



Office for
Environmental
Protection

A review of implementation of the Water Framework Directive Regulations and River Basin Management Planning in England



Office for
Environmental
Protection

A REVIEW OF IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE REGULATIONS AND RIVER BASIN MANAGEMENT PLANNING IN ENGLAND

Presented to Parliament pursuant to section 29(2)
of the Environment Act 2021

May 2024

The Office for Environmental Protection is a non-departmental public body, created in November 2021 under the Environment Act 2021. Our mission is to protect and improve the environment by holding government and other public authorities to account. Our work covers England and Northern Ireland. We also cover reserved matters across the UK.

www.theoep.org.uk/what-we-do



© Copyright 2024

Contains public sector information licensed under the Open Government Licence v3.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence.

This publication is available at www.gov.uk/official-documents

Any enquiries regarding this publication should be sent to us at:

The Office for Environmental Protection

Wildwood

Wildwood Drive

Worcester

WR5 2NP

www.theoep.org.uk

03300 416 581

enquiries@theoep.org.uk

ISBN: 978-1-5286-4757-1

E03031974 05/24

Printed on paper containing 40% recycled fibre content minimum

Printed in the UK by HH Associates Ltd. on behalf of the Controller of His Majesty's Stationery Office

Contents

Foreword.....	3
Executive summary and recommendations.....	7
Chapter 1. Introduction	17
Chapter 2. The Water Framework Directive Regulations and River Basin Management Plans.....	29
Chapter 3. The water environment in England.....	49
Chapter 4. Effectiveness of implementation of the Water Framework Directive Regulations.....	65
Chapter 5. Effectiveness of the legal and policy framework.....	111
Annex 1. Glossary	147
Annex 2. Stakeholder engagement and expert review	157
Annex 3. The Water Framework Directive	163
Annex 4. Summary of monitoring, assessment and classification under the Water Framework Directive Regulations	169
Annex 5. Challenges in relation to some specific sources of pollution and other pressures	173

Foreword



Foreword

Recent assessments of the condition of our rivers, lakes and other surface waters show that over four in five are not in good ecological condition, or on a trajectory towards it. We have seen little change in recent years, despite measures designed to improve matters. As things stand, Government will not meet its ambition that most water bodies will be on the road to good condition or else already in that state by 2027.

This is not just a laudable aim in itself. Waters in good condition help us to adapt to climate change, for example by building resilience, protecting ecosystems and ensuring we have enough clean water to drink. And the quality of our waters matters when it comes to Government's ambitions and statutory targets for our plants and wildlife. Early in 2023, Government proposed and Parliament agreed biodiversity and species targets to be met by 2030. For England to experience a halt in the decline of our birds, fish, invertebrates and other wildlife, the state of our waters needs to improve.

There is an integrated, evidence-based regime in place to assess the state of the water environment, set objectives and implement measures to drive the necessary improvements. However, while we believe the underlying approach of the regime is broadly sound, it is not being implemented effectively and is far from delivering as it should. In this report we look in detail at the reasons why progress has been so faltering. We recommend some practical and specific measures, including a need for additional funding, to increase the prospects of success.

As in so many other aspects of the environment, there is a need to not just redouble existing effort, but to take a wider range of action, at pace and with ambition. Without such measures, we assess that the commitment by Government and the Environment Agency to bring 77% of surface water bodies to a good ecological condition by 2027 will be missed by a considerable margin.

Our worst-case assessment would see just 21% of surface waters in this state by 2027, representing only a 5% improvement on the current situation. This would fall far short of the outcomes to which Government and the Environment Agency have committed under environmental law. It highlights the need for urgent additional action to maximise environmental improvements and the likelihood of achieving the 2027 objectives.

Overall, therefore, we see a significant need to strengthen how environmental law on water is applied to increase its effectiveness and support Government's wider goals and targets. We encourage Government to pursue the major reset that we believe is required as it takes forward its 'Plan for Water'.

There are underlying and seemingly endemic issues (a lack of robust delivery arrangements and poor governance, for example) that prevent progress here, just as we have highlighted in other areas of environmental protection and improvement.¹ Yet these endemic issues are not irresolvable. They can be addressed, with the will to do so, and must be addressed to materially improve performance towards targets.

1 Office for Environmental Protection, 'Progress in Improving the Natural Environment in England 2022/2023' (2024) <www.theoep.org.uk/report/government-remains-largely-track-meet-its-environmental-ambitions-finds-oep-annual-progress> accessed 22 January 2024.

We make specific recommendations to Government, Defra and the Environment Agency designed to increase the prospects of protecting and improving the water environment, including in relation to the 2027 objectives. We also present recommendations to strengthen the legislative framework and its governance and application in the longer-term.

We are grateful to all of those who have submitted information to us, and who have given generously of their time and expertise to inform our thinking. We hope our analyses and recommendations prove useful and informative, as Government considers ways forward.



A handwritten signature in black ink, appearing to read 'G Stacey'.

Dame Glenys Stacey
Chair, Office for Environmental Protection

Executive summary and recommendations



Executive summary and recommendations

Introduction and overview

In this report, we look at whether plans to improve England's water bodies will be enough to meet the 'Environmental Objectives' under the Water Framework Directive (WFD) Regulations.² We also look more broadly at the effectiveness of the regulations, their implementation and how they interact with other laws and policies.

Our assessment is that Government is not on track to meet the Environmental Objectives it has set under the regulations. We are particularly concerned about the Environmental Objectives with a 2027 deadline. The measures in place and planned and the funds committed are not yet close to being enough to meet these outcomes for most water bodies. Without significant additional action and resources, applied with pace and ambition, they appear likely to be missed by a large margin.

In our view, this situation triggers the requirement in the WFD Regulations for additional measures where Environmental Objectives are unlikely to be met (Regulation 25). We therefore recommend that the Secretary of State and the Environment Agency (EA) take urgent action to identify further, practical and specific measures with committed funding to maximise environmental improvements and the likelihood of reaching the Environmental Objectives they have set for 2027.

Most of the issues we identify could be addressed within the existing regime. If applied effectively, we consider that the WFD Regulations provide a sound basis to manage and monitor the water environment. We therefore advocate retention of their fundamental, underlying structure and approach in the case of any future reform, while taking some key opportunities to improve the regime without lowering current levels of protection or lessening ambition. We also make recommendations to strengthen the wider legal, governance and policy landscape to better protect and enhance the water environment.

The WFD Regulations

The regulations reflect an outcome-based approach to environmental law, and specify processes to achieve those outcomes. They aim to return water bodies to a condition that is at or close to a natural state. This aim is also reflected in Government's 2023 Environmental Improvement Plan ('EIP23').³

Implementation of the WFD Regulations involves setting binding Environmental Objectives for water bodies in 10 'River Basin Districts' (RBDs) in England. For these RBDs, the EA and Government produce 'River Basin Management Plans' (RBMPs) which include the Environmental Objectives and summarise 'Programmes of Measures' to meet them. These plans should then cascade through to decision-making and physical action to realise the intended outcomes.

² The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407.

³ Defra, 'Environmental Improvement Plan 2023' (7 February 2023) <www.gov.uk/government/publications/environmental-improvement-plan> accessed 9 November 2023.

The Environmental Objectives are also significant for wider environmental law and policy. They underpin the EIP23 goal of ‘clean and plentiful water’. They are important, too, for other Government goals and targets. These include the EIP23 goal of ‘thriving plants and wildlife’, and water and biodiversity targets under the Environment Act 2021. The WFD Regulations additionally support adaptation to climate change and the implementation of international commitments.

Government’s ‘Plan for Water’,⁴ published in April 2023, aims to build on the EIP23. It outlines additional actions to support the ‘clean and plentiful water’ goal and Environment Act targets. In the plan, Government commits to reviewing implementation of the WFD Regulations. We support such a review, which should aim to provide clear, coherent plans and measures that stack up to enable delivery of an improved water environment.

Government is not on track to meet the Environmental Objectives

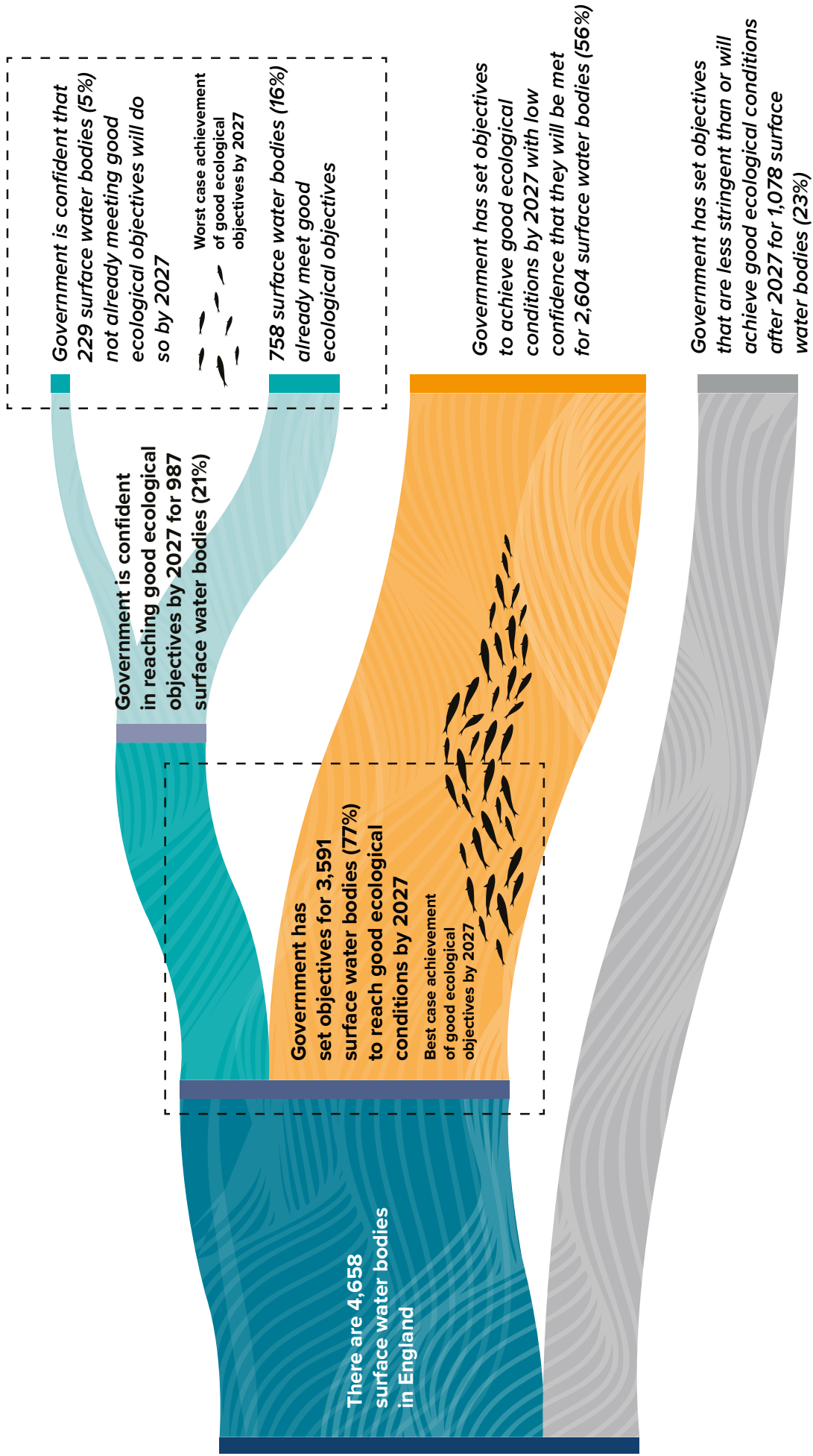
Most of England’s water bodies are in an unsatisfactory state. While levels of some individual pollutants have been reduced over the years, pollution and other pressures are still problematic. The pace of change has stalled and only 16% of surface waters currently meet the WFD Regulations’ objectives of ‘Good Ecological Status’ or ‘Good Ecological Potential’. Not only has there been little overall positive change in the state of water bodies in recent years, there has also been some apparent regression.

Whilst we recognise and commend current action to drive improvement, Government, the EA and others including water companies, farmers and landowners need to do more. This is not just our view. The RBMPs show that Government and the EA have a significant lack of confidence that the 2027 Environmental Objectives they have set for most water bodies will be achieved.

The RBMPs’ Environmental Objectives are, at first sight, ambitious. If met, they would bring 77% of England’s 4,658 surface water bodies to Good Ecological Status or Potential by 2027. However, the RBMPs also highlight Government and the EA’s ‘low confidence’ in this outcome for 56% of these water bodies. This leaves only 21% where they have more than low confidence in achieving these Environmental Objectives, an increase of just 5% on the 2019 figure. We illustrate this in Figure 1.

4 Defra, ‘Plan for Water: Our Integrated Plan for Delivering Clean and Plentiful Water’ (4 April 2023) <www.gov.uk/government/publications/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water> accessed 9 November 2023.

Figure 1 . Best- and worst-case scenarios for the ecological condition of surface water bodies by 2027 based on the Environmental Objectives in RBMPs



What is holding back progress?

Successful application of the regime requires translating its objectives and plans into tangible and effective measures to manage the effects of human activities on water bodies. However, our assessment is that there are not enough specific, time-bound and certain measures in the RBMPs to achieve the Environmental Objectives. Progress is also impeded by a range of further factors, including the following.

Insufficient investment in measures to address all major pressures. The EA has calculated a cost of £51 billion to achieve the Environmental Objectives, providing £64 billion in monetisable benefits.⁵ However, confirmed funding of only £6.2 billion is just 12% of that required. Significant further investment in the water industry is expected, to implement the storm overflows discharge reduction plan⁶ and through the 2025-2030 price review. However, the amount, pace and contribution of these investments towards the Environmental Objectives are not fully yet known. Moreover, other major sources of pressure, such as agriculture and transport, are not receiving the same resources or attention. Overall, we do not yet see a picture of the necessary resources being directed to all major pressures to meet the Environmental Objectives. In the meantime, the benefits or avoided costs that additional investments could deliver are not being realised.

Measures contained in the RBMPs are too generic. There is little explanation of how it is expected that they will address pressures and achieve the Environmental Objectives at the RBD and water body levels. There are also significant gaps in the tools and resources that are being deployed, leaving them insufficient to achieve Government's intended outcomes and commitments.

Lack of pace and certainty. The timing to apply some measures appears drawn out, or in certain instances unknown or open ended. Slow progress with Environmental Land Management schemes and Diffuse Water Pollution Plans illustrates where action needs to be stepped up to improve the pace and likelihood of meeting objectives.

