Briefing paper



DIVERGING WASTEWATER POLICY

The implications of changes to EU policy for the UK





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The Institute for European Environmental Policy UK (IEEP UK) is a not-for-profit sustainability think tank, with over 40 years of experience. As part of the broader IEEP family, we are committed to advancing evidence-based research, analysis and policy insights concerning the UK and its interaction with policy in the EU and globally.

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Images

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EXECUTIVE SUMMARY



U law concerning collection and treatment of wastewater (sewage) has been dominated by the 1991 Urban Waste Water Treatment Directive. This legislation is still in force across the UK, even though there are significant questions about how well it is being implemented at present.

The EU has, however, just adopted a completely revised directive. This 2024 directive includes many changes, including:

- Many changes to definitions.
- The threshold for collection of wastewater is reduced from 2,000
 p.e. (population equivalent) to 1,000 p.e.
- The use of individual systems for smaller settlements needs stricter justification.
- Member States will need to produce integrated urban wastewater management plans, including to tackle storm water overflows.
- The requirements for secondary treatment will now apply to agglomerations of 1,000 p.e.
- The requirements for tertiary treatment (nutrient removal) are made stricter.
- The directive introduces a new quaternary treatment for large agglomerations to treat to control micropollutants.
- Wastewater treatment plants will need to be energy neutral.
- The directive introduces requirements on producers of medicines and cosmetics so they pay the costs of treatment of their chemicals in the wastewater.
- There are stronger links to obligations in the Water Framework
 Directive and Priority Substances Directive.
- There are stronger obligations on monitoring, inspection, penalties, etc.

IN THE UK THERE ARE ALREADY PROBLEMS IN DELIVERING THE INVESTMENTS NEEDED TO COMPLY WITH LEGISLATION WHICH IS NOW 33 YEARS OLD, SO THAT ADDING THESE NEW OBLIGATIONS WOULD BE A CHALLENGE There is a need for risk-based planning.

- There are new rights of access to sanitation (public toilets).
- There are provisions on sludge recovery, especially on phosphorus.

All of these legal changes mean that EU law is now different from UK law. This represents significant divergence between the EU and UK. In one area there has been some policy development in England. The Environment Act 2021 requires the Secretary of State to produce a plan for storm overflows. Such a plan was published in September 2023. This differs from the integrated urban wastewater management plans required under the new directive, but does represent some parallel policy activity. On 4 September 2024 the UK Government introduced The Water (Special Measures) Bill. This focuses on monitoring and enforcement of sewage discharges and has relevance to some provisions in the 2024 directive.

The new obligations in the 2024 directive will require significant investment in some parts of the EU. In the UK there are already problems in delivering the investments needed to comply with legislation which is now 33 years old, so that adding these new obligations would be a challenge. EXECUTIVE SUMMARY

INTRODUCTION



he issue of collection and discharge of sewage is one of the most high-profile environmental issues in the UK at the moment. Questions have been raised about storm water overflows (SWOs), dumping of sewage from tankers into sensitive waters, impacts on bathing waters (and other sensitive waters), compliance with permit conditions, and the role of the regulators, Ofwat and the Environment Agency (in England). This has resulted in some response by the previous government and also new UK case law. These arguments concern the interpretation of the law, its implementation (including monitoring to assess implementation) and the ability and willingness of regulators to take action to enforce the law. These are high profile issues and have strong political traction. However, the law itself in the UK has not changed (though may do soon – see below).

While this has been happening in the UK, the EU has developed and adopted new legislation on collecting and managing urban wastewater.¹

One area of focus for the work of IEEP UK is whether the UK and EU are diverging from each other with respect to environmental protection since the UK left the EU. Essentially the UK and EU were harmonised in their legal systems for environmental protection before the UK left. Since then, divergence could happen in different ways:

- Changed UK law leading to differences with the EU.
- ∞ Changed EU law, leading to differences with the UK.
- Changes in how the UK implements the law.

