty under regulation 6(3) of the 1994 Regulations, nor for the periodic review and inspection of CSOs as regulated facilities pursuant to regulation 34(1) and (2) of the 2016 Regulations.
- 4.60 The Environment Agency stated that between January 2015 and September 2023 there were 6,653 permit reviews that resulted in new conditions or limits on storm overflows. However, the Environment Agency also suggested that most of these reviews consisted simply of adding EDM monitoring and reporting conditions or general modernisation. In the Decision Notice, we stated that modifying a permit solely to add conditions relating to EDM into the permit or modernising the terms of the permit was not the same as amending the permit in a substantive way so as to ensure compliance with the 1994 Regulations.⁸¹

⁸¹ Decision Notice, para 98.

- 4.61 The Decision Notice also noted that despite the Environment Agency asserting it had carried out 4,000 permit reviews for storm overflows between 2020 and 2023, it had not explained or provided any detail as to how it reviewed, inspected, modified or revoked permits prior to the advent of EDM.⁸² Given the demonstrable widespread lack of compliance revealed as a result of the operation to date of the SOAF, we found that proper review and inspection must not have taken place in the years prior to the SOAF.⁸³
- 4.62 Paragraph 3(c) of the Decision Notice concluded that the Environment Agency had committed a serious failure to comply with environmental law, by:
- “(c) Unlawfully failing to exercise properly or at all, in relation to discharges from network CSOs, its functions of review, inspection and/or modification and/or revocation of permits pursuant to its duty under regulation 6(3) of the 1994 Regulations and regulation 34(1) and (2) of the 2016 Regulations so as to achieve compliance with regulation 6(2)(c) of and Schedule 2 to the 1994 Regulations.”*
- 4.63 We recommended in the Decision Notice that the Environment Agency review and inspect CSOs and modify or revoke permits pursuant to its duty under regulation 6(3) of the 1994 Regulations and regulation 34(1) and (2) of the 2016 Regulations.⁸⁴
- 4.64 The Environment Agency responded to the Decision Notice and disagreed that the alleged failures had occurred. It considered that any periodic review of a permit satisfied the obligations under the 1994 Regulations and the 2016 Regulations. The Environment Agency advised that it employs a risk-based approach to permit reviews and focusses on the review of permits for those discharges with the highest level of environmental risk. The Environment Agency accepted that permit variations had not been implemented at sufficient pace but stated that it had improved the speed of its processes for undertaking permit reviews.
- 4.65 In response to the Decision Notice, and further correspondence, the Environment Agency provided details of its Storm Overflow Permit Review Plan (the ‘Review Plan’). This plan forms part of a broader permit modernisation and improvement programme by the Environment Agency which aims to standardise historic water quality permits and identify those requiring full technical review. As part of the Review Plan, permits will be varied to include spill limit conditions, particularly where SOAF triggers have been activated and improvements are required following a BTKNEEC assessment. Permits for CSOs not currently exceeding trigger thresholds are also likely to be varied, although this may take a considerable amount of time. The Environment Agency regulates approximately 8,400 CSO permits and the

⁸² Decision Notice, para 99.

⁸³ Decision Notice, para 99.

⁸⁴ Decision Notice, para 109.

pace of this work will depend on the outcome and relative success of the modernisation project.

- 4.66 We conclude that the Environment Agency failed to comply with environmental law as set out in the Decision Notice in relation to its permit review functions. We accept that it will take time to implement the Review Plan and understand that the Environment Agency expects compliance will take place over several price control periods. However, although the failure identified above remains ongoing, we consider that the Review Plan, if properly implemented, will ultimately be sufficient to bring the non-compliance to an end and prevent the failure from reoccurring. We will accordingly maintain appropriate oversight of the Environment Agency's relevant functions as set out in paragraph 5.8 below.