Lack of clear governance arrangements for practical delivery. Our assessment highlights a lack of clear governance arrangements to implement RBMPs and concern that adequate mechanisms to ensure their application are not always in place.

Gaps in monitoring. There is not currently a monitoring and evaluation framework that considers progress towards the Environmental Objectives and other related Government goals and targets in an integrated way. There is also a need to consider how to monitor and set standards for emerging substances of concern.

Public participation, clarity and transparency

The RBMPs present detailed information and have led to a better understanding of the state of the water environment, including at a water body level. However, we see a recurring theme of lack of clarity and transparency in certain areas. This undermines the ability to scrutinise the RBMPs and what they aim to deliver.

5 Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (29 November 2022) <www.gov.uk/government/publications/investment-requirements-for-englands-river-basin-management-plans/investment-requirements-for-englands-river-basin-management-plans> accessed 14 November 2023.

6 Defra, 'Storm Overflows Discharge Reduction Plan: Impact Assessment' (2022) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1102403/storm-overflows-impact-assessment.pdf> accessed 14 November 2023.

The regulations allow exemptions to be applied in setting Environmental Objectives for water bodies. However, these are not clearly and robustly justified in the RBMPs.

More broadly, we and other stakeholders have found the RBMPs complex and hard to navigate. This is a barrier to public participation and could be making it more difficult for public bodies to meet their duty to ‘have regard to’ the RBMPs.

Our conclusions

Overall, a picture emerges of application of a regime that provides significant technical analysis and a vision of an improved water environment, yet lacks robust delivery and governance mechanisms to create accountability and achieve outcomes.

In our view, the RBMPs, the measures they contain and the mechanisms for their implementation are not commensurate with the essential task of driving delivery at the scale and pace needed. Given that funding, specificity and time-bound commitments are all limited, we conclude that the Programmes of Measures are not able to meet the approved Environmental Objectives. A failure to achieve the Environmental Objectives would lead to a consequential failure to achieve the EIP23 ‘clean and plentiful water’ goal and risks to other related goals including ‘thriving plants and wildlife’.

To maximise environmental improvements and the likelihood of meeting the Environmental Objectives, we highlight a need for Government and the EA to identify additional practical and specific measures with committed funding. These should be implemented with certainty and at pace. This needs stronger leadership and ownership by Government of how the WFD Regulations are applied. It also needs to involve all the main players in a more effective way, including Defra, the EA, Natural England, Ofwat, water companies, the farming sector and local, planning and highways authorities.

Adequate governance mechanisms are also lacking, exacerbating deficiencies impeding progress. To drive delivery, there should be clarity about who is accountable, and how decisions are made and progress towards Environmental Objectives assured across Government and other bodies. Moreover, the degree of disclosure and transparency has not been consistent with that needed for public scrutiny or accountability.

Compliance

Based on the available information, we also identify in this report several areas where we currently consider that the approach to implementation may not comply with the requirements of the WFD Regulations. These relate to the setting of Environmental Objectives with ‘low confidence’, how objectives will be met at the water body level, timeframes to make measures operational, justification of exemptions, and public participation and consultation on certain aspects of the RBMPs. The condition of some water bodies has also declined, in apparent contravention of the regulations.

Our recommendations

We make 15 recommendations to Government, Defra and the EA. They aim to improve the effectiveness of the WFD Regulations and their application, increase the likelihood and

pace of meeting Environmental Objectives and wider obligations and commitments that depend upon them, and strengthen interaction with other measures.

All of our recommendations address important issues. However, some are especially time-critical in terms of progress towards the 2027 Environmental Objectives. These are Recommendations 1 and 2 (on the need for additional measures and funding) and 13 to 15 (on governance and legal mechanisms for application of the RBMPs). We also highlight the time sensitivity of Recommendation 11 on the need for action to ensure the effective monitoring and regulation of new and emerging chemical risks. The remaining recommendations are important for the regime's longer-term application and its effective functioning in a coherent, wider system of water law and policy.

Recommendations on implementation of the WFD Regulations

We make nine recommendations to address the main implementation issues that we identify. The first two address the need for urgent action to maximise progress towards and the likelihood of achieving the 2027 Environmental Objectives. The other seven recommendations apply to ongoing application of the regulations more generally.

Recommendation 1: We recommend that the Secretary of State and the EA take urgent action in accordance with Regulation 25 of the WFD Regulations. This should include taking action to ensure that Programmes of Measures contain the additional measures that are necessary to achieve the Environmental Objectives, including those to be met by 2027. Programmes of Measures should be produced with specific and time-bound measures that demonstrate with sufficient certainty how Environmental Objectives will be met at the water body level. This should also include sufficient and confirmed funding to meet those outcomes.

Recommendation 2: In support of Recommendation 1, we recommend that Government and the EA prepare an updated economic analysis and assessment of investment requirements for the RBMPs. This should take account of new commitments since the RBMPs were approved, for example in the Plan for Water, and additional measures included in the Programmes of Measures under Regulation 25 to achieve the Environmental Objectives, including those to be met by 2027. It should include a comprehensive update of the EA's 2015 impact assessment, which was not carried out in 2022, and should be produced alongside the identification of additional measures under Recommendation 1 to demonstrate the adequacy of the investment to meet the Environmental Objectives.

Recommendation 3: In relation to the requirement to make measures operational within three years of approval, we recommend that measures in the Programmes of Measures be time-bound, and implemented accordingly, in alignment with the Environmental Objectives and their intended dates of achievement. This should include the implementation of specific physical and regulatory actions, as well as the development of necessary enabling policy measures and funding mechanisms. We also recommend that Defra and the EA review and clarify their approach to this provision as part of Defra's review of implementation of the WFD Regulations. This should ensure clear alignment between legal requirements, policies, funding, guidance and operational practice.

Recommendation 4: We recommend that Defra and the EA review and improve how exemptions are justified and presented in the RBMPs to ensure they are appropriate, clear and transparent. We recommend specifically that RBMPs should include at least an outline of the substantive justifications for individual exemptions at the water body level. The approach to how exemptions are determined, justified and presented should also be subject to greater oversight by Defra before the RBMPs are approved by the Secretary of State.

Recommendation 5: We recommend that Defra and the EA adjust the structure, presentation and content of RBMPs for future cycles. For each RBD, the RBMP should provide the 'driver-pressure-state-impact-response' information for the RBD as a whole and each water body. It should be clear in the RBMPs how the measures will achieve the Environmental Objectives at the water body level. The RBMPs should also be adjusted to make the next cycle of plans and supporting documents clearer, and more reader- and user-friendly, including through the provision of a non-technical summary.

Recommendation 6: We recommend that Defra and the EA improve the approach to public consultation on the draft plans for future cycles. This should ensure that it supports full, active and informed public consultation including in relation to Environmental Objectives, at the RBD and water body levels, measures to achieve those objectives, and the review and justification of exemptions.

Recommendation 7: We recommend that Government, in seeking to extend the reach of Catchment Based Approach partnerships, more clearly define their role and functioning, and then organise and fund them so they can deliver as intended. This will require a closer alignment with the contents of the Programmes of Measures, relating to individual water bodies and catchments, and clarification of the role of partnerships in identifying and supporting the implementation of those measures where appropriate. We also recommend that Government determine how best to further develop partnership working in conjunction with other plans covering water, nature, land use and other development.

Recommendation 8: We recommend that the EA update its assessments of risks to water bodies from the pressures caused by human activities, including climate change as well as infrastructure and domestic and commercial development, when it next reviews them for the fourth cycle RBMPs. We also suggest that, in tandem, Defra update the related economic analyses of water use in each RBD in the next review of these analyses on behalf of the Secretary of State.

Recommendation 9: We recommend that Defra develop and implement a coherent and nested monitoring and evaluation framework for the state of the water environment and progress on measures to improve it. This should include a clear relationship between monitoring for individual water bodies, catchments and river basin districts under the WFD Regulations through to wider monitoring and evaluation of the water-related goals and targets of the EIP23.

Recommendations on the legal, governance and policy framework

We identify six recommendations in this area. The first one is overarching, and concerns what we see as core elements of any effective, future regime to protect and improve the water environment. The other five highlight specific areas where the legal, governance and policy framework could be strengthened to increase its effectiveness.

Recommendation 10: We recommend that Government retain the fundamental underlying structure and approach of the WFD Regulations, while also consulting on proposals to improve the legal and governance framework to produce a regime that is stronger and includes mechanisms for better implementation. Central aspects of the WFD Regulations that we consider should be retained include:

- Integrated protection of all water body types to cover aquatic ecosystems as a whole.
- Ambitious Environmental Objectives based on strong scientific underpinnings and evidence. This should include retention of the ‘No Deterioration’ principle and targets for the ecological, chemical and quantitative health of surface water and groundwater.
- An integrated, multi-element approach to classifying water bodies and determining if overall Environmental Objectives are met, while providing for assessment and reporting of progress towards these objectives at a more detailed level for the various individual elements monitored.
- An evidence-based framework using the ‘driver-pressure-state-impact-response’ model to address key pressures and enable tailoring to local conditions.
- Coordination across administrative and geographic boundaries.
- Public participation provisions to enable and encourage active involvement of interested parties.

Recommendation 11: We recommend that Defra determine how to approach the monitoring and regulation of new and emerging chemicals in reviewing the implementation of the WFD Regulations. In particular, we highlight the need for Defra to establish effective processes to replace the former EU ‘Watch List’ mechanism and for setting environmental quality standards. This should ensure the WFD Regulations can provide a continuing framework for addressing new and emerging threats.

Recommendation 12: We recommend that, in further developing the Plan for Water and reviewing implementation of the WFD Regulations, Defra: i) clarify how the WFD Regulations’ objectives and the goals and targets of the Environment Act, EIP23 and Plan for Water relate and contribute to each other for both surface water and groundwater, including chemical status; (ii) review their coherence with other water law and policy and broader environmental and sectoral law; and (iii) review and rationalise the overall wider suite of relevant plans and measures, including their timings and plan periods, to ensure that their alignment and sequencing serves to optimise outcomes.

Recommendation 13: We recommend that, in reviewing implementation of the WFD Regulations, Defra assess current levels of understanding of and compliance with the general duty on public authorities to have regard to the RBMPs (Regulation 33). The assessment should prioritise public authorities with functions that are key to delivering the Environmental Objectives.

Recommendation 14: We recommend that Defra and the EA issue guidance to all public authorities with functions that may affect RBDs on a standardised process for WFD assessment. This should take account of any relevant evidence and information gathered through the implementation of Recommendation 13 above. We also recommend that the EA engage with public authorities concerning implementation of the guidance, prioritising those with functions that are key to delivering the Environmental Objectives. Defra should also itself adopt and apply a standardised process for WFD assessment in relation to its own decision-making.

Recommendation 15: We recommend that, in reviewing implementation of the WFD Regulations, Defra consider: (i) strengthening the wording of the ‘have regard to’ duty for RBMPs; (ii) introducing a free-standing duty on all public authorities to consult with the EA when WFD assessment identifies risks to water bodies; and (iii) increasing transparency concerning mechanisms to ensure and monitor the implementation of all measures in the approved Programmes of Measures. The EA should also provide more detailed information in its report describing progress in the implementation of each planned Programme of Measures, to support scrutiny and transparency concerning their delivery.

Chapter 1. Introduction



Chapter 1. Introduction

1.1 Focus of this report

Clean and plentiful water is vital for life. It sustains plants and animals and forms an integral part of wider ecosystems. People need water to drink, produce food and support business and leisure activities. Human society also puts pressure on the water environment, including through abstraction, pollution from wastewater treatment, agriculture and other sectors, and physical alterations.

Effective measures are therefore needed to manage human activities that affect water quality and quantity. England, along with other UK administrations and European countries, follows an integrated approach for assessing and managing waters. This looks at all elements of the natural water environment in a single framework. It covers inland surface waters (for example rivers and lakes), groundwaters, transitional waters (estuaries and lagoons) and coastal waters.

This approach is applied in England under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.⁷ We refer to the regulations in this report as ‘the WFD Regulations’.

The report assesses the effectiveness of the WFD Regulations and their implementation. It is based on a project that has considered the following questions:

- What do the WFD Regulations require and how have they been applied?
- What challenges for the water environment do they need to address?
- Does their underlying approach offer a good basis to protect and improve the water environment?
- How effective has their implementation been in achieving their objectives?
- Are they effectively integrated in a coherent, wider body of water law and policy?
- What are the barriers to the achievement of the WFD Regulations’ objectives and how could these be addressed?

This introductory chapter explains why we have looked at this subject (Section 1.2), our approach to the work (Section 1.3) and the structure of the report (Section 1.4). In conducting the project, we have also looked in parallel at the equivalent issues and legislation in Northern Ireland. We are producing separate reports for each jurisdiction to be laid before Parliament and the Northern Ireland Assembly. We will publish both reports on the OEP website.

1.2 The need and opportunity for action

There are two main reasons why we have chosen to look at implementation of the WFD Regulations. The first is the environmental context, which highlights that urgent change is necessary to protect and improve the water environment in line with legally binding commitments and targets. The second is the legislative and policy context which indicates the potential for water law reform.

⁷ Statutory Instrument 2017 No. 407.

It is important to understand which aspects of the existing arrangements work well, which do not and, in either case, why. This can inform the work of Government, Parliament, delivery bodies and others as they consider possible changes in how the law is applied and the opportunity for reform.

1.2.1 The WFD Regulations

This section briefly introduces the WFD Regulations. Chapter 2 provides more detail on the regulations, including explaining various terms (in quotation marks) that we use with a specific meaning. These are also in the glossary (Annex 1) along with the abbreviations in this report.

River Basin Districts and River Basin Management Plans

The WFD Regulations provide a statutory framework to protect and enhance the water environment through a combined approach to managing all types of water bodies in ‘River Basin Districts’ (RBDs). These water bodies include rivers, lakes, streams, wetlands, groundwaters, transitional waters and coastal waters.

The regulations apply an ongoing, six-year cycle of developing, implementing, reviewing and updating ‘River Basin Management Plans’ (RBMPs). RBMPs are produced by the Environment Agency (EA) with oversight and approval by the Secretary of State for Environment, Food and Rural Affairs (‘the Secretary of State’). The Secretary of State approved England’s current RBMPs in December 2022.⁸

The RBMPs contain objectives for all water bodies and a summary of the measures to meet them. All public bodies must have regard to the RBMPs when exercising functions that could affect the water environment.⁹ The RBMPs and the measures they contain are therefore the main vehicle for achieving the regime’s intended outcomes and others that depend on them.