The UK has not changed the law on wastewater collection and treatment (though there are policy initiatives which will be explored later and a bill which would change some law). It may be argued that the current problems with sewage in the UK represents a change in implementation practice. However, this note focuses on one issue – divergence between the UK and the EU due to the adoption of new EU law. Transposition in the UK of the 1991 directive was similar in the different nations of the UK, but recent practical developments have



¹

Note that the 1991 directive (and UK law transposing it) referred to "waste water", while the 2024 directive refers to "wastewater". This briefing uses "wastewater", except where quoting the 1991 directive and relevant UK law.



differed across the UK. This note, therefore, focuses on England, though all of the legal changes at EU level described below represent divergence across the UK (not least whether sewerage is the responsibility of a public or private entity). In Scotland, for example, the Scottish Government published a consultation on water, wastewater and drainage policy in November 2023.²

An earlier briefing produced by IEEP UK explored whether there had been legal changes in the UK relating to sewage (given the debate on the issue).³ It concluded that there had not been and, therefore, any issue relating to sewage treatment in the UK were not as the result of legal divergence with the EU.

² https://www.gov.scot/publications/water-wastewater-drainage-policy-consultation/ pages/1/

³ Haigh, N. and Farmer, A.M. 2023. Sewage Discharges: Interaction between UK and EU Law continues post-Brexit. https://ieep.uk/incubator/wp-content/uploads/2024/01/ Sewage-Policy-Briefing_Nigel-Haigh-Andrew-Farmer_January-2024-1.pdf



THE LEGAL CONTEXT AND DEVELOPMENTS

U ntil recently EU law on the collection and treatment of wastewater was primarily the 1991 Urban Waste Water Treatment Directive 91/271/EEC⁴ (UWWTD). Alongside this, other EU law has established objectives for water quality and discharges from sewage treatment works need to ensure that these quality objectives are also complied with. This includes the Water Framework Directive 2000/60/EC and the Bathing Water Directive 2006/7/EC.⁵ For example, sewage treatment works may include disinfection to kill pathogens to ensure high quality bathing waters. This is not a requirement of the 1991 directive itself.

The UK (including the devolved administrations had fully transposed the 1991 directive (and other related EU water law) into UK law. In England, for example, this is mainly through the Urban Waste Water Treatment (England and Wales) Regulations 1994.⁶⁷ The process of withdrawal from the EU led to the decision to retain this legislation on the UK statute books. Therefore, until recently there was no significant legal divergence between the UK and EU on this issue.

This, however, has now changed. The European Commission undertook a detailed review of the 1991 directive, determining whether it was achieving its objectives and whether it was still fit for purpose 33 years after it was adopted. The review was initiated in 2017 in parallel with a Fitness Check of the Water Framework Directive. The evaluation⁸ was published in 2019 and concluded that the 1991 directive had been successful in increasing waste water collection and treatment, but changes were needed to address existing and emerging pollution, address climate change, and respond to technological developments issues (and take account of the fact that the EU had expanded from 12 to 27 Member States). IEEP undertook analysis to support the evaluation.⁹ IN 2024 A REVISED VERSION OF THE UWWTD WAS ADOPTED BY THE EUROPEAN PARLIAMENT AND EUROPEAN COUNCIL

⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31991L0271

⁵ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006L0007-20140101

⁶ https://www.legislation.gov.uk/uksi/1994/2841/contents

⁷ As well as SI No.1788 The Urban Waste Water Treatment (England and Wales)

⁽Amendment) Regulations 2003 and SI No. 558 The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019.

⁸ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019SC0700& qid=1690378833708

As a result, the European Commission proposed a revised directive in October 2022. In 2024 a revised version of the UWWTD was adopted by the European Parliament and European Council.¹⁰

There have also been some developments in the UK. Chapter 4 of the Environment Act 2021 requires the Secretary of State to produce a plan for storm overflows. As a result, in September 2023 the UK Government published a "storm overflows discharge reduction plan".

On 4 September 2024 the UK Government introduced The Water (Special Measures) Bill.¹¹ Once adopted, it would amend The Water Industry Act 1991. The aim of the amendments is to tackle pollution incidents from sewage discharges. The basic legal obligations regarding collection and treatment would be unchanged. Rather, the amendments strengthen enforcement and monitoring and require planning to reduce pollution incidents. Some consider that some of these provisions are available under existing legal powers, however.

The following sections explore the changes included within the 2024 directive. Each change is a potential divergence between the EU and UK. However, in some cases developments in the UK may (partially) mirror the provisions in the new directive and these are noted where relevant (though they are not relevant for most of the new provisions).