Conclusion and recommendations

5. Conclusion and recommendations

- 5.1. For the reasons set out in Chapter 4, we conclude that the Environment Agency failed to comply with environmental law as set out in the Decision Notice. As a result of actions taken, setting aside the differences of legal opinion explained in Chapter 4, we consider that the failures regarding the Environment Agency's guidance and permit conditions are no longer ongoing. To the extent that the failure in relation to permit reviews remains ongoing, we are satisfied that plans are in place which are likely to bring it to an end within a reasonable timeframe.
- 5.2. The Environment Agency has made meaningful progress in addressing the issues identified during the investigation. The SOAF 2025 lowers the thresholds that trigger an investigation into a CSO based on spill data to 30, 20, and 10 spills per year (depending on timespan of spill data). All network CSOs are now reported to have benefited from the full rollout of EDM which has achieved 100% coverage. By 2026, the vast majority of network CSOs will fall within the scope of the 10-spill trigger. Where investigations determine that high spill frequency is due to capacity within the system, a detailed cost-benefit assessment will be required to determine whether, and to what extent, spills should be reduced. This represents a significant strengthening of the regulatory regime.
- 5.3. As noted at paragraph 4.53 above, the Environment Agency has confirmed its intention to introduce spill frequency threshold conditions directly into environmental permits. This approach establishes both short-term annual spill triggers and a long-term average based on a ten-year period. The short-term triggers are intended to provide a more responsive mechanism for enforcing compliance, while the long-term triggers aim to ensure that robust control measures remain in place to maintain compliance with SODRP targets. Whilst not the only mechanism available, we consider spill triggers and limits to be an appropriate means of reflecting the requirements of the 1994 Regulations and the UWWTD directly in environmental permits.
- 5.4. Although the Environment Agency does not agree with our determination that, as a matter of law, BTKNEEC should be applied only rarely, this disagreement is not determinative of the lawfulness of the updated guidance and planned changes to environmental permits. While some differences in legal interpretation remain, in our view, they do not materially affect the practical outcomes. The SOAF 2025, together with the updated technical guidance on the correct methodology of cost-benefit assessment and planned permitting changes, provide the necessary mechanisms to prevent a reoccurrence of the identified failures. The development and publication of a MoU further supports this by clarifying responsibilities and promoting coordinated action.

- 5.5. As part of our Decision Notice, we recommended the establishment of a single, global annual spill limit above which a CSO would be conclusively deemed ‘unsatisfactory’ and would therefore trigger improvement measures, or enforcement action. This recommendation was intended to act as a safeguard, ensuring that CSOs are not permitted to spill at high frequencies, for example more than 60 times per year, without intervention, even where the cost of improvements is considered unjustifiably high.
- 5.6. This specific recommendation has not been incorporated into the updated guidance documents by the Environment Agency. Nevertheless, in practice, the combination of measures already outlined, including revised SOAF thresholds, strengthened BTKNEEC assessments, and the application of SODRP limits, should make it unlikely that a CSO discharging at such a high frequency could continue to do so without triggering remedial action.
- 5.7. We recognise that reviewing all relevant permits will take time, and we consider that the Environment Agency’s Review Plan, if properly implemented and maintained, will be sufficient to end the failure to comply with the 1994 Regulations and the 2016 Regulations in relation to permit reviews. We will continue to monitor the implementation of this plan to ensure compliance with the relevant legislation.
- 5.8. Concluding our investigation by publishing this report offers a proportionate and effective means of securing accountability and maintaining transparency. We will continue to monitor compliance with the relevant legal and regulatory obligations by the Environment Agency. This monitoring will include engagement with the Environment Agency, review of performance data, and assessment of progress against statutory requirements and commitments made in response to this investigation. The initial monitoring stage will take place six months after the publication of this report. We will also maintain appropriate oversight as sector reforms are implemented, including those arising from the government’s response to the Independent Water Commission recommendations.⁸⁵

Recommendations

- 5.9. In addition to setting out the specific steps we consider a public authority should take in relation to any failure identified in an investigation report, we may also make broader, general recommendations arising from our investigation or its conclusions. We have set out our recommendations below together with our rationale for each where appropriate.

⁸⁵ ‘Independent Water Commission: review of the water sector’ (Published 3 June 2025, last updated 29 July 2025) <[Independent Water Commission: review of the water sector - GOV.UK](#)> accessed 04/12/2025.

- 5.10. In response to the Decision Notice, the Environment Agency advised that its September 2018 Guidance would be updated following updates to the SOAF, spill frequency threshold permitting and Defra's 1997 Guidance.

Recommendation 1 - the Environment Agency should update the September 2018 Guidance to properly and adequately set out the revised approach of the Environment Agency towards the regulation of network CSOs in a manner which is consistent with the 1994 Regulations and UWWTD.

- 5.11. The SOAF 2025 states that it will be reviewed every 5 years (including the benefit cost ratios). The MoU states that it will be reviewed and refreshed as needed with a first review to occur 12 months after the date of signature. A review may occur prior to this if needed to reflect changes in roles and responsibilities.

Recommendation 2 - the Environment Agency should review the SOAF 2025 every five years, or earlier if appropriate, to ensure that it is consistent with relevant environmental law, remains fit for purpose and considers lessons learned. In addition, the Environment Agency should work with the Secretary of State and Ofwat, to ensure that the MoU is reviewed 12 months after the date of signature, or earlier if required. Such reviews could be coordinated with the Secretary of State's statutory review of the SODRP. If regulatory responsibilities change following the Independent Water Commission's recommendations the SOAF 2025 and MoU should also be reviewed and revised as part of that transition process.