Environmental Objectives

The WFD Regulations reflect an ambitious, outcome-based approach to environmental law, as well as specifying processes to achieve those outcomes. They aim to return water bodies to a condition that is at or close to their natural state. This is also reflected in Government’s wider Environmental Improvement Plan (EIP),¹⁰ as well as specific Ministerial Guidance on the WFD Regulations.¹¹

To this end, the WFD Regulations include a number of ‘Environmental Objectives,’ which we describe in more detail in Chapter 2 and summarise here. A key objective is to prevent the deterioration of water bodies (the ‘No Deterioration Objective’). Subject to possible statutory ‘exemptions’, a second main Environmental Objective is to achieve ‘Good Status’ in all water bodies. ‘Good Status’ means different things for different types of water bodies:

8 Environment Agency, ‘River Basin Management Plans: Updated 2022’ (22 December 2022) <www.gov.uk/guidance/river-basin-management-plans-updated-2022> accessed 13 November 2023.

9 Reg 33, WFD Regulations.

10 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 102.

11 Defra, ‘River Basin Management Planning Guidance’ (23 September 2021) 6 <www.gov.uk/government/publications/river-basin-planning-guidance> accessed 13 November 2023.

- for most surface water bodies, ‘Good Status’ means a combination of ‘Good Ecological Status’ and ‘Good Chemical Status’
- for surface waters that are designated as ‘Artificial or Heavily Modified Water Bodies’ (AHMWBs), such as reservoirs and canals, it means a combination of ‘Good Ecological Potential’ and ‘Good Chemical Status’
- for groundwater bodies, it means a combination of ‘Good Quantitative Status’ and ‘Good Chemical Status’.

There are also further Environmental Objectives for ‘protected areas’ identified under the WFD Regulations and other legislation. The full set of Environmental Objectives as they apply to different types of water bodies is summarised in Table 1.1.

Table 1.1. Environmental Objectives applying to different types of water bodies

Different types of water bodies have different types of objectives		Type of Water body		
		Surface water		Groundwater
		Artificial or heavily modified surface water bodies	All other surface water bodies (not artificial or heavily modified)	
Type of Objective	Ecological	Good Ecological Potential	Good Ecological Status	N/A
	Quantitative	N/A	N/A	Good Quantitative Status
	Chemical	Good Chemical Status		
	Protected area	Protected area objectives as individually applicable to specific water bodies		
	Preventing deterioration	No Deterioration Objective		

Dates to meet Environmental Objectives

The WFD Regulations set a deadline to meet the Environmental Objectives of 22 December 2021. They allow for possible extensions to 22 December 2027¹² or later dates if certain statutory tests are met.

The date in the RBMPs to achieve Good Ecological Status or Potential for most surface water bodies has been extended to 2027. The achievement of Good Chemical Status in surface water bodies has been extended to 2063 due to the presence of certain ‘ubiquitous, persistent, bio-accumulative and toxic’ (uPBT) chemicals. These are now found throughout the environment and will take many years to break down. The RBMPs also apply exemptions to groundwater achieving Good Quantitative Status and Good Chemical Status by 2021, albeit to a lesser degree than for surface water.

We therefore focus most of our analysis of Environmental Objectives in this report on those to be met by 2027 concerning the ecological condition of surface waters and the

¹² Or 22 December 2033 or 22 December 2039 respectively for certain priority substances under Reg 16(5), WFD Regulations.

quantitative status of groundwater. These are the most imminent and apply to most water bodies. They are also important to Government's wider goal of 'clean and plentiful water' (see Section 1.2.4 below). We also provide some commentary on the chemical status objectives.¹³

1.2.2 Progress and pressures

Chapter 3 discusses the state of and pressures on the water environment. The main pressures include pollution, physical modifications and invasive species. Agricultural, urban and wastewater inputs and the presence of ubiquitous chemicals are the main pollution pressures.

Wastewater (and especially sewage) discharges and water companies get much of the media attention. In broad terms they are, jointly with agriculture, the largest source of pollution. However, they are not, in fact, the most frequently reported cause of problems in achieving environmental outcomes in relation to individual water bodies. Rather, physical modifications are the largest individual pressure.

The framework underpinning the WFD Regulations has been in operation for 20 years, building on previous measures over decades before that. In recent years, deterioration in most water bodies has been avoided, although not without some exceptions as noted below. There have also been improvements. Pollution from some sources has been cut significantly. For example, Defra has reported that pollutant loads discharged to rivers from wastewater treatment works over the period 1995 to 2020 were reduced by 80% for ammonia, 68% for phosphorus and 55% for biochemical oxygen demand (which is a measure of organic pollution).¹⁴

Despite such positive steps, however, overall progress has been limited with some recent stagnation and decline in the state of water bodies. In some cases, the condition of water bodies has remained visibly poor and a cause of considerable public and ecological concern.

Recent high-profile cases have included, for instance, the prominent eutrophication in the River Wye due to excessive nutrient loading over an extended period. More generally, water pollution and other problems remain widespread, as we discuss in Chapter 3. While the WFD Regulations provide a framework to address these issues, there is still a long way to go to meet their Environmental Objectives.

13 We have not looked in this report at the details of the specific and additional objectives that apply to protected areas. We are, however, conducting work with a view to producing further reports on the implementation of environmental law concerning bathing waters, and protected sites more generally. We have also reported separately on the implementation of environmental law that applies to protected sites for habitats and species. See: Office for Environmental Protection, 'A Review of the Implementation of Environmental Assessment Regimes in England' (2023) <www.theoep.org.uk/report/environmental-assessments-are-not-effective-they-should-be-due-practical-barriers> accessed 2 January 2024.

14 Defra, '25 Year Plan Outcome Indicator Framework B1: Pollution Loads Entering Waters' (2023) <<https://oifdata.defra.gov.uk/themes/water/B1/>> accessed 23 November 2023.

For example, in 2019, 84% of surface water bodies in England did not meet the Good Ecological Status or Potential objectives. The figure from 2015 was 83%. This shows that, contrary to the No Deterioration Objective, the condition of some water bodies has got worse. No surface water bodies meet the Good Chemical Status Objective. Groundwater bodies fare better, with 45% and 73% at Good Chemical and Good Quantitative Status respectively, but still need further improvement.¹⁵

1.2.3 Looking forward

In Chapter 4, we look ahead to consider the likelihood of the Secretary of State and the EA meeting the Environmental Objectives in accordance with the WFD Regulations. In particular, we are concerned about the 2027 deadline for achieving Good Ecological Status or Potential for most surface water bodies.

Without significant further action, based on the available evidence and information we have assessed that the 2027 deadline in the Environmental Objectives for most water bodies is highly unlikely to be met. It appears more likely to be missed by a large margin. This is not just our view. Government and the EA also are not confident about these outcomes.

1.2.4 The Environmental Improvement Plan and Environment Act targets

The Environmental Objectives under the WFD Regulations and measures to achieve them are also critical to meeting wider Government goals and targets. These include goals in the EIP and relevant targets under the Environment Act 2021 (referred to in this report as the ‘Environment Act targets’¹⁶). We provide an introduction as context for this report below and explore these matters in more detail in Chapter 5.

The EIP is Government’s statutory plan to protect and improve the environment under the Environment Act 2021. Government published its current EIP¹⁷ in January 2023 (commonly referred to as ‘EIP23’). This is a revision of the previous ‘25 Year Environment Plan.’¹⁸ It contains 10 goals underpinned by targets and commitments.

Clean and plentiful water

Goal 3 of the EIP23 is ‘*clean and plentiful water*’. In relation to this goal, Government says that it ‘*will achieve clean and plentiful water by improving at least 75% of our waters to be close to their natural state as soon as is practicable.*’ The EIP23 also includes several specific commitments under this goal, one of which is to ‘*restore 75% of our water bodies to good ecological status.*’¹⁹

15 Environment Agency, ‘River Basin Management Plans, Updated 2022: Progress Report’ (22 December 2022) <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-progress-report> accessed 13 November 2023.

16 These are the targets set under Ss. 1-3 of the Environment Act 2021.

17 Defra, ‘Environmental Improvement Plan 2023’ (n 3).

18 Defra, ‘A Green Future: Our 25 Year Plan to Improve the Environment’ (11 January 2018) <www.gov.uk/government/publications/25-year-environment-plan> accessed 13 November 2023.

19 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 98–99.

Both Goal 3 and this specific commitment depend on the delivery of Environmental Objectives under the WFD Regulations, as we discuss in Chapter 5. Accordingly, both Defra²⁰ and the EA²¹ have also identified that the RBMPs underpin the ‘clean and plentiful water’ goal.

The EIP23 also lists policies to help achieve the Environment Act water targets. Government has set four such legally binding targets.²² Each of these water targets also has underpinning interim targets.

Although the EIP23 does not explicitly state this, effective implementation of the WFD Regulations through the RBMPs will be key to Government meeting these and some of the other Environment Act targets, and vice versa. We discuss this further in Chapter 5. The inter-relationship between these different measures is also reflected in the Government’s ‘significant improvement test’ for the Environment Act targets.²³ This states that: *‘Meeting statutory targets would support a significant improvement for this component of the natural environment, including [...] restoring 75% of England’s surface water bodies to Good Status by 2027, which would reduce pressures on species and habitats as well as deliver wider environmental benefits’.*

Our assessment of progress towards clean and plentiful water

In January 2024, we published our report²⁴ assessing progress in improving the natural environment in accordance with the EIP and Environment Act targets.

On the ‘clean and plentiful water’ goal, our assessment noted a mixed picture of progress.²⁵ It found the recent scale of investment to drive delivery commendable, with broadly comprehensive plans in place for some issues. However, it also noted slow progress in achieving outcomes, largely due to a lack of specific measures and the focus of efforts and investments not addressing all major pressures.

As we note above, the number of water bodies achieving Good Ecological Status or Potential under the WFD Regulations has remained similar over the last two RBMP cycles. The EA’s analysis suggests that, unless current interventions are maintained and new ones introduced, the number of rivers at Good Ecological Status will decrease by 6% by 2027.²⁶

Our finding in our EIP progress report was that there is insufficient indication that improvement will have happened at the necessary scale. Accordingly, we assessed progress on the ‘clean and plentiful water’ goal as largely off track.²⁷ This reflects the underpinning role of the WFD Regulations’ Environmental Objectives for this goal area, on which we elaborate in this report.

20 Defra, ‘River Basin Management Planning Guidance’ (n 11) para 1.1.

21 Environment Agency, ‘River Basin Management Plans’ (n 8).

22 The Environmental Targets (Water) (England) Regulations 2023, Statutory Instrument 2023 No. 93.

23 Defra, ‘The Significant Improvement Test’ (GOV.UK, 31 January 2023) <www.gov.uk/government/publications/the-significant-improvement-test> accessed 14 December 2023.

24 Office for Environmental Protection, ‘Progress in Improving the Natural Environment in England 2022/2023’ (n 1).

25 *ibid* 4.

26 Environment Agency, ‘River Basin Management Plans’ (n 8).

27 Office for Environmental Protection, ‘Progress in Improving the Natural Environment in England 2022/2023’ (n 1) 58.

Protecting and restoring nature and biodiversity

Protecting and improving the water environment is also critical to supporting other environmental outcomes, including those relating to nature and biodiversity.

Again, the picture is not all bad. For example, the recent ‘State of Nature’ report²⁸ highlights that populations of freshwater insect species across the UK have, on average, shown a strong recovery since 1990. It suggests this is likely in part due to improvements in river quality over that period. However, the report also notes indications that the recovery of freshwater invertebrates has slowed. Overall, for instance, it states that the abundance of 753 terrestrial and freshwater species has on average fallen by 19% across the UK since 1970.²⁹

Goal 1 of the EIP23 is ‘*thriving plants and wildlife*’, where Government states its aim to ‘*achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife*’.³⁰ This is underpinned by Government’s targets under the Environment Act 2021. These include the legally binding target of halting the decline in species abundance by 2030 and a long-term target to reverse the decline of species abundance.³¹

As we describe in our EIP progress report,³² we see both of these Environment Act targets as equally important for delivering Government’s ambitions for the environment. They are not only crucial for delivery of the EIP23, but also for adaptation to climate change.

The EIP23 additionally includes a goal of ‘*30% of global land and 30% of global ocean to be protected by 2030*’.³³ This refers to Targets 2 and 3 of the Global Biodiversity Framework, through which the UK and other nations have agreed two distinct and more specific ‘30 by 30’ commitment for 2030.^{34 35}

Progress towards Environmental Objectives under the WFD Regulations will be central to the delivery of such wider nature targets and commitments. This is recognised in Defra’s biodiversity targets evidence pack, for example, which highlights the particular importance of improving water quality, among other outcomes, to meet the Government’s species abundance target.³⁶

Other Environmental Improvement Plan goals

More broadly, progress towards the WFD Regulations’ Environmental Objectives will be important to support other goals under the EIP23, and vice versa. These include, Goals 4, (managing exposure to chemicals and pesticides), 6 (using resources from nature sustainably), 7 (mitigating and adapting to climate change) and 9 (enhancing biosecurity).

28 State of Nature Partnership, ‘State of Nature 2023’ <<https://stateofnature.org.uk/>> accessed 10 November 2023.

29 *ibid* 4, 25.

30 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 30.

31 The Environmental Targets (Biodiversity) (England) Regulations 2023, Statutory Instrument 2023 No. 91.

32 Office for Environmental Protection, ‘Progress in Improving the Natural Environment in England 2022/2023’ (n 1) ch 2.

33 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 38.

34 Convention on Biological Diversity, ‘2030 Targets (with Guidance Notes)’ <www.cbd.int/gbf/targets/> accessed 17 December 2023.

35 Prime Minister’s Office and Defra, ‘PM Commits to Protect 30% of UK Land in Boost for Biodiversity’ (28 September 2020) <www.gov.uk/government/news/pm-commits-to-protect-30-of-uk-land-in-boost-for-biodiversity> accessed 23 November 2023.

36 Defra, ‘Biodiversity Terrestrial and Freshwater Targets Detailed Evidence Report’ (2022) 46 <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets/supporting_documents/Biodiversity%20terrestrial%20and%20freshwater%20targets%20Detailed%20evidence%20report.pdf>.

In addition, some measures, such as environmental land management, will contribute towards the Environmental Objectives and multiple EIP23 goal areas.

In relation to Goal 7 on climate change, Government's 'National Adaptation Plan' highlights a number of risks and opportunities for freshwater species and habitats from changing climatic conditions and extreme events. These include higher water temperatures, flooding, water scarcity and shifts in biological life cycles. It identifies RBMPs among the actions to address these issues.³⁷

1.2.5 The potential for reform and the need for additional action

There is also potential for change to existing water law and policy. Government has powers to modify, replace or revoke the WFD Regulations under the Retained EU Law (Revocation and Reform) Act 2023.³⁸ Without changing the law, Defra and the EA can also adjust how it is applied to maximise effectiveness.