It is useful to distinguish legal divergence from practical divergence. EU Member States will have 30 months to transpose the 2024 directive into national law. Assuming they do so on time, this will represent extensive legal divergence between the UK and EU Member States. However, legislation takes time to implement. The analysis below sets out different timetables for different provisions in the 2024 directive. Some obligations also have intermediate deadlines with progressive implementation. Each would potentially represent practical divergence from the UK.

Definitions and other textual changes

Throughout the 2024 directive there are many amendments to the wording in the 1991 directive. All of these represent a divergence from the UK law. The 2024 directive includes new and revised definitions, such as on sewage systems, levels of treatment, micropollutants, etc., as well as in relation to completely new elements in the revised directive, such as relating to producer responsibility. Almost none of the definitions in the 1991 directive are unamended.



Wood, COWI, Institute for European Environment Policy, Centre for Hydrology and Informatics of the National Technical University of Athens, HR Wallingford and Czech Environmental Information Agency 2019. Study supporting the Evaluation of the Urban Waste Water Treatment Directive. EU MEMBER STATES WILL HAVE 30 MONTHS TO TRANSPOSE THE 2024 DIRECTIVE INTO NATIONAL LAW

¹⁰ pdf (europa.eu)

¹¹ https://bills.parliament.uk/bills/3751

Collection of urban wastewater

The 1991 directive (Article 3) required that all agglomerations above 2,000 population equivalent (p.e.) are provided with collecting systems for urban wastewater by the end of 2005. This is now amended in the 2024 directive to apply also to agglomerations between 1,000 and 2,000 p.e. by 31 December 2035. There are provisions for Member States to derogate from this deadline under specific conditions. This extension of the waste water collection system coverage is a divergence with the UK.

The 1991 directive stated, "Where the establishment of a collecting system is not justified either because it would produce no environmental benefit or because it would involve excessive cost, individual systems or other appropriate systems which achieve the same level of environmental protection shall be used." The 2024 directive clarifies this (Article 4) in that "environmental benefit" includes health benefits and that individual systems are to be subject to "regular inspections or other means of regular checks or control of those systems, on the basis of a risk-based approach, are carried out by the competent authority". As before, Member States need to justify their use of individual systems to the European Commission, but the 2024 directive includes a new provision that Member States must demonstrate that the use of such systems complies with the environmental requirements of the Water Framework Directive.

It is important to note that the environmental regulators in all four nations of the UK have conducted inspections on a risk-based approach for many years. Indeed, the approach used by the Environment Agency has, through the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL)¹² in particular, been influential as a model in EU Member States. There has, however, been concern that in recent years budget and other constraints have reduce inspection frequency in the UK. However, a specific frequency is not stated in the 2024 directive.

Integrated Urban Wastewater Management Plans

Article 5 of the 2024 directive introduces the requirement for Member States to adopt Integrated Urban Wastewater Management Plans. It is within these that storm water overflows are addressed. There have been developments on planning for this issue recently in England. In considering the extent of divergence between the EU and UK, this, therefore, deserves more detailed examination. An Annex at the end of this briefing note does this. Also relevant is the requirement in The Water (Special Measures) Bill for water companies to publish annual Pollution Incident Reduction Plans, setting out steps they are taking to address their pollution incidents.

¹² Note that the UK is still a member. https://www.impel.eu/en

Secondary treatment

The provisions on secondary treatment have been extensively amended in the 2024 directive. Some is substantive, including on derogations. The extension of requirements to collect wastewater collected from agglomerations between 1,000 and 2,000 p.e. means that the requirements for secondary treatment are extended and Article 6 includes progressive deadlines to achieve this. Previously the main derogation was for marine areas where there might be rapid dispersal (previously known as less sensitive areas), but to this has been added high mountain areas and (for agglomerations between 1,000 and 2,000 p.e. only) areas with a cold climate where biological treatment might not be practicable. All of this represents divergence with the UK.

Tertiary treatment

The 1991 directive stated "Member States shall ensure that urban wastewater entering collecting systems shall before discharge into sensitive areas be subject to more stringent treatment than that described in Article 4, by 31 December 1998 at the latest for all discharges from agglomerations of more than 10 000 p.e."