- 5.12. In Chapter 3 we summarise evidence from the Environment Agency regarding the number of BTKNEEC assessments that have been completed by WaSCs via the SOAF process. We note that discrepancies in the data reported at various times during the investigation were the result of different data collection and processing methodologies.

Recommendation 3 - the Environment Agency, in partnership with Ofwat,⁸⁶ should establish a robust and transparent methodology for consistent data collection and reporting. This framework should enable clear tracking of progress for each CSO and provide structured summaries at each stage of the SOAF process. It must also support accurate reporting of BTKNEEC assessment outcomes, ensuring that data is both reliable and comparable across submissions.

- 5.13. We maintain that if CSOs discharging outside of properly defined 'exceptional circumstances' are regularly found to lack any cost-beneficial solution, then BTKNEEC is not being applied 'by way of exception' as intended and this is likely to indicate an erroneous approach to cost-benefit assessment.

⁸⁶ Or any subsequent authority.

Recommendation 4 - the Environment Agency should use better data to regularly monitor and review the proportion of CSOs that are not progressed for improvement following BTKNEEC assessments. To ensure strategic alignment and policy coherence, it would be beneficial for this review process to be coordinated with Defra and considered for inclusion in the Secretary of State's statutory review of the SODRP.

- 5.14. The correct application of the BTKNEEC test is crucial for ensuring effective outcomes. The Environment Agency informed us that it completed a review in October 2024 of SOAF investigations which indicated that BTKNEEC assessments were undertaken inconsistently across different WaSCs. The review also identified that an update of the SOAF and BTKNEEC guidance for practitioners was required.
- 5.15. In August 2025, the Environment Agency updated its guidance for practitioners on how to conduct BTKNEEC assessments.⁸⁷ The revised guidance introduces several enhancements to how BTKNEEC assessments should be conducted and reported. We welcome these improvements and the clearer approach they provide and therefore do not make a recommendation on this point. However, continued oversight of how the guidance is applied remains essential to ensure consistency, accuracy, and transparency in future assessments.

Recommendation 5 - the Environment Agency should strengthen its regulatory oversight of BTKNEEC assessments and their outcomes. Greater scrutiny is needed to ensure that, in cases where CSOs are not improved, the concept of excessive costs is being correctly applied through robust cost-benefit analysis. It is also important that WaSCs use up-to-date cost data, fully account for wider environmental and societal benefits, and assess a range of spill frequency reduction scenarios.

⁸⁷ Environment Agency, *Valuing the Benefits of Storm Discharge Improvements for use in BTKNEEC Analysis version 3.0* (August 2025).

Annex

Annex: Glossary

Term	Description
Best Technical Knowledge Not Entailing Excessive Cost (BTKNEEC)	An assessment that considers the most effective technical solution available that avoids disproportionate costs, typically applied in environmental regulation.
Combined Sewer Overflow (CSO)	A structure that releases excess stormwater and to prevent sewer system flooding.
Decision Notice	A formal document used when the OEP concludes that a public authority has failed to comply with environmental law.
Environmental Permits	Legal authorisations required to carry out activities that may impact the environment, such as discharges to water.
Event Duration Monitoring (EDM)	The tracking of how often and how long discharge events occur, especially from storm overflows.
Executive Non-Departmental Public Body	A public organisation operating independently of government departments, tasked with delivering specific services or regulatory functions.
Independent Water Commission	Established in October 2024 by the UK and Welsh governments to conduct a comprehensive review of the water sector. Chaired by Sir Jon Cunliffe, the Commission made recommendations to government to restore public trust, improve

	regulation, and ensure the sector is equipped to meet future challenges.
Information Notice	A formal document issued by the OEP when it suspects that a public authority may have failed to comply with environmental law.
Inlet Storm Overflow	An overflow point at the entrance of a treatment facility, used to manage excess flow during heavy rainfall.
Non-Ministerial Government Department	A government agency that operates independently of direct ministerial control.
Price Control	Regulatory limits set on the prices utilities can charge customers, ensuring fair and affordable services.
Sewage Treatment Works	Facilities where wastewater is treated before being safely discharged or reused.
Storm Overflow	An engineered outlet that releases excess water from sewer systems to prevent flooding.
Storm Overflow Assessment Framework (SOAF)	Environment Agency issued guidance document detailing the approach for evaluating and improving the performance of storm overflows.
Storm Overflow Discharge Reduction Plan (SODRP)	A strategic framework developed by the UK Government—specifically Defra—to tackle pollution from storm overflows in England.
Storm Tank Overflow	An overflow from temporary storage tanks designed to hold surplus stormwater during peak flow periods.

Water and Sewerage Company (WaSC) Or Sewage Undertaker	A legally appointed organisation responsible for managing public sewerage services within a defined geographical area in the UK. These organisations are typically regional water and wastewater companies.