The Plan for Water

Government's Plan for Water, published in April 2023, aims to build on the EIP23 by outlining additional actions to support the 'clean and plentiful water' goal and Environment Act targets.³⁹ Government states in this plan that it considers there to be opportunities to improve the regulatory system through reviewing implementation of the WFD Regulations.⁴⁰ It does not make specific proposals but commits to consulting on any changes. There have been no such consultations to date.

The basis for reform

It is critical that any reforms are effective and do not result in lowering current levels of protection or lessening ambition. Any significant reform should have a proper basis, with supporting evidence and analysis. Through this report, we aim to provide an independently researched view of the effectiveness of the existing legislation and its implementation, highlighting possible improvements to optimise delivery.

The report builds on our observations in the EIP progress report. It provides an in-depth view on why achieving the 'clean and plentiful water goal', and the RBMP Environmental Objectives under the WFD Regulations, are largely off-track. We highlight that urgent action is needed if these outcomes are to be met.

Compliance with the WFD Regulations

We also note areas where, based on the information available, our current view is that the approach to implementation may not comply fully with the requirements of the WFD Regulations. We make recommendations to address these issues.

37 Defra, 'National Adaptation Plan Annex 1: Climate Risks and Opportunities' (2023) 68–69 <https://assets.publishing.service.gov.uk/media/64b52a430ea2cb001315e3b7/NAP3_Annex_1_Climate_risks_and_opportunities.pdf>.

38 Ss. 14-16, Retained EU Law (Revocation and Reform) Act 2023.

39 Defra, 'Plan for Water' (n 4).

40 *ibid* 24.

1.3 Our approach

We started the project in late 2022. It has included the following elements.

Firstly, we have reviewed relevant legislation, guidance, implementing arrangements and literature. This has included analysis of caselaw and information in the RBMPs.

Secondly, we have interacted with the main public authorities involved in implementing the WFD Regulations. This involved meetings with and consideration of information from Defra (on behalf of the Secretary of State) and the EA.

Thirdly, we established a stakeholder group to engage with other parties interested in the project. Participants were drawn from public authorities, industry bodies, non-governmental organisations (NGOs) and professional bodies across England and Northern Ireland. We held four online meetings with the group during 2022 and 2023.

We also organised in-person project workshops in London and Belfast with a wider group of stakeholders, including academics and consultants, in February and March 2023 respectively. Annex 2 provides further information on our interaction with stakeholders in the project.

Fourthly, and supporting all of the above, we commissioned three independent pieces of work from two separate consulting firms. We have published on our website the reports from these studies and refer to them in this report where relevant. The findings and recommendations of the consultants are their own and not necessarily those of the OEP. The subjects of the consultants' work were:

- a) a review of the RBMPs in England and Northern Ireland by WSP (which we refer to in this report as 'the RBMP analysis');⁴¹
- b) a comparison of river basin management approaches and outcomes in England and Northern Ireland with those in other UK administrations, other European countries and selected jurisdictions in other parts of the world, also by WSP ('the comparative analysis');⁴² and
- c) a water quality stocktake carried out for England and Northern Ireland by Atkins which has identified emerging substances of concern and critical knowledge gaps ('the water quality stocktake').⁴³

This report has been produced by the OEP drawing on all of the elements above. It has been subject to review and comment by external, independent experts. The external reviewers are identified in Annex 2.

In developing our findings and recommendations, we have sought to ensure that they are objectively based on the available facts and evidence. In presenting our analyses, therefore, we explain what issues we have considered and the information we have used. Where appropriate, we refer to the views of stakeholders to provide further context. We also note some areas where information is lacking, and which Government may therefore wish to consider further.

41 WSP, 'Review of the Third River Basin Management Plans in England and Northern Ireland' (2023) 853371.

42 WSP, 'Comparative Approaches to River Basin Management Plans' (2023) 22062023.

43 Atkins and WCA, 'Water Quality Stocktake' (2023) CRO050-02.

The report is primarily a legal and practical assessment of the WFD Regulations and their implementation. Broader issues concerning the detailed science behind the regulations and wider socio-economic matters are beyond the scope of this report.

1.4 Structure of this report

After this introduction, the remaining chapters of the report are as follows.

Chapters 2 and 3 provide factual background information as context for and to support our analytical assessments in subsequent chapters.

Chapter 2 presents a summary of the WFD Regulations and how they are implemented. It outlines the origin of the WFD Regulations, their provisions, the institutional arrangements for their application and the practical production of RBMPs. It also briefly summarises other relevant measures that form part of the wider landscape of laws and policies in which the WFD Regulations operate.

Chapter 3 looks at the state of and pressures on the water environment. This is intended to illustrate what has been achieved to date and the remaining challenges. We also consider in this chapter how progress in protecting and improving the water environment in England compares with that elsewhere in the UK and Europe.

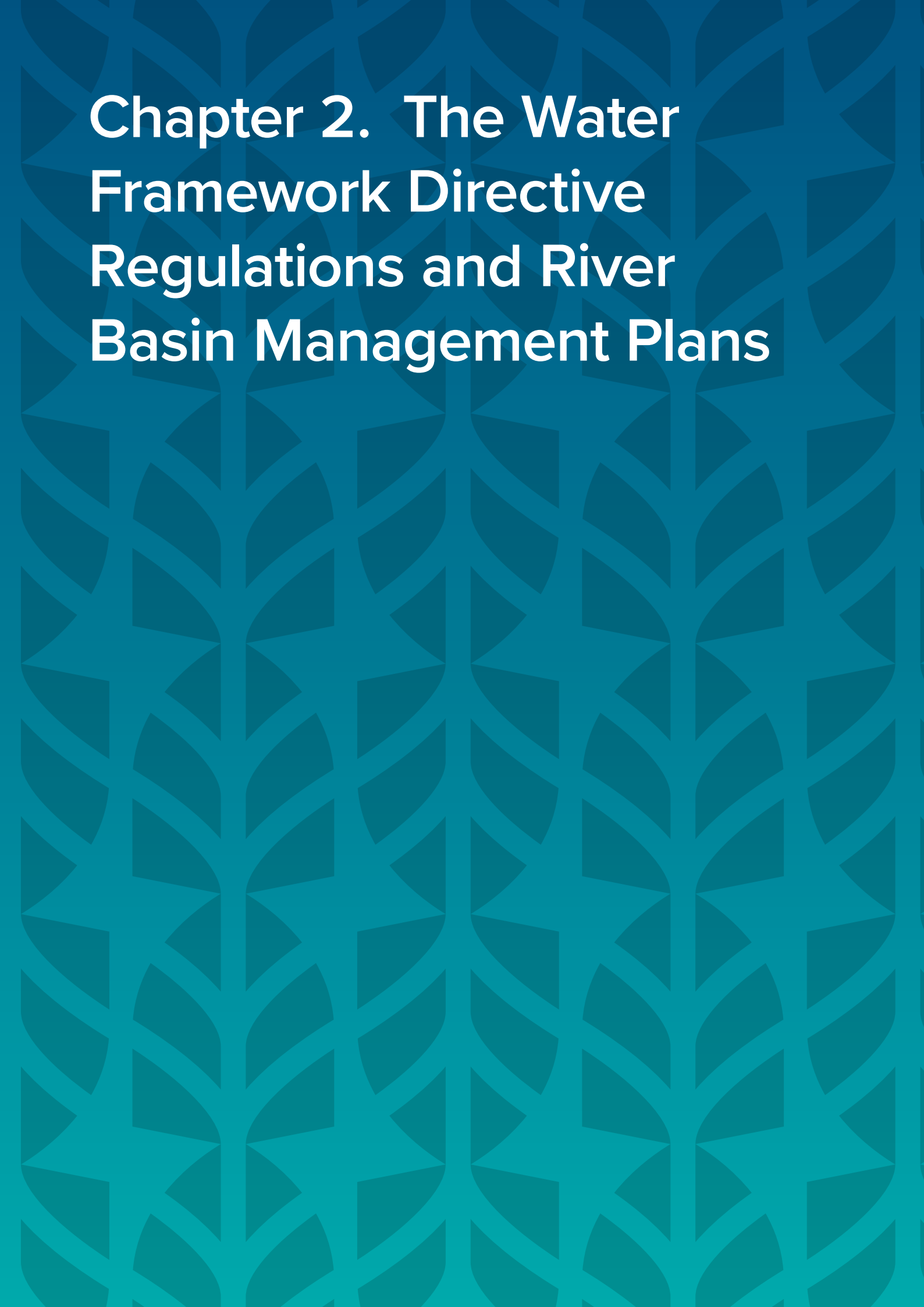
Chapters 4 and 5 are our main analytical parts of the report and present our findings and recommendations. They highlight areas where we see a need or opportunity for improvement to support achievement of the Environmental Objectives and other outcomes that depend on them. These chapters also consider whether these issues can be addressed through changes in practical application of the WFD Regulations or reflect limitations in the underlying law or policy.

Chapter 4 assesses the effectiveness of implementation of the WFD Regulations. It looks at issues such as the setting of Environmental Objectives under the regulations, the adequacy of measures to achieve them and the determination and justification of exemptions. We explain in Chapter 4 areas where we consider implementation to be ineffective and recommend improvements. We also identify areas where, based on the available information, we currently consider that the approach may not comply with the requirements of the regulations.

Chapter 5 then looks at the effectiveness of the WFD Regulations as a legal instrument. We consider that the regulations are, by and large, fit for purpose in providing an appropriate, integrated framework to protect and improve the water environment. Our concerns lie mainly in how that framework is applied in practice, as highlighted in Chapter 4. Nevertheless, we also consider that there are areas where the legislation itself, or its coherence within the wider landscape of law and policy, could be strengthened and improved. We identify a particular need for stronger governance mechanisms to underpin delivery of the Environmental Objectives.

Finally, we highlight that this report forms part of a wider programme of OEP activity concerned with the water environment. Other elements include assessing progress against the water-related goals of the EIP23 and Environment Act targets. We are also progressing a separate investigation into possible failures by Defra, the EA and Ofwat to comply with environmental law in regard to combined sewer overflows.⁴⁴

44 Office for Environmental Protection, 'OEP Identifies Possible Failures to Comply with Environmental Law in Relation to Regulatory Oversight of Untreated Sewage Discharges' (12 September 2023) <www.theoep.org.uk/news/oep-identifies-possible-failures-comply-environmental-law-relation-regulatory-oversight#:~:text=The%20aims%20of%20the%20OEP%20investigation%20are%20to,to%20achieve%20long%20term%20improvement%20in%20water%20quality.> accessed 23 November 2023.



Chapter 2. The Water Framework Directive Regulations and River Basin Management Plans

Chapter 2. The Water Framework Directive Regulations and River Basin Management Plans

This chapter presents the background to the WFD Regulations, their provisions and their practical implementation. It uses and elaborates upon some of the terminology introduced in Chapter 1, which is also explained in the Glossary (Annex 1).

As the WFD Regulations are lengthy, and both technically and legally complex, we have sought to summarise and simplify key elements of them. Anyone who wishes to consider the exact legal provisions should therefore refer to the legislation.

2.1 Background to the WFD Regulations

2.1.1 Origin of the WFD Regulations

The WFD Regulations were developed to ‘transpose’ (to put into domestic law so as to give effect to) the EU Water Framework Directive (WFD).⁴⁵ The WFD is the main EU law on water. Annex 3 summarises the development and content of the WFD.

The WFD had to be transposed by 2003. This was initially done in England through the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.⁴⁶ The 2017 WFD Regulations replaced the 2003 regulations from April 2017, making certain changes of substance to better reflect the WFD requirements, while retaining the same fundamental approach.

2.1.2 Ongoing application of the WFD Regulations

The WFD Regulations continue to apply in England. Following the UK’s exit from the EU, they acquired the status of ‘retained EU law’ under the European Union (Withdrawal) Act 2018.⁴⁷ The Retained EU Law (Revocation and Reform) Act 2023 then renamed ‘retained EU law’ as ‘assimilated law’.⁴⁸

This renaming does not change the legal effect of the WFD Regulations. It does, however, mean that, until 23 June 2026, Government has the power under the Retained EU Law Act to modify, revoke or replace the WFD Regulations through new legislation with minimal Parliamentary scrutiny.⁴⁹

45 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.

46 Statutory Instrument 2003 No. 3242.

47 Ss.2-4, European Union (Withdrawal) Act 2018.

48 S. 5, Retained EU Law (Revocation and Reform) Act 2023.

49 Ss. 14-16, Retained EU Law (Revocation and Reform) Act 2023.

2.1.3 Ongoing relevance of the Water Framework Directive

The WFD Regulations place a general duty on Defra and the EA to ‘secure compliance’ with the WFD and its so-called ‘daughter directives’ (see Annex 3) when exercising certain functions which may have an impact on water status. In addition, the WFD Regulations continue to cross-refer to certain technical provisions and standards in the WFD and its ‘daughter directives’ where appropriate. We explain this in more detail and give some examples in Section 2.2 below.

This means that, subject to certain modifications following EU Exit,⁵⁰ the provisions of the WFD and its daughter directives continue to be relevant to the interpretation of the WFD Regulations. In reviewing the WFD Regulations, Government may decide whether to retain this approach, modify it or replace it with something else.

2.1.4 Other international and national commitments

Among other drivers, the WFD was developed to give effect to certain international obligations.⁵¹ These include the Convention for the Protection of the Marine Environment of the North-East Atlantic⁵² and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes,⁵³ both agreed in 1992.

While the WFD may not have been developed specifically to meet international obligations on biodiversity, its objectives also clearly overlap with and will contribute to meeting those commitments. Under the Convention on Biodiversity, the UK and other countries have recently adopted and committed to the targets of the Global Biodiversity Framework. In addition to the ‘30 by 30’ biodiversity targets discussed in Chapter 1, Target 7 of this framework is to reduce pollution risks and impacts by 2030 to levels not harmful to biodiversity or ecosystem functions and services. This includes reducing excess nutrients lost to the environment by at least half.⁵⁴

If Government were to decide to move away from the WFD approach, therefore, it would still need to comply with applicable international law. It would also need to ensure a clear line of sight and interaction with relevant wider domestic measures. As noted in Chapter 1, these include the EIP23 goals and Environment Act targets.