The 2024 directive (Article 7) now refers to "tertiary treatment" specifically. It also extends the requirements for tertiary treatment beyond sensitive areas. With intermediate deadlines, it requires "that all urban wastewater treatment plants treating a load of 150 000 p.e. and above meet the relevant requirements for tertiary treatment". Furthermore, also with intermediate deadlines, tertiary treatment is required for agglomerations above 10,000 p.e. by 2045. There are possible temporary derogations from these deadlines and also the option (as in the 1991 directive) for a whole Member State approach to reducing nitrogen and/or phosphorus discharges. However, the amount to be reduced at a whole Member State level is much tougher than in the 1991 directive. Overall, this represents a major extension in the use of tertiary treatment and divergence from the UK.

Quaternary treatment

There is a new category of quaternary treatment introduced into the 2024 directive (Article 8 and Annex I). This is treatment to address micropollutants. There are requirements for discharges from agglomerations above 150,000 p.e. and above 10,000 p.e. with progressive deadlines until all must comply by 2045. Assessments of threats to human health, including specifically to bathing waters, must be made. This is divergent from the UK.



Extended producer responsibility (EPR)

Article 9 of the 2024 directive is a radical departure from the 1991 directive in that it is not directed to operators of wastewater collection and treatment systems. Rather it is directed to producers of products listed in Annex III (medicinal and cosmetic products) to ensure that they cover "at least 80% of the full costs for complying with the requirements set out in Article 8" of quaternary treatment and also the full cost of gathering and verifying information on the placing of products on the market. Article 10 provides for the creation of producer responsibility organisations and there are exemptions for low quantities placed on the market.

EPR is a well-established mechanism in waste management to encourage waste reduction, etc., by producers and direct funds to support consumer awareness, recycling, etc. It is important to note that UK producers of medicinal and cosmetic products selling into the EU will be "captured" by this provision. This provision on EPR is a significant divergence from the UK.

Energy neutrality

Article 11 of the 2024 directive is also new. It requires energy use audits to be carried out for treatment plants above 10,000 p.e. and then, with intermediate targets, for the energy used to be 100% renewable by 2045 (with some specific, limited derogations). This is divergence from the UK.

Transboundary cooperation

Article 12 of the 2024 directive covers transboundary cooperation. It is a little more elaborate than the 1991 directive but does not add much to the existing requirements.

Local climatic conditions

Article 13 of the 2024 directive requires water treatment plants to be able to operate under normal local climatic conditions, as previously required by Article 10 of the 1991 directive. However, this is now elaborated so that the design of new plants should take account of future climate change.

Discharges of non-domestic wastewater

The 1991 directive essentially required that industrial wastewater be subject to prior authorisation and meet certain specified conditions. The 2024 directive extends this in Article 14. First, it requires that obligations arising from the Water Framework and Priority Substances Directives are met. It also includes several provisions linking it to the risk assessments surrounding the protection of sources of abstraction for UK PRODUCERS OF MEDICINAL AND COSMETIC PRODUCTS SELLING INTO THE EU WILL BE "CAPTURED" BY THIS PROVISION drinking water as set out in the Drinking Water Directive. Alongside this are obligations on competent authorities regarding prior authorisations and compliance checking. This represents divergence from the UK.

Water reuse and discharges of urban wastewater

The 1991 directive promoted water reuse and required prior authorisation, with Member States being able to set conditions. The 2024 directive expands on this significantly, not least by building on Regulation 2020/741 which sets standards for reused wastewater. Article 15 of the 2024 directive also requires Member States to adapt their wastewater collection and treatment systems to address growing urban populations and discharges and sets out requirements to ensure that this meets the requirements of the Water Framework Directive. This represents divergence from the UK, which has also not included Regulation 2020/741 in UK law.

Biodegradable non-domestic wastewater

Article 16 of the 2024 directive sets out conditions for discharge of biodegradable wastewater from industry that is not discharged to the domestic wastewater collection system, and which is not regulated under the 2010 Industrial Emissions Directive above 4,000 p.e. These discharges must at least meet conditions set out in an Annex to the directive.

Urban wastewater surveillance

The 1991 directive required competent authorities to monitor compliance. The 2024 directive goes well beyond this. Article 17 requires Member States to set up a national system for cooperation and coordination between competent authorities to identify "relevant public health parameters, that are to be monitored at least in the inlet of urban wastewater treatment plants", identify roles, to determine appropriate monitoring and determine communication to the public. For treatment plants above 100,000 p.e. antimicrobial resistance must be monitored. There are also provisions concerning public health emergencies. This represents legal divergence from the UK, but may not be practical divergence. Note that policy and legal developments in England, on monitoring, focus particularly on monitoring by water companies themselves.

Risk assessment and management

Article 18 of the 2024 directive requires that by 31 December 2027, Member States shall identify and assess the risks caused by urban wastewater discharges to the environment and human health, taking into account seasonal fluctuations and extreme events and at least those related to a range of other directives (Water Framework, Bathing Waters, Drinking Water, etc.). Where there are risks, Member States shall take measures including all those in the directive and others where necessary, e.g. for agglomerations below 1,000 p.e. The risk assessment shall be repeated and aligned with the production of River Basin Management Plans under the Water Framework Directive. This represents divergence from the UK.

Access to sanitation

Article 19 of the 2024 directive requires that Member States take measures to ensure access to sanitation for all, in particular for vulnerable and marginalised groups. Member States need to assess the situation and for all agglomerations above 10 000 p.e., encourage the establishment of a sufficient number of sanitation facilities in public spaces, which are freely and, in particular for women, safely accessible and in such case ensure appropriate information to the public (and there are also further requirements for smaller agglomerations). This represents divergence from the UK.

Sludge and resource recovery

Member States (Article 20 of the 2024 directive) shall encourage the recovery of valuable resources from sewage sludge and take the necessary measures to ensure that sludge management routes conform to the waste hierarchy (prevent, reuse, recycle, recover). The European Commission is to adopt delegated acts particularly with regard to recycling of phosphorus. Article 14 of the 1991 directive encouraged reuse of sludge while avoiding harm to the environment. Its other main focus was to ban dumping of sewage sludge at sea. The 2024 directive embeds management of sewage sludge more effectively into the waste hierarchy. This represents divergence from the UK.

Monitoring

In the 1991 directive monitoring was addressed in Article 15 which required competent authorities to monitor discharges to ensure compliance and monitor discharges of sludge to surface waters. They were also to monitor receiving waters to assess the consequences of discharges. The 2024 directive (Article 21) retains these provisions, adding a cross check to the composition of sludge as per the 1986 Sewage Sludge Directive. It also requires monitoring of carbon dioxide emissions and energy use by treatment plants. Further, there shall be monitoring of storm water overflows and specific monitoring of microplastics. Member States shall also ensure monitoring at inlets and outlets of treatment plants of a whole list of pollutants specified in other directives, such as the Priority Substances Directive, EPRTR, etc., PFAS, Bathing Water Directive parameters and also microplastics. The



directive specifies the frequency of monitoring (which varies according to agglomeration size). Article 22 addresses management of this information, with responsibilities for the European Commission and European Environment Agency.

In the UK there has been criticism of insufficient monitoring of sewage discharges. The 2023 Storm Overflows Discharge Reduction Plan included additional monitoring requirements and the 2024 Water (Special Measures) Bill includes further monitoring provisions for emergency sewage overflows, requiring real time data publication. These specific detailed provisions are not in the 2024 directive (though are consistent with it). However, the other new monitoring provisions in the 2024 directive are not included.

National implementation programme

Within three years, Member States shall (Article 23 of the 2024 directive) establish a national implementation programme for this Directive. This will identify the actions needed (including to replace systems that are at the end of their life), the costs of doing so and the investment needs and sources.

Information to the public and access to justice

Article 24 of the 2024 directive requires that a range of information is to be made available to the public (and proactively supplied to those paying for sewerage services). Details of what and its frequency are specified. This is not in the 1991 directive, though such information would have already been subject to the Access to Information Directive. Similarly, Article 25 of the 2024 directive introduces Access to Justice, which is potentially already covered by the separate Access to Justice Directive, though the 2024 directive provides additional detail. The Access to Information and Access to Justice Directives are in UK law.

Compensation

Where damage to human health has occurred as a result of a violation of national measures that were adopted pursuant to the 2024 directive, Article 26 requires that the individuals affected have the right to claim and obtain compensation for that damage from the relevant natural or legal persons, in accordance with national rules. Member States shall ensure that national rules and procedures relating to claims for compensation are designed and applied in such a way that they do not render impossible or excessively difficult the exercise of the right to compensation for damage.