2.2 Provisions of the WFD Regulations

2.2.1 Overall framework

The framework created by the WFD Regulations is designed to be evidence based and informed by local conditions. The WFD Regulations adopt the so-called ‘driver-pressure-state-impact-response’ (‘DPSIR’) framework, which aims to understand the relationship between environmental effects, their causes and measures taken.

50 Sch. 5, WFD Regulations.

51 This is reflected in the preamble to the WFD. See for example recitals 21 and 35.

52 ‘Convention for the Protection of the Marine Environment of the North-East Atlantic’ (1992) <www.ospar.org/convention> accessed 23 November 2023.

53 ‘Convention on the Protection and Use of Transboundary Watercourses and International Lakes’ <<https://unece.org/environment-policy/water/about-the-convention/introduction>> accessed 23 November 2023.

54 Target 7, Global Biodiversity Framework 2030 Targets.

Key provisions of the WFD Regulations that support the DPSIR framework include:

- (i) undertaking an assessment of drivers and pressures affecting the water environment and carrying out an economic analysis of water use⁵⁵
- (ii) establishing and keeping under review monitoring programmes to ensure the state of the water environment is known⁵⁶
- (iii) using evidence gathered through monitoring to classify water body status⁵⁷
- (iv) using evidence from assessments and monitoring to set Environmental Objectives and establish Programmes of Measures to achieve them⁵⁸
- (v) carrying out six-yearly reviews of the assessments, Environmental Objectives and Programmes of Measures⁵⁹
- (vi) public participation requirements to encourage active involvement of all interested parties.⁶⁰

Most of this information must be recorded in the RBMPs. In this way, the WFD Regulations provide for holistic assessment based on an ongoing, six-year cycle, looking at different types of waters in an integrated way, establishing drivers and pressures and identifying measures to address them.

2.2.2 Key responsibilities

The Secretary of State has overall accountability for ensuring the WFD Regulations are implemented and objectives met. In particular, the Secretary of State is responsible for considering and approving proposals put forward by the EA and can issue guidance and directions where necessary.

The EA is the main delivery body for implementing the WFD Regulations. Among its specified functions, the EA assesses the condition of water bodies, classifies their status and proposes objectives and Programmes of Measures. The EA also develops and consults on draft RBMPs. The Secretary of State makes the final determination on the RBMPs and must either reject or approve the draft plans, in whole or in part, and with or without modifications.

As referred to above, the WFD Regulations also impose a general duty on the Secretary of State and the EA to carry out certain functions relevant to water status 'so as to secure compliance with the requirements of' the WFD and its 'daughter directives'.⁶¹ Examples of functions that are relevant would be decisions by the EA on whether to grant, vary or revoke environmental permits or water abstraction and impoundment licences. The Secretary of State and the EA must also exercise their relevant functions in relation to each RBD to

55 Regs 5 and 7, WFD Regulations.

56 Reg 11, WFD Regulations.

57 Reg 6, WFD Regulations.

58 Reg 12, WFD Regulations.

59 Regs 5, 7 and 12(6), WFD Regulations.

60 Regs 12(2)(b) and 29, WFD Regulations.

61 Reg 3(1), WFD Regulations.

best secure that the requirements of the WFD and its ‘daughter directives’ for achieving Environmental Objectives, in particular Programmes of Measures, are co-ordinated for the whole of that RBD.⁶²

More broadly, all ‘public bodies’ must ‘have regard’ to the relevant RBMP in exercising their functions so far as affecting the RBD concerned.⁶³ This applies to any public body as defined in the WFD Regulations. These will include, for example, government departments, local authorities, planning authorities, National Highways and other highway authorities, Natural England, water companies and Ofwat.

The Secretary of State may give directions to the EA or any other public body for the purposes of ‘giving effect to the WFD’. The Secretary of State can also issue guidance to the EA or any other public body on the practical implementation of the WFD. The EA or public body must have regard to any such guidance.⁶⁴

2.2.3 Water body classification

The EA must classify water bodies in accordance with an approach set out in the WFD.⁶⁵ This determines the ‘status’ of water bodies. The system is summarised below. Annex 4 provides further technical detail.

For surface waters, the system classifies each water body in terms of its ecological and chemical status based on tests for various parameters or ‘elements’. This is illustrated in Figure 2.1.

As shown in Figure 2.1, the results for different quality elements are combined to form the overall ecological classification, ranging from ‘High Ecological Status’ (which means unaffected or virtually unaffected by human activity) to ‘Bad Ecological Status’ (meaning severely damaged).⁶⁶

The overall ecological classification of a surface water body is determined by the lowest classed quality element. This is known as the ‘one-out, all-out principle’. It means that a water body can be rated as ‘bad’, for example, due to a single element being in that condition. This is the overall result even if the water body achieves ‘high’ for all the other elements. We show how this works in real cases in Chapter 3 (see Section 3.2.3) and discuss its merits in Chapter 4 (Section 4.6.4).

62 Reg 3(4), WFD Regulations. This is another example of where the WFD Regulations make direct reference to the WFD (i.e. the directive).

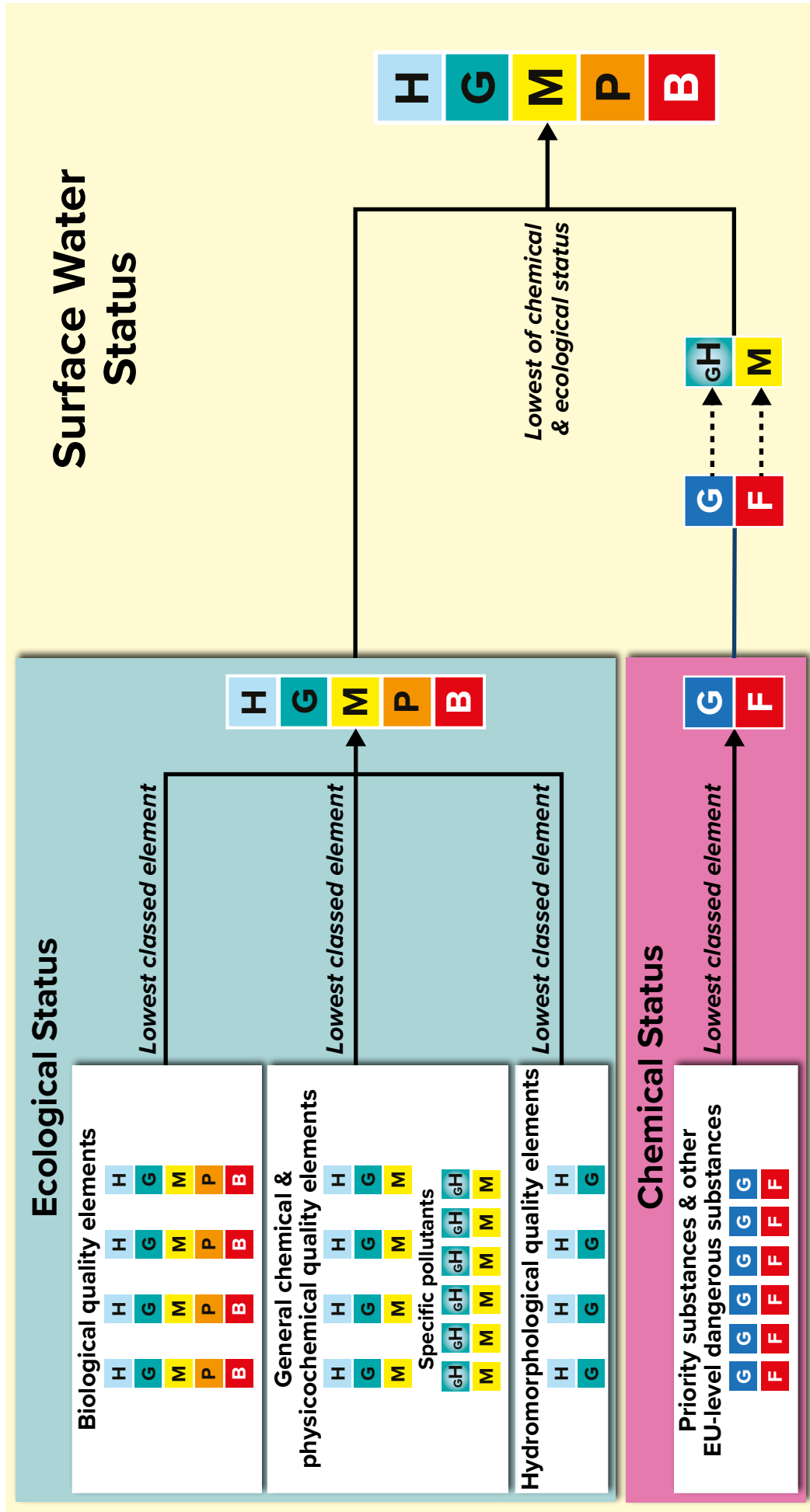
63 Reg 33, WFD Regulations.

64 Reg 36, WFD Regulations.

65 Reg 6, WFD Regulations. This is another example of where the WFD Regulations make direct reference to the WFD (i.e. the directive).

66 In Figure 1, ‘H’ means High; ‘G’ means Good; ‘GH’ means Good or better; ‘M’ means Moderate; ‘P’ means Poor; ‘B’ means Bad; and ‘F’ means Failing to achieve Good Surface Water Chemical Status.

Figure 2.1. Classification of surface water bodies under the WFD Regulations (source: UK Technical Advisory Group on the Water Framework Directive, 2007)⁶⁷



67 UK Technical Advisory Group on the Water Framework Directive, 'Recommendations on Surface Water Classification Schemes for the Purposes of the Water Framework Directive' (2007) 5 <www.wfduk.org/sites/default/files/Media/Characterisation%20of%20the%20water%20environment/Recommendations%20on%20surface%20water%20status%20classification_Final_010609.pdf>.

For surface water bodies that are artificial or heavily modified, the classification is based on ecological ‘potential’ rather than ‘status’. This recognises that the nature of those water bodies means that they cannot necessarily be expected to offer or achieve the same conditions as other surface water bodies. These water bodies therefore have different assessment approaches for biological and hydro-morphological quality elements. Chemical and physico-chemical assessments are usually common with those for more ‘natural’ water bodies. According to Defra, four out of ten water bodies are designated as artificial or heavily modified.⁶⁸

Chemical status for surface water is classed as either ‘good’ or ‘failing to achieve good’. ‘Good’ means that none of the standards for substances in the EU Environmental Quality Standards Directive (one of the WFD’s ‘daughter directives’ – see Annex 3) is exceeded. The EA has published a list of these substances.⁶⁹

Ecological status and chemical status are then combined to provide an assessment of overall surface water status. This again applies the one-out, all-out principle. Thus, the overall surface water body classification and whether it achieves ‘Good Status’ is dictated by the lower of the ecological and chemical classifications.

The ecological and chemical status figures generally are reported separately. If they were only reported together, the combined result would be failure of all surface waters to achieve Good Status due to the chemical classifications, and in particular the presence of uPBTs. Section 3.2.3 discusses this further

Finally, there is a different approach for groundwater. Each groundwater body is classified on its chemical status (assessed by reference to the EU Groundwater Directive which is a second ‘daughter directive’ – see Annex 3) and its quantitative status. Groundwater quantitative status predominantly concerns the levels and volumes of water in the groundwater body and is classified based on abstraction pressures, rather than water quality elements. Both groundwater chemical and quantitative status are classed as either ‘good’ or ‘poor’. The results are combined to give the overall status, which is the lower of the two.

2.2.4 Environmental Objectives in the WFD Regulations

The WFD Regulations set out Environmental Objectives to be met by specified dates for each water body type, unless ‘exemptions’ are applied (see Section 2.2.6).⁷⁰

For both surface water and groundwater, the Environmental Objectives include preventing the deterioration of the status of each body of water (the ‘**No Deterioration Objective**’) and aiming to achieve ‘Good Status’ (the ‘**Good Status Objective**’) under the classification system. Subject to the scope for exemptions as outlined below, the Good Status Objective should have been met by 22 December 2021⁷¹ (or by 22 December 2027 for Good Chemical Status in relation to certain priority substances in surface water).

68 Defra, ‘Plan for Water’ (n 4) 52.

69 Environment Agency, ‘Environmental Quality Standards Directive (EQSD) List for WFD Assessments’ (15 December 2016) <www.gov.uk/government/publications/list-of-chemicals-for-water-framework-directive-assessments/environmental-quality-standards-directive-eqsd-list-for-wfd-assessments> accessed 20 December 2023.

70 Reg 13, WFD Regulations.

71 As specified in the WFD, the original deadline for meeting the Environmental Objectives was 2015. However, the WFD also allowed compliance to be extended by EU member states for up to two RBMP cycles, meaning by 2027. As the WFD Regulations were adopted in 2017 (replacing the earlier regulations from 2003), they reflect the extended 2021 compliance date rather than the original 2015 date.

The OEP interprets the obligation to achieve the Environmental Objectives by 22 December 2027 as a 'strategic outcome duty'. The legislation creates a specific and measurable outcome that public authorities must achieve. This means that, subject to the application of exemptions (see Section 2.2.6 below), all practicable measures must be taken with the aim of achieving Good Status for water bodies.

The Environmental Objectives include additional objectives for certain 'protected areas', such as Special Areas of Conservation,⁷² Special Protection Areas,⁷³ drinking water protected areas⁷⁴ and shellfish waters.⁷⁵ This provision of the regulations brings together water body outcomes with protected area outcomes, supporting a more joined-up approach to environmental protection.

Protected areas must meet standards laid down in the WFD Regulations plus any additional standards required by any assimilated law under which the area is protected. Under the WFD Regulations, this should be achieved either by 22 December 2021 or such other deadline as the instrument protecting the area specifies. We illustrate this in the box below at Section 2.2.5.

2.2.5 Environmental Objectives for individual water bodies

The RBMPs must list the Environmental Objectives established in relation to surface water, groundwater and protected areas, including identification of any instances where exemptions have been applied. The EA proposes these objectives at the water body level and submits them to the Secretary of State for approval.

Setting Environmental Objectives for water bodies

Example 1: For a surface water body that is already achieving Good Ecological Status but not Good Chemical Status, the Environmental Objectives will be to prevent deterioration and (unless a Less Stringent Objective Exemption has been applied – see Section 2.2.6) to achieve Good Chemical Status.

Example 2: Special Areas of Conservation are high-quality conservation sites that are protected under separate legislation as noted above. That legislation provides for the setting of site-specific 'conservation objectives' to restore the habitat or species for which the site was designated to 'favourable conservation status'.