With regard to divergence from the UK, it is important to note the ruling of the Supreme Court¹³ on 2 July 2024 that The Manchester Ship Canal Company Ltd is entitled to bring a claim when the canal

is polluted by sewage discharges from outfalls maintained by the statutory sewerage undertaker, United Utilities Water Ltd. There is, therefore, provision in existing English law for some compensation, but whether this is as broad as the provisions in the 2024 directive (e.g. including individuals) is a subject that deserves more detailed examination.

Penalties

Article 29 of the 2024 directive requires that Member States lay down the rules on penalties applicable to infringements of national provisions adopted pursuant to the directive and shall take all measures necessary to ensure that they are implemented. This type of provision is now standard in directives, but was not the case in the 1991 directive.

The issue of penalties for environmental offences has also evolved in EU law through the adoption of a revised Environmental Crime Directive in 2024. A separate IEEP briefing¹⁴ explores this, including how it compares with UK developments on penalties. The approach to penalties and assessment of severity, etc., is already a feature in UK law and the Environment Agency and other UK agencies have formal enforcement policy documents. It is important to note that even with EU law on environmental crime there is still much variation between Member States on the scope and application of criminal law to environmental offences and the penalties applied.¹⁵

The Water (Special Measures) Bill has a specific focus on penalties regarding non-compliance for sewage discharge obligations. This gives powers to Ofwat to ban the payment of performance-related pay including bonuses to chief executives and senior leadership of water companies as well as removing them from employment if necessary. It also changes the standard of proof for the Environment Agency from the criminal to the civil standard. It also sets the basis for further increases to administrative fines. These provisions are consistent with the 2024 directive.

¹³ https://www.supremecourt.uk/cases/docs/uksc-2022-0121-press-summary.pdf

¹⁴ Nicholson, M. (2024). A new EU Environmental Crime Directive – a diverging approach with the UK. IEEP London.

¹⁵ See: Farmer, A.M., Faure, M. and Vagliasindi, G.M. (2020). Environmental Crime in Europe. Hart Publishing (Bloomsbury). https://www.bloomsbury.com/uk/ environmental-crime-in-europe-9781509937455/

CONCLUSIONS

he EU's 2024 Urban Wastewater Directive is a major extension and revision of the earlier 1991 directive that the UK implemented whilst a member of the European Union. The 2024 directive involves significant changes to the collection and treatment of wastewater in the EU and also of storm water overflows. On top of this is there is a whole new range of provisions to monitor and check on general implementation and specific pollutants, which further represents a significant divergence from current UK law and practice.

The costs of implementing the new provisions will no doubt be significant in many EU Member States. In the UK there is debate about the costs to implement the provisions of the existing law (even though it is over 30 years old). If the UK were still in the EU, and had to implement this new directive, adding the costs of the new provisions in the 2024 directive would be a significant additional challenge to UK water companies, which are struggling to already comply with the 1991 directive (and, as the Office for Environmental Protection has shown,¹⁶ resulting in problems to comply with the Water Framework Directive).

On the wider subject of EU/UK divergence, this new directive illustrates how broad such divergence can become in a short period of time. While one might imagine EU law becoming "stricter" and potentially leaving the UK behind, the 2024 directive is much more than this. Yes, its provisions on collection and treatment are much "stricter", but it also adds many new provisions and takes the law on wastewater treatment into new areas – EPR for medicine and cosmetic producers for example. HIS NEW DIRECTIVE ILLUSTRATES HOW BROAD SUCH DIVERGENCE CAN BECOME IN A SHORT PERIOD OF TIME

¹⁶

OEP (2024). A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England. OEP finds 'deeply concerning' issues with how the laws in place to protect England's rivers, lakes and coastal waters are being put into practice | Office for Environmental Protection (theoep.org.uk)

ANNEX



Integrated Urban Wastewater Management Plans and Storm Water Overflow Plans

Article 2.6 of the 2024 directive provides a definition: "storm water overflow' (SWO) means discharge of untreated urban wastewater into receiving waters from combined sewers caused by precipitation or system failures". Note that the discharge problems from SWOs are not limited to rainfall events but include "system failures".

The new requirements in Article 5 of the 2024 directive on "Integrated urban wastewater management plans" requires that, by 31 December 2033, Member States shall ensure that an integrated urban wastewater management plan is established for drainage areas of agglomerations of 100 000 p.e. and above. Article 5.2 requires analysis of pressures from SWOs. This analysis shall begin with a list of agglomerations of between 10 000 p.e. and 100 000 p.e. where SWOs are a problem (as defined later). This is to be done within the River Basin Management Plans of the Water Framework Directive – either six months after the next RBMP update or by 22 June 2028.