For a river that is also a Special Area of Conservation and has not yet achieved either of Good Ecological Status, Good Chemical Status or any of its conservation objectives, the Environmental Objectives will be to prevent deterioration in status and achieve all of these outcomes, unless a Less Stringent Objective exemption applies. If any of the objectives overlap, the most stringent applies.

72 Special Areas of Conservation (known as 'SACs') are high quality conservation sites under the Conservation of Habitats and Species Regulations 2017, Statutory Instrument 2017 No. 1012.

73 Special Protection Areas (known as 'SPAs') are protected areas for birds under the Conservation of Habitats and Species Regulations 2017.

74 Designated under Reg 8, WFD Regulations.

75 Designated under Reg 9, WFD Regulations.

2.2.6 Exemptions for extended deadlines and less stringent objectives

The requirement to achieve the Environmental Objectives in the WFD Regulations is subject to possible ‘exemptions’.

Under the ‘**Extended Deadline Exemption**’,⁷⁶ the date specified in the regulations to reach the Environmental Objectives, 22 December 2021,⁷⁷ may be extended. The latest permissible date is 22 December 2027.⁷⁸ A further extension beyond 2027 is only possible where it is justified on the basis of ‘natural conditions’. The meaning of ‘natural conditions’ has been set out in guidance produced under the WFD’s ‘Common Implementation Strategy’ (see Annex 3).⁷⁹ The Ministerial Guidance confirms that Common Implementation Strategy guidance continues to be relevant in England following EU exit.⁸⁰

Where the Extended Deadline Exemption is applied, the relevant RBMP must set out a summary of the measures to achieve the Environmental Objective progressively by bringing the water body to the required status by the extended deadline. The next update of the RBMP must include a review of the implementation of these measures and a summary of any additional measures needed to achieve the objective.

Under the ‘**Less Stringent Objective Exemption**’,⁸¹ the Environmental Objectives set for a water body in an RBMP may be less stringent, in terms of environmental outcomes, than those in the WFD Regulations. This could mean, for example, aiming for a condition that is less than Good Ecological Status for a surface water body. Where this exemption is applied, each subsequent six-yearly review must include consideration of whether a less stringent objective should continue to be set.⁸²

Reliance on exemptions is subject to conditions. Broadly speaking, exemptions must be justified on the basis of technical infeasibility, disproportionate cost or natural conditions. The RBMPs must set out the exemption and the reasons for it. We explore how this has operated in practice in Chapter 4 (Section 4.4).

2.2.7 Allowances for failure to meet Environmental Objectives

The scope for the exemptions described above only applies to the Good Status Objective element of the Environmental Objectives, and not to the No Deterioration Objective. However, separate provisions of the WFD Regulations allow for specific instances where a failure to meet the Environmental Objectives, including No Deterioration, is not a breach. This is subject to certain conditions such as taking mitigating action and reviewing the matter in the next RBMP update. There are two such provisions as set out in the box below.

76 Reg 16, WFD Regulations.

77 The date in the WFD, and the original 2003 transposing regulations, was 2015. However, the WFD also allowed the deadline to be extended by up to two further RBMP cycles. When the original transposing regulations were replaced in 2017, therefore, the 2017 WFD Regulations only reflected the provision to meet the extended 2021 deadline, rather than the 2015 date which had already passed.

78 Or 22 December 2033 or 22 December 2039 for certain priority substances in relation to Good Chemical Status for surface water.

79 Document endorsed by EU Water Directors, ‘Natural Conditions in Relation to WFD Exemptions’ (2017) <<https://circabc.europa.eu/sd/a/49b021b3-5d8e-4b4d-946d-4754d1ae0573/NaturalConditionsinrelationtoWFDexemptions.pdf>> accessed 16 November 2023.

80 Defra, ‘River Basin Management Planning Guidance’ (n 11) para 12.19.

81 Reg 17, WFD Regulations.

82 Reg 17(6), WFD Regulations.

Instances where failure to meet Environmental Objectives is not a breach

Firstly, the WFD Regulations allow for a temporary deterioration in the status of a water body in certain circumstances.⁸³ These are when there have been exceptional or unforeseeable natural causes or '*force majeure*' (such as extreme floods or prolonged droughts), or unforeseeable accidents.

Secondly, the regulations allow for failures to meet Environmental Objectives that stem from certain modifications to the physical characteristics of water bodies. Where certain conditions are met and the modifications are necessary for reasons of overriding public interest or benefits relating to human health, safety or sustainable development, the following are specified as not entailing a breach:

- A failure to achieve Good Groundwater Status or Good Ecological Status or Potential, or to prevent deterioration, which results from new modifications to the physical characteristics of a surface water body,⁸⁴ and
- A failure to prevent deterioration of surface water from 'high' to 'good' status which results from new sustainable development activities.⁸⁵

2.2.8 Programmes of Measures in River Basin Management Plans

The WFD Regulations require the EA to prepare proposals for a 'Programme of Measures' to achieve the Environmental Objectives. The EA must review and update the objectives and Programmes of Measures every six years. Any new or revised measures must be made operational within three years of being updated.⁸⁶

Each RBMP must include a summary of the Programme of Measures, including the ways in which the Environmental Objectives are to be achieved.⁸⁷ The objectives and Programmes of Measures proposed by the EA are subject to approval, modification or rejection by the Secretary of State.⁸⁸ The WFD Regulations also set out various requirements concerning public participation and consultation including in respect of proposals for Environmental Objectives and Programmes of Measures.⁸⁹

2.2.9 Requirements for additional measures to meet Environmental Objectives

Where monitoring or other data indicate that Environmental Objectives are unlikely to be met, additional measures must be included in the Programmes of Measures to achieve them. The EA must also investigate the causes of any possible failure to achieve Environmental Objectives and, as appropriate, examine and review any relevant permits and authorisations.⁹⁰

83 Reg 18, WFD Regulations.

84 Reg 19(1), WFD Regulations.

85 Reg 19(2), WFD Regulations.

86 Reg 12, WFD Regulations.

87 Reg 27(1)(b), WFD Regulations and Annex VII, para. A.7. WFD.

88 Reg 31, WFD Regulations.

89 Reg 12(2), WFD Regulations.

90 Reg 25, WFD Regulations.

The WFD Regulations also empower the EA to prepare ‘supplementary plans’ for the purposes of supplementing the RBMPs.⁹¹ This can happen at any time. There is no need to wait for the next RBMP cycle. It can therefore be a mechanism to set out additional measures needed to achieve the Environmental Objectives, beyond those summarised in the RBMPs.

2.2.10 Review of River Basin Management Plans

The RBMPs, Environmental Objectives and exemptions, Programmes of Measures and other aspects of the WFD are subject to ongoing review in a six-year cycle.

In conducting this project, we have heard a misconception from some stakeholders that the WFD Regulations only apply up to 2027, with no provision for plans or objectives thereafter. However, this is not the case. The WFD Regulations will have ongoing application unless and until they are changed. They will require updated RBMPs every six years,⁹² with continuing obligations to prevent deterioration, review exemptions and update measures to achieve objectives.

2.3 Implementation of the WFD Regulations

2.3.1 River Basin Districts and water bodies

There are 10 RBDs that are wholly or partly in England.⁹³ The EA manages six RBDs that are entirely in England. These are the ‘Anglian’, ‘Humber’, ‘North West’, ‘South East’, ‘South West’, and ‘Thames’ RBDs. Two more, the ‘Dee’ and ‘Severn’ RBDs, span the border with Wales. A further two, the ‘Northumbria’ and ‘Solway Tweed’ RBDs, span the border with Scotland.⁹⁴ Only a small fraction of the Northumbria RBD lies within Scotland.⁹⁵

The EA jointly manages the transboundary RBDs with Natural Resources Wales or the Scottish Environment Protection Agency as appropriate. In practice, the EA leads on and publishes the RBMPs for the Severn and Northumbria RBDs, which are mostly in England. Natural Resources Wales and the Scottish Environment Protection Agency lead on and publish the RBMPs for the Dee and the Solway Tweed RBDs, which are mostly in Wales and Scotland respectively.

91 Reg 32, WFD Regulations.

92 Reg 31(5), WFD Regulations.

93 Environment Agency, ‘River Basin District Map’ <www.gov.uk/government/publications/river-basin-district-map> accessed 13 November 2023.

94 These are developed under separate, parallel regulations for the RBDs in question: the Water Environment (Water Framework Directive) (Northumbria River Basin District) Regulations 2003; and The Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004.

95 Scottish Government, ‘River Basin Districts: Information and Maps’ <www.gov.scot/publications/river-basin-districts-information-maps/> accessed 16 November 2023.

England currently has 4,929 water bodies comprising 4,658 surface water bodies and 271 groundwater bodies.⁹⁶ The number and delineation of water bodies varies slightly from time to time for operational reasons.⁹⁷ In addition, the total number of water bodies is not always the same as the number that have been classified.⁹⁸

Essentially, these RBDs are administrative amalgamations of two or more adjacent physical river basin systems, each of which may have some different characteristics and pressures. In addition, what may be thought of in natural terms as a single, continuous water body (e.g. a river along its whole length) may be treated as multiple water bodies for the purposes of the WFD Regulations (each comprising an individually named stretch of that river).

2.3.2 Preparation of River Basin Management Plans

The third cycle RBMPs should have been completed under the WFD Regulations by December 2021. They were delayed due to the Covid-19 pandemic.

The EA published the draft third cycle RBMPs for England, including the transboundary Severn and Northumbria RBMPs, in October 2022. The Secretary of State approved the RBMPs without any modifications in December 2022.⁹⁹ The transboundary RBMPs for the Dee and Solway Tweed RBDs have been published separately by Natural Resources Wales (July 2022)¹⁰⁰ and the Scottish Environment Protection Agency (December 2021)¹⁰¹ respectively.

2.3.3 Contents of River Basin Management Plans

Each RBMP consists of an individual, online 'landing page',¹⁰² which provides links to further webpages and documents that combine to form the plan. These constitute a mix of generic, national information, and material specific to the individual RBD, as shown in the box below.

Material that makes up the River Basin Management Plans for England

The RBMPs have a common structure which comprises, for each plan:

- a. A generic introduction¹⁰³ to RBMPs. This explains what they are and how they are structured.

96 Environment Agency, 'Summary Data for England' <<https://environment.data.gov.uk/catchment-planning/England/print>> accessed 20 November 2023.

97 Environment Agency, 'River Basin Management Plans, Updated 2022' (n 15) s 6.4.

98 For example, the third cycle RBMPs classify 4,651 surface water bodies for ecological status and 4,649 for chemical status. The EA has explained that 7 lakes were newly designated as water bodies for cycle 3 after being designated as drinking water protected areas and had no data to produce an ecological classification. The same 7 lakes were also missing any chemical data to produce a chemical status classification. In addition, 2 river water bodies were newly reinstated for cycle 3 and, likewise, had no data to produce a chemical status classification.

99 Environment Agency, 'River Basin Management Plans' (n 8).

100 Natural Resources Wales, 'Dee and Western Wales River Basin Management Plans 2021-2027' <<https://naturalresources.wales/evidence-and-data/research-and-reports/water-reports/river-basin-management-plans/river-basin-management-plans-2021-2027/?lang=en>> accessed 13 November 2023.

101 Scottish Environment Protection Agency, 'River Basin Management Planning' <www.sepa.org.uk/environment/water/river-basin-management-planning/> accessed 13 November 2023.

102 See for example the Anglian RBMP: Environment Agency, 'Anglian River Basin District River Basin Management Plan: Updated 2022' (22 December 2022) <www.gov.uk/guidance/anglian-river-basin-district-river-basin-management-plan-updated-2022> accessed 13 November 2023.

103 Environment Agency, 'River Basin Management Plans, Updated 2022: Introduction' (22 December 2022) <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-introduction> accessed 13 November 2023.

- b. A generic document on ‘implementing the plans’.¹⁰⁴ This sets out principles to follow when identifying actions to protect and improve the water environment.
- c. A generic suite of documents on ‘current condition and environmental objectives’.¹⁰⁵ These explain how the current health of the water environment is assessed and Environmental Objectives are used.
- d. A generic description of ‘challenges for the water environment’.¹⁰⁶
- e. A link to the relevant RBD ‘Catchment Data Explorer’ landing page.¹⁰⁷
 - This provides access to details of individual RBDs’ management catchments, operational catchments and water bodies.¹⁰⁸ It includes information on the classifications, challenges, Environmental Objectives, summary Programmes of Measures and summary statistics for all RBDs.
 - It also provides links to relevant ‘catchment partnership pages’.¹⁰⁹ These reflect the so-called ‘Catchment Based Approach’, a community-led approach that engages people and groups from across local communities to help protect and improve the water environment. We discuss this further in Chapter 4 (Section 4.5.3).
- f. A link to the relevant RBD ‘map explorer’.¹¹⁰ This presents classifications, Environmental Objectives and other information in map form.
- g. A generic ‘river basin planning process overview’ document.¹¹¹ This summarises the process that the EA and others have followed in reviewing and updating the RBMPs.
- h. A generic ‘progress report’.¹¹² This summarises what has happened and been achieved since the second cycle (2015) RBMPs were published.
- i. A ‘Habitats Regulations Assessment report’ specific to the RBD in question.¹¹³ This sets out the results of an assessment of the likely significant effects of the RBMP on certain protected areas.¹¹⁴

104 Environment Agency, ‘River Basin Management Plans, Updated 2022: Implementing the Plans’ (22 December 2022) <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-implementing-the-plans> accessed 13 November 2023.

105 Environment Agency, ‘River Basin Management Plans, Updated 2022: Current Condition and Environmental Objectives’ (22 December 2022) <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-current-condition-and-environmental-objectives> accessed 13 November 2023.

106 Environment Agency, ‘River Basin Management Plans, Updated 2022: Challenges for the Water Environment’ (22 December 2022) <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-challenges-for-the-water-environment> accessed 13 November 2023.

107 Environment Agency, ‘Anglian River Basin District Catchment Data Explorer’ <<https://environment.data.gov.uk/catchment-planning/v/c3-plan/RiverBasinDistrict/5>> accessed 13 November 2023.

108 Management catchments are the bigger sub-divisions of a river basin district. Each management catchment is divided into several operational catchments, which in turn are divided into water bodies.

109 Defra and Environment Agency, ‘Catchment Partnership Pages Catchment Data Explorer’ <<https://environment.data.gov.uk/catchment-planning/v/c3-plan/CatchmentPartnerships>> accessed 13 November 2023.

110 Environment Agency, ‘River Basin Management Plan: Maps’ <<https://experience.arcgis.com/experience/73ed24b6d30441648f24f043e75ebed2>> accessed 13 November 2023.

111 Environment Agency, ‘River Basin Planning Process Overview’ <www.gov.uk/guidance/river-basin-planning-process-overview> accessed 13 November 2023.

112 Environment Agency, ‘River Basin Management Plans, Updated 2022’ (n 15).

113 Environment Agency, ‘Anglian River Basin Management Plan, Updated 2022: Habitats Regulation Assessment’ <www.gov.uk/government/publications/anglian-river-basin-management-plan-updated-2022-habitats-regulation-assessment> accessed 13 November 2023.

114 This is undertaken for the purposes of the Conservation of Habitats and Species Regulations 2017.

As noted in the box above, when the user navigates through the links to these constituent elements, RBD-specific information is only provided through: (e) the data explorer; (f) the map explorer; and (i) the Habitats Regulations Assessments. The remaining links are to generic, national overview documents common to all RBMPs.

Using the data explorer and map explorer for each RBD, the user can access (either as a list in the data explorer or a map in the map explorer) certain data at the water body level for that RBD. This provides access to information on: classification status, investigations into classification status (broken down into ‘reasons for not achieving good’ and ‘reasons for deterioration’), Environmental Objectives, challenges, protected areas, monitoring sites and location. The map explorer also allows comparison of progress between the classification status in 2015 and 2019.

The published information also confirms that the EA did not undertake ‘Strategic Environmental Assessments’¹¹⁵ for the third cycle RBMPs, unlike the first and second cycles where such assessments were undertaken. This was justified by the EA on the basis of the third cycle plans making only minor modifications to the Environmental Objectives compared to those of the second cycle.¹¹⁶ We discuss this further in Chapter 4 (see Section 4.3.2).

2.3.4 Guidance and directions

On behalf of the Secretary of State, in September 2021 Defra issued guidance to the EA concerning river basin management planning (the ‘**Ministerial Guidance**’).¹¹⁷ This covers the planning period from 2021 to 2027. The guidance sets out the Secretary of State’s expectations for the main steps and principles of river basin planning and the documents the EA must produce.

Among other points, the guidance states that the EA should indicate that the level of confidence in a water body meeting its Environmental Objective is low if there is uncertainty over when some of the measures needed to achieve it by 2027 will take place, or what effect they will have. This is framed as an acknowledgement that the EA will be more certain of meeting some objectives than others, due to variations in the level of confidence on water classification and certainty about the effectiveness of proposed measures. However, the guidance is also clear that the EA should ‘*be satisfied that the programmes of measures can reasonably be expected to achieve the objectives.*’¹¹⁸ We discuss this issue further in Chapter 4.

The guidance also includes information for the EA on the general principles of economic analysis, how to assess the cost-effectiveness of measures, and consideration of issues of proportionality and affordability as the basis for possible exemptions. It states that information reported to ministers should be sufficient to determine whether exemptions have been applied appropriately.¹¹⁹

115 These are assessments under the Environmental Assessment of Plans and Programmes Regulations 2004, Statutory Instrument 2004 No. 1633.

116 Environment Agency, ‘River Basin Management Plans: Use of Strategic Environmental Assessment Screening’ <www.gov.uk/government/publications/river-basin-management-plans-use-of-strategic-environmental-assessment-screening> accessed 14 December 2023.

117 Defra, ‘River Basin Management Planning Guidance’ (n 11).

118 *ibid* 10.6-10.7.

119 *ibid* 39–42.

The Secretary of State gave directions to the EA on standards and classifications for surface water and groundwater in 2015¹²⁰ and 2016 respectively.¹²¹

In terms of obligations on other public bodies, the Ministerial Guidance directs the EA to engage with public bodies concerning water quality considerations and their general duty to have regard to the RBMPs.¹²² Specifically, the EA is asked to *'seek to promote and encourage...the inclusion of water quality considerations in public bodies' plans, policies, guidance, appraisal systems and casework decisions'*. More specific guidance is given on how the EA should engage with public bodies on groups of plans where the relationship with RBMPs will be most important. This includes plans developed by planning authorities, lead local flood risk authorities, Ofwat, water companies and sewerage undertakers. There is also guidance on the relationship with conservation and with transitional and coastal waters.

2.3.5 Economic and cost analyses

Under the WFD Regulations, proposals for Environmental Objectives and Programmes of Measures must take account of analyses carried out to characterise the RBD and an economic analysis of water use.¹²³ The Secretary of State is responsible for carrying out the economic analysis of water use in RBDs. As with other provisions of the regulations, this must be reviewed and, where appropriate, updated every six years. The most recent review was due in December 2019.¹²⁴

Additionally, the Secretary of State must ensure that water pricing policies provide adequate incentives to use water resources effectively and provide adequate contributions to the recovery of the cost of water services. Again, this must take account of the economic analysis.¹²⁵

The economic analysis of water use must be made accessible through publication on an official website and at a principal office.¹²⁶ Defra published the economic analyses of water use for the first cycle RBMPs in 2005 alongside wider information produced for the purposes of the WFD. Defra reviewed the analyses for the second and third RBMP cycles, concluding that there was no need to update them. The current economic analyses of water use for the WFD Regulations are therefore the same as those originally produced. This information is now accessible through the Government's National Archives webpages.¹²⁷

Separately, and for a different purpose, the EA has published an analysis of investment requirements for the third cycle RBMPs.¹²⁸ This is an update of a similar assessment for the second cycle plans. The document states that it *'outlines the economic evidence that underpins conclusions about the investments required to protect and improve the*

120 The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.

121 The Groundwater (Water Framework Directive) (England) Direction 2016.

122 Defra, 'River Basin Management Planning Guidance' (n 11) s 15.

123 Reg 12(2), WFD Regulations.

124 Reg 7, WFD Regulations.

125 Reg 21, WFD Regulations.

126 Reg 34(3), WFD Regulations.

127 Defra, 'Water Framework Directive - Article 5 Economic Analysis' (2005) <<https://webarchive.nationalarchives.gov.uk/ukgwa/20080306090528/http://www.defra.gov.uk/environment/water/wfd/economics/index.htm#eco>> accessed 22 January 2024.

128 Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (n 5).

quality of England's water environment'. This includes considerations of affordability and proportionality of measures to secure improvements. We discuss this further in Chapter 4.

To be clear, this assessment of RBMP investment requirements is not the same as the 'economic analysis' of water use required to be produced by the Secretary of State under the WFD Regulations. However, the EA has advised the OEP that the economic analysis of water use published in 2005 does underpin some of its assessment of the RBMP investment requirements. In addition, Defra and the EA have noted to us that, since their original publication, some aspects of the economic analyses have been superseded in the RBMP information, such as the analysis of pressures (see Chapter 4). As a result, the current (archived) economic analyses do not appear to be wholly up to date.

2.3.6 The *Pickering* judgment

In undertaking this project, we have also looked at relevant case law concerning the WFD Regulations. We refer to this where appropriate in Chapters 4 and 5.

In particular, we explore the implications of the 2023 judgment in a judicial review brought by the Pickering Fishery Association against the Secretary of State.¹²⁹ The case focused on the Programme of Measures to achieve the Environmental Objectives for a particular surface water body in North Yorkshire, the Upper Costa Beck (UCB).

The decision under challenge was the Secretary of State's approval of the Humber RBMP, which is the relevant RBMP for the UCB. In that case, the High Court found that the Humber RBMP did not contain sufficiently targeted measures to achieve the objectives that had been set. The Court made an order quashing the Secretary of State's decision to approve the Humber RBMP insofar as it relates to the Programme of Measures as it applies to the UCB. At the time of finalising this report, the Secretary of State has been granted leave to appeal the High Court's decision in this case.

As we discuss in Chapter 4, this highlights more generally the need for the EA to consider what measures will be necessary to achieve the Environmental Objectives at the water body level.

2.4 The wider legislative and policy framework

The WFD Regulations do not function in isolation. They operate in a wider framework of legislation and policies concerned with the protection, improvement and management of the water environment.

As well as the EIP23, Plan for Water and Environment Act targets, all of which we discuss in Chapter 1, there are a range of other measures as illustrated below. We further explore the implementation of the WFD Regulations within the wider legal and policy landscape in Chapter 5 of this report.

¹²⁹ *Pickering Fishery Association v Secretary of State for Environment, Food and Rural Affairs* [2023] EWHC 2918 (Admin).

2.4.1 Relevant functions

The WFD Regulations require the Secretary of State and the EA to exercise their ‘relevant functions’ in a manner which secures compliance with the requirements of the WFD and its ‘daughter directives’. ‘Relevant functions’ here means the functions specified in the WFD Regulations, as well as those in other legal instruments listed in Schedule 2 of the WFD Regulations.¹³⁰

Schedule 2 of the WFD Regulations lists 31 legal instruments dealing with a wide range of subjects. These include legislation on drainage, fisheries, waste management, abstraction, water pollution control, sewage treatment, bathing water, groundwater and agriculture.

The list does not include the ‘farming rules for water’¹³¹ which were enacted in 2018, after the WFD Regulations, and Schedule 2 has not been updated. However, Defra and the EA remain under the general duty to ‘have regard to’ the relevant RBMP when exercising functions under other legislation that could affect an RBD.

2.4.2 Other regimes concerning water

The RBMPs produced under the WFD Regulations are only one of many plans or strategy documents produced to deal with issues concerning the water environment.

Chapters 4 and 5 of this report discuss a number of issues concerning the interaction of the WFD Regulations with the regulation of the water and sewerage industries. In relation to this topic, both Ofwat and water companies have the status of ‘public bodies’ under the WFD Regulations (see Section 2.2.2 above). However, the WFD Regulations do not refer to them expressly, other than in identifying them among certain other bodies with whom the EA must consult in developing the RBMPs.¹³² As such, the WFD Regulations do not list specific responsibilities or functions applying to Ofwat or the water companies, beyond the general duty of all public bodies to have regard to the RBMPs where relevant.

Separately, the EA develops the ‘Water Industry National Environment Programme’ (WINEP) in conjunction with the water companies. This is a programme of actions that water companies undertake to improve the environment, reflecting obligations arising from environmental legislation including the WFD Regulations. It is an important input to the five-year water industry Asset Management Period (AMP) cycle and price review led by Ofwat. This is the process through which Ofwat determines the funding that water companies will have to complete the agreed WINEP, and the impact on water customer prices. At the time of completing this report, Ofwat is considering draft business plans from water companies for the eighth AMP period (‘AMP8’).

Water companies also produce other plans including Drainage and Wastewater Management Plans, Water Resources Management Plans and Drought Plans. In addition, as a specific requirement under the Water Industry Act 1991 as amended by the Environment Act 2021, the Government has published a Storm Overflows Discharge Reduction Plan in response to widespread concerns about pollution from combined sewer overflows.¹³³

¹³⁰ Reg 3 and Sch. 2, WFD Regulations.

¹³¹ The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018, Statutory Instrument 2018 No. 151.

¹³² Reg 29(4), WFD Regulations.

¹³³ Defra, ‘Storm Overflows Discharge Reduction Plan’ (2023) <https://assets.publishing.service.gov.uk/media/6537e1c55e47a50014989910/Expanded_Storm_Overflows_Discharge_Reduction_Plan.pdf> accessed 9 November 2023.

Other plans and strategies that operate at regional or national level include Regional Water Resources Plans, Flood Risk Management Plans and Flood Risk Management Strategies. Commenting on the multiplicity of plans, Defra’s Plan for Water sets out the department’s intentions as follows:¹³⁴

‘A clear and robust framework underpins our whole management of the water system. The current water and floods policy and legal framework has been developed incrementally over time, resulting in over 15 national plans and strategic documents. Whilst each plan has its own purpose, we want to make the whole framework more outcome-focussed and fully integrated with other environmental plans and government delivery plans. This will ensure efficient delivery of our water policies on the ground across catchments and an increase in the use of nature-based solutions.’

2.5 Other recent reviews

As part of our review of relevant literature and evidence in the project, we have looked at other recent reviews, including relevant inquiries in Parliament.

2.5.1 House of Lords Industry and Regulators Committee

The House of Lords Industry and Regulators Committee reported on the work of Ofwat in March 2023.¹³⁵ While welcoming recent progress on closer co-operation between the EA and Ofwat, the report noted a clear lack of effective co-ordination on issues such as EA outputs not aligning with what Ofwat deems financeable, and ineffective information-sharing. The report also made the observation that:

‘Effectively reducing water pollution and securing future supply will require the unified effort of a range of sectors, government departments, and regulators. Each of these areas has a range of funding sources, bodies and policies that affect the water environment, yet these must be co-ordinated to deliver overall success for the environment. Political will to deliver for the environment will also be necessary.’¹³⁶

The Committee’s report contained 27 recommendations. These included advocating that Government, Ofwat and the EA ensure that the next iteration of WINEP has a greater focus on the environmental outcomes, giving responsible companies more leeway to use nature-based and catchment-based solutions.¹³⁷

Government responded to the Committee report in June 2023.¹³⁸ The Committee Chair subsequently wrote to the then Secretary of State setting out the following further points on the Plan for Water:¹³⁹

134 Defra, ‘Plan for Water’ (n 4) 24.

135 House of Lords Industry and Regulators Committee, ‘The Affluent and the Effluent: Cleaning up Failures in Water and Sewage Regulation’ (House of Lords 2023) HL Paper 166 <<https://committees.parliament.uk/publications/34458/documents/189872/default/>> accessed 10 November 2023.

136 *ibid* 49.

137 *ibid* 152–153.

138 Defra, ‘Government Response to the House of Lords Industry and Regulators Committee Report: The Affluent and the Effluent: Cleaning up Failures in Water and Sewage Regulation.’ (2023) <<https://committees.parliament.uk/publications/40187/documents/196307/default/>> accessed 10 November 2023.

139 Lord Hollick, ‘Letter from the Chair of the Industry and Regulators Committee to The Rt Hon Thérèse Coffey MP, Secretary of State for Environment, Food and Rural Affairs’ (18 September 2023) <https://cdn.roxhillmedia.com/production/email/attachment/1260001_1270000/acafb71927cd626bca87363b34421f24b6d3f838.pdf> accessed 10 November 2023.

‘Overall, we welcome the Plan for Water, which fulfils our recommendation for a national strategy that considers the issues facing the sector holistically. However, we are concerned that there is insufficient policy or drive to meet the Government’s targets and what appears to be a lack of leadership demonstrating deep-rooted complacency. We are also concerned that the ability of the sector and regulators to deliver Government targets may fall short of what is required.’