Annex V of the 2024 directive concerns the content of the plans. This includes a detailed analysis of the initial situation of the drainage area, including sewage capacity, flows in different rainfall conditions, etc. This should lead to an estimation of pollution loads. There is also a description of monitoring. Annex V states that the plans should include "Objectives for the reduction of pollution from storm water overflows. Annex V continues that the plan must include "measures to be taken to achieve the objectives ... in accordance with the deadlines ... accompanied with a timeline for the implementation of the measures and a distinction between measures already in place and to be taken. It shall also contain a clear identification of the integrated plan."

The important point within Annex V is the objectives relating to reduction of discharges from SWOs. Article 5 requires an analysis of the problem and how that is linked to other EU legislation. Annex V sets a target. However, this is described as an "indicative non-binding objective". This non-binding objective is then linked to two deadlines (for different sizes of agglomeration). It ought to be noted, however, that the analysis under Article 5 should explicitly list all of the cases where SWOs prevent the achievement of objectives under other EU water law. Each of these



has their own deadlines and whether they are binding or not. With the analysis in the plan under the 2024 directive, the Commission could take enforcement action under another directive if necessary.

In England, Chapter 4 of the Environment Act 2021 requires the Secretary of State to produce a plan for storm overflows. In September 2023 the UK Government published a "Storm overflows discharge reduction plan"¹⁷ [hereinafter referred to as the 'England Plan']. The plan is a plan, but also not a plan – it is more correctly a policy statement, as it sets a requirement on water companies to develop plans. It is in those water company plans that should contain details about specific SWOs, problems and measures. The England Plan sets the following targets:

- "By 2035, water companies will have: improved all storm overflows discharging near every designated bathing water; and improved 75% of storm overflows discharging into or near 'high priority sites' (as defined in Annex 1).
- By 2045, water companies will have improved all remaining storm overflows discharging into or near 'high priority sites'.
- By 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm."

It is important to note that the targets only apply to all inland storm overflows. The plan argues that "there is currently no common standard for testing the ecological impact of storm overflows in coastal and estuarine waters". The plan states the government will develop this standard. It is not clear why water companies cannot use the extensive ecological status criteria already available for coastal waters under the Water Framework Directive.

High priority sites are mostly nature conservation sites of different types. There is also the somewhat vague "waters currently failing our ecological standards". This is similar to the "adverse ecological harm" in the third objective. This is clarified in Annex I which states "For the purposes of this Plan, 'no local adverse ecological impact' means achieving the Urban Pollution Management Fundamental Intermittent Standards (FIS) or 99 percentile standards for Ammonia and Dissolved Oxygen downstream of the discharge point". This is very specific and does not include wider ecological status objectives and assessments set out in River Basin Management Plans. It should be noted that the assessment is not against the specific ecological/conservation characteristics of these sites, but the specific chemical objectives within these sites. It is also important to note that the first two targets stated FT IS IMPORTANT TO NOTE THAT THE TARGETS ONLY APPLY TO ALL INLAND STORM OVERFLOWS

ANNE)

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https://assets.publishing.service.gov.uk/media/6537e1c55e47a50014989910/Expanded_ Storm_Overflows_Discharge_Reduction_Plan.pdf



The targets described above are elaborated further in the plan and then additional targets are set out. These are:

- Water companies must significantly reduce harmful pathogens from storm overflows discharging near designated bathing waters, by either: applying disinfection; or reducing the frequency of discharges to meet Environment Agency spill standards by 2035.
- Storm overflows will not be permitted to discharge above an average of 10 rainfall events per year by 2050. This target must be achieved for at least 75% 'high priority sites' by 2035 and for 100% of 'high priority sites' by 2045.
- Water companies will be required to ensure all storm overflows have screening controls.

On "achieving the targets", the plan requires the following:

- Water companies must comply with all their existing regulatory obligations and duties, including permits issued by the Environment Agency.
- 2. Water companies should have maps of their sewer networks and understand where properties with separate rainwater pipes are connected to their sewer network.
- 3. Water companies have clearly set out how they will meet their storm overflow targets in their Drainage and Wastewater Management Plans.
- 4. In developing the best solutions, water companies should base their decisions on robust evidence and explore ways to maximise wider benefits where solutions can address multiple issues, delivering best value for people and the environment.
- 5. Water companies should achieve year on year reductions in the amount of surface water that is connected to their combined sewer network.
- 6. Water companies should prioritise a natural capital approach, considering carbon reduction and biodiversity net gain, as well as catchment level and nature-based solutions in their planning.
- 7. Water companies are expected to consider treatment of sewage discharges as an alternative solution where appropriate.
- 17 https://assets.publishing.service.gov.uk/media/6537e1c55e47a50014989910/Expanded_ Storm_Overflows_Discharge_Reduction_Plan.pdf

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The plan also has a relatively detailed section on costs and links to consumer prices.

On the question of divergence between the UK and EU it is first important to stress that the 2024 directive is law, the England plan is not law. The Environment Act 2021 is law, but its provisions on developing plans are very limited.

The definition of a SWO in the 2024 directive includes "system failures". However, the Environment Act 2021 lists a series of system failures that are excluded from the definition in English law. This is, therefore, a clear case of divergence and all subsequent comparisons of targets, measures, etc., would need to take this into account.

The 2024 directive requires plans to be produced at the scale of the drainage areas of agglomerations of different sizes. The England plan is a plan at "country" scale. However, the England plan requires that water companies set out how they will meet their SWO targets in their Drainage and Wastewater Management Plans, which would be equivalent in scale to the plans in the directive.

The England plan is different to the plans envisaged in the 2024 directive. The directive begins the planning process by requiring a detailed assessment of the problem (now and in the future) of the SWOs in a drainage area, of the impacts on a range of EU legal objectives, etc. The England plan sets out the problem in far more general terms. It is too high a scale to go into detail about individual SWOs. This will need to be developed subsequently by the water companies.

Another difference between the two is financial. The England plan explores the costs of implementation and how this needs to be addressed. The directive does not do this.

The objectives in the revised directive and the England plan are quite different. Firstly, the 2024 directive's targets are "indicative" and "nonbinding". This is not the case for the England plan. Second, the directive sets an objective for SWO discharges as a comparison to annual collected load in dry weather conditions. The England plan refers to "improving" SWOs (by a target) themselves. The 2024 directive also refers to the progressive reduction of macroplastics.¹⁸ This is not a specific element in the England plan.

Another comparison is the target dates. The 2024 directive has one objective to be met by 2039 for agglomerations above 100,000 p.e. and 2045 for those below this. The England plan has progressive targets for 2035, 2045 and 2050. Because the objective for SWOs is formulated in different ways, it is not possible to compare likely progress on these dates.



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This is in addition to the provisions on microplastics for larger treatment plants.

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A further issue is prioritisation. The England plan refers to priority sites and lists what these are. The progressive reduction of SWO discharges should first aim to protect these sites. There is a further additional emphasis on bathing waters. The 2024 directive infers a similar prioritisation in that the plans must include a detailed analysis of where SWOs threaten the achievement of a range of objectives in EU water law (including bathing waters). The assumption (given Member States are at risk from non-compliance) would be that where SWOs pose a risk, this might prioritise interventions.

A further difference is that the England plan assesses discharges based on limited chemical parameters. The 2024 directive cross refers to a wide range of EU legal objectives (chemical, microbiological and ecological). If "harm" in the England plan is judged simply by those chemical parameters, then there could be difference in outcomes. However, the England plan states that "This target will ensure that no water body in England should fail to achieve good ecological status due to storm overflow discharges." This indicates that the expectation is that much broader targets will be achieved.

The 2024 directive requires plans to state clearly who is responsible for what action. The England plan sets out some responsibilities (for the water companies, Environment Agency and Ofwat), but more would be identified by the water companies themselves.

On the specific issue of SWOs, there is clearly divergence between the EU and UK as both seek to address the problem. The challenge for the EU is the wide variation in the extent of the problem. As one would expect, the 2024 directive links its actions to objectives in other EU law, while the UK prioritises objectives that have a more domestic origin (for some). The 2024 directive has more detailed requirements on what analysis to undertake in a plan, except on the issue of finance, which is stronger in the England plan. The targets in the directive are, however, "soft" compared to those in the England plan.



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