2.5.2 House of Commons Environmental Audit Committee

The House of Commons Environmental Audit Committee (EAC) reported on its inquiry into water quality in rivers in January 2022.¹⁴⁰ Among other points, this report drew the following conclusion:

‘A ‘chemical cocktail’ of sewage, agricultural waste, plastic and persistent chemicals is polluting rivers. River water quality has improved by some measures in recent decades, but in others it appears to be getting worse. The establishment of a complete overview of the health of rivers in England and the pollution affecting them is hampered by outdated, underfunded and inadequate monitoring regimes. Many harmful pollutants are not routinely monitored, and the Environment Agency has reduced the number of monitoring sites.’¹⁴¹

In addition, the EAC expressed concern about protection of wild salmon, anti-microbial resistance, pollution from sewage, agriculture, surface drainage and urban run-off, and a range of other issues. It presented 42 recommendations applicable to Government, the EA, Ofwat and other authorities. Government’s response to the report was published in May 2022.¹⁴²

As part of its report, the EAC noted the OEP’s establishment under the Environment Act 2021 and our potential to contribute to achieving Government’s environmental objectives in general, and to the improvement of water quality in rivers in particular. It encouraged us to take account of the relevant conclusions and recommendations of its inquiry when planning our work on water quality.¹⁴³ We do so in this report.

140 House of Commons Environmental Audit Committee, ‘Water Quality in Rivers’ (2022) HC 74 <<https://committees.parliament.uk/publications/8460/documents/88412/default/>> accessed 10 November 2023.

141 *ibid* 39.

142 House of Commons Environmental Audit Committee, ‘Water Quality in Rivers: Government Response to the Committee’s Fourth Report of Session 2021–22’ (2022) HC 164 <<https://committees.parliament.uk/publications/22190/documents/164546/default/>> accessed 10 November 2023.

143 House of Commons Environmental Audit Committee (n 140) para 325.

Chapter 3. The water environment in England



Chapter 3. The water environment in England

3.1 Introduction

In this chapter, we summarise our assessment of the current state of the water environment in England and the main pressures causing harm. We have developed this assessment using publicly available information and evidence, including material published by Defra and the EA.

The chapter considers assessment procedures and evidence from the RBMPs, as well as wider national and international evidence sources. It compares progress made in England on achieving outcomes under the WFD Regulations against other UK administrations under their equivalent regulations, and against EU member states under their legislation that implements the WFD.

The chapter also presents evidence concerning new and emerging water pollution pressures. Without more attention from Government and the EA, these may increase threats to public health and the wider natural environment.

3.2 Current state of and trends in the water environment

This section of the report presents information on the current state of and trends in the water environment, from which we summarise the following key facts.

Key facts

- Despite historic improvements in water quality, achievements under the RBMPs and other measures have failed so far to adequately protect or improve the overall state of the water environment.
- There is a significant gap between the current state of most water bodies and the Environmental Objectives in the WFD Regulations.
- Recent progress towards achieving these objectives has been limited and there has been some incidence of deterioration.
- The picture of the state of individual water bodies is more nuanced when considering the individual elements assessed rather than just the combined classification determined through the ‘one-out, all-out’ principle.
- Despite some elements of the water environment achieving Good Status, however, the pressures remain substantial and the objectives of the WFD Regulations are not being achieved.
- Pollution overall is the largest pressure, dominated by diffuse rural sources and wastewater treatment discharges.
- Pollution from urban areas and roads, physical modifications, non-native invasive species and water abstraction are also major pressures.

- Pollution from sewer overflows and minewaters are comparatively smaller though still important.
- Levels of phosphate account for more surface water bodies failing to achieve Good Ecological Status or Potential than any other water quality pressure. Failure in groundwater bodies is driven by nitrate while chemical status in surface waters is driven by uPBTs.

3.2.1 The changing state of the water environment

There have been significant improvements in water quality over the past 30 to 40 years. Recent ecological and water quality studies^{144 145 146} clearly demonstrate improvements over this period. However, these studies also show that improvements have slowed or largely stalled since the first cycle (2009 to 2015) RBMPs.

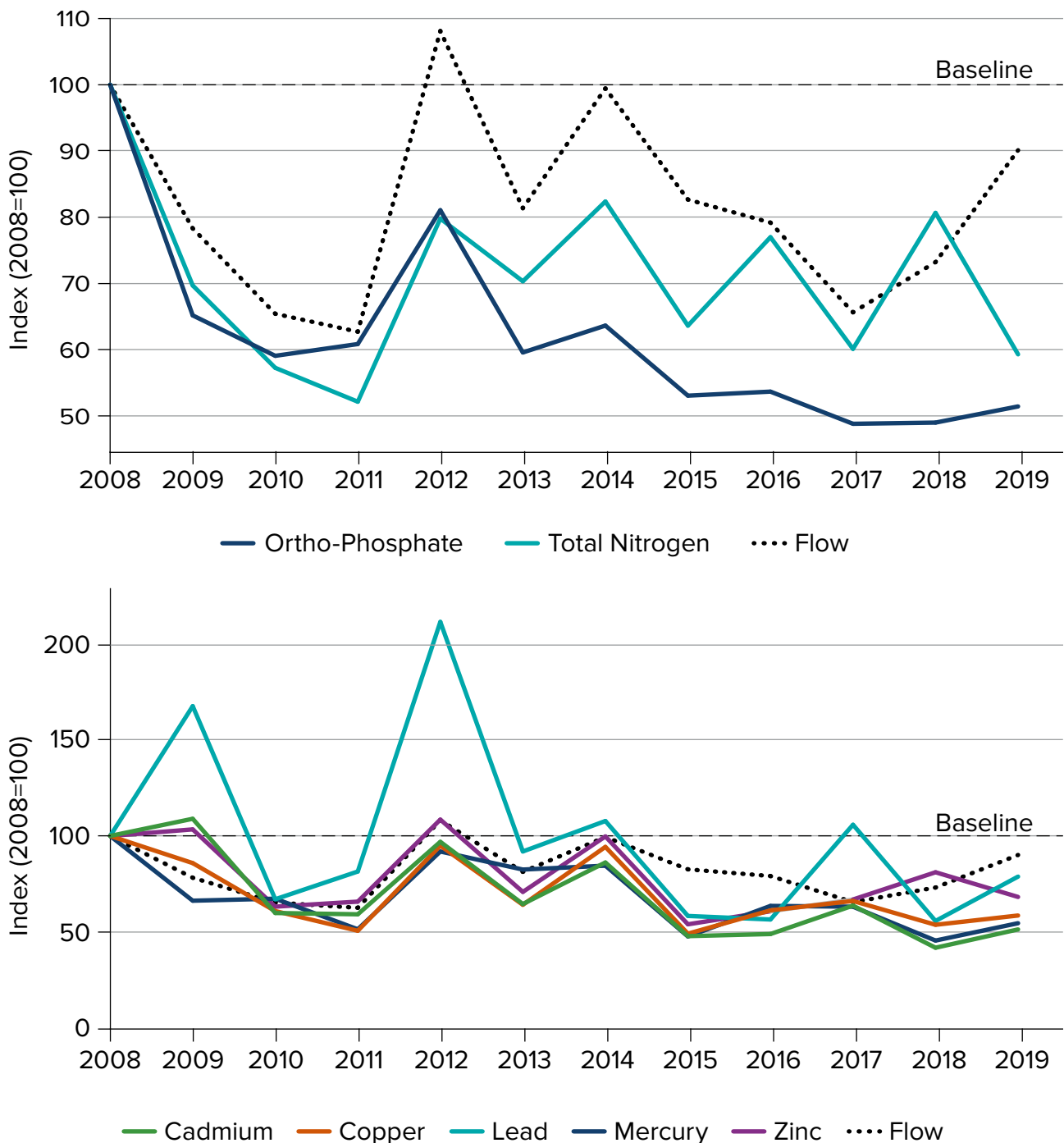
To illustrate this, Figure 3.1 summarises the inputs into tidal rivers of nutrients and selected metal contaminants across catchments in England between 2008 and 2019. Inputs have fluctuated considerably but have fallen overall. Most of the reductions appear to have occurred in the first few years of this period, with limited reductions after that. Fluctuations also appear to be related to flow volumes, with 2008 having been a particularly wet year, influencing the levels observed.

144 Environment Agency and Natural England, 'State of the Water Environment: Long-Term Trends in River Quality in England' (2023) <www.gov.uk/government/publications/state-of-the-water-environment-indicator-b3-supporting-evidence/state-of-the-water-environment-long-term-trends-in-river-quality-in-england> accessed 23 November 2023.

145 Environment Agency, 'An Analysis of National Macroinvertebrate Trends for England: 1991–2019' (22 October 2021) <www.gov.uk/government/publications/an-analysis-of-national-macroinvertebrate-trends-for-england-1991-2019> accessed 23 November 2023.

146 Emma Pharaoh and others, 'Evidence of Biological Recovery from Gross Pollution in English and Welsh Rivers over Three Decades' (2023) 878 Science of The Total Environment 163107.

Figure 3.1. Riverine inputs of selected nutrients and metals into English tidal waters, 2008 to 2019 (Source: Defra, 2023)¹⁴⁷



3.2.2 The results of water body classifications

The WFD Regulations' classification approach, described in Chapter 2 (Section 2.2.3) and Annex 4, defines threshold levels of physical, chemical or biological conditions to achieve certain statuses. This means that a percentage reduction in inputs or pressures alone may not equate to an overall improvement in the status of a water body if the applicable threshold is not met.

¹⁴⁷ Defra, '25 Year Plan Outcome Indicator Framework B1: Pollution Loads Entering Waters' (n 14).

According to the 2019 assessment, 16% of surface water bodies are at Good (or high) Ecological Status or Potential. No surface water bodies achieve Good Chemical Status. Groundwater bodies fare better with 45% and 73% at Good Chemical and Good Quantitative Status respectively.

These results are far from achieving the Environmental Objectives in the WFD Regulations or those set under the RBMPs, even allowing for exemptions (see Chapter 4, Section 4.4). They also are not yet close to meeting the commitment made in the EIP23 to *'restore 75% of our water bodies to good ecological status'*. This EIP23 commitment, while directly related to the WFD Regulations' objectives, does not use the term 'good ecological status' in exactly the same way as the regulations. We discuss this in Chapter 5 (Section 5.4).

Moreover, not only has there been little overall positive change in the status of water bodies, there has also been an apparent regression (see box below). This is despite the WFD Regulations' 'No Deterioration Objective' described in Chapter 2 (Section 2.2.4).

Between the second and third cycle RBMPs, 171 surface water bodies (just under 4% of the total number of 4,658) deteriorated from Good (or high) Ecological Status or Potential to moderate or worse. Over the same period, 151 surface water bodies (just over 3%) improved from moderate or worse to good or better. This is a net deterioration of 20 surface water bodies.¹⁴⁸

Note also that this may not show the full picture of change. Some water bodies may have seen a decline or an improvement in the class of specific elements without that affecting their overall status.

Other information also illustrates the challenges in the water environment. For example, salmon stocks have shown a sharp decline.¹⁴⁹ Salmon are often viewed as a keystone aquatic species. Their 'recruitment' levels (the survival of young, small fish to older, larger salmon), disease, and the impact of invasive species are particular problems, alongside wider migrational pressures.

3.2.3 Looking beyond the headline figures

The figures and findings outlined above suggest that implementation of the WFD Regulations and other measures have not been successful to date in achieving objectives to protect and improve the water environment.

The detailed picture is more nuanced. As set out in Government's Plan for Water, these headline figures alone do not show the complete picture of the state of the water environment.¹⁵⁰

If only the headline figures are used, the 'one-out, all-out' principle means changes in relation to individual elements may be overlooked. It is important, therefore, to ensure that assessments of status, progress, and of the measures to seek improvements take account

148 Environment Agency, 'River Basin Management Plans, Updated 2022' (n 15) s 2.1.

149 CEFAS, Environment Agency, and Natural Resources Wales, 'Salmon Stocks and Fisheries in England and Wales in 2021' (2022) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1093963/SalmonReport-2021-assessment.pdf> accessed 23 November 2023.

150 Defra, 'Plan for Water' (n 4) 14.

of the individual input tests as well as the overall results. We illustrate this in the box below by reference to two example water bodies.

Helm Beck and Fox Dike/Carr Dike

'Helm Beck'¹⁵¹ is a surface water body in the English part of the Solway Tweed RBD. 'Fox Dike/Carr Dike'¹⁵² is a surface water body in the Humber RBD.

Both water bodies are at 'moderate' ecological status. However, Helm Beck only has two individual elements at 'moderate' with the remainder at 'high' or 'supports good'. On the other hand, Fox Dike/Carr Beck has five elements below 'good' ecological status. Helm Beck is also shown to have only a single identified 'reason for not achieving good' ecological status in comparison with 12 for Fox Dike/Carr Dike. One reason for deterioration is also attributed to Fox Dike/Carr Dike.

Based on the monitoring information of the various elements, the health of both water bodies is significantly different, yet their overall status classifications are the same. Therefore, the headline status can be misunderstood, or present only part of the picture, if the underlying data and assessments are not also considered.

Across all surface waters, the Plan for Water states that 79% of the individual element tests are at the level needed for Good Ecological Status. This varies across the different elements tested. For instance, ammonia, dissolved oxygen and phosphorus are at 92%, 82% and 45% respectively. The Plan for Water also states that one-fifth of all surface water bodies are classified as moderate ecological status, because of a single 'moderate' test result where all other tests achieved 'good'.¹⁵³

With regard to chemical status, all surface water bodies failed the Good Chemical Status test in 2019. This is a large change in classification compared with 2016 when 97% were at Good Chemical Status. This change is mostly because of the presence of uPBTs. It reflects the fact that new assessments for uPBTs were included for the 2019 chemical classifications, as well as new standards, improved techniques and methods. If uPBT assessments were excluded from the 2019 results, 6% of surface water bodies would fail the Good Chemical Status test and 94% would pass.¹⁵⁴

3.2.4 Major pressures on the water environment

Despite the complex picture on the state of the water environment, it is clear there are still major pressures to tackle. The tests undertaken to monitor progress with the RBMPs show that the main water quality pressure constraining the achievement of Good Ecological Status or Potential for surface waters is nutrient pollution. This is primarily phosphate pollution in rivers, which make up the majority of surface water bodies. Lake water

151 Environment Agency, 'Helm Beck | Catchment Data Explorer' <<https://environment.data.gov.uk/catchment-planning/v/c3-plan/WaterBody/GB102076070710>> accessed 23 November 2023.

152 Environment Agency, 'Fox Dike/Carr Dike from Source to Selby Dam | Catchment Data Explorer' <<https://environment.data.gov.uk/catchment-planning/WaterBody/GB104027063680>> accessed 23 November 2023.

153 Defra, 'Plan for Water' (n 4) 14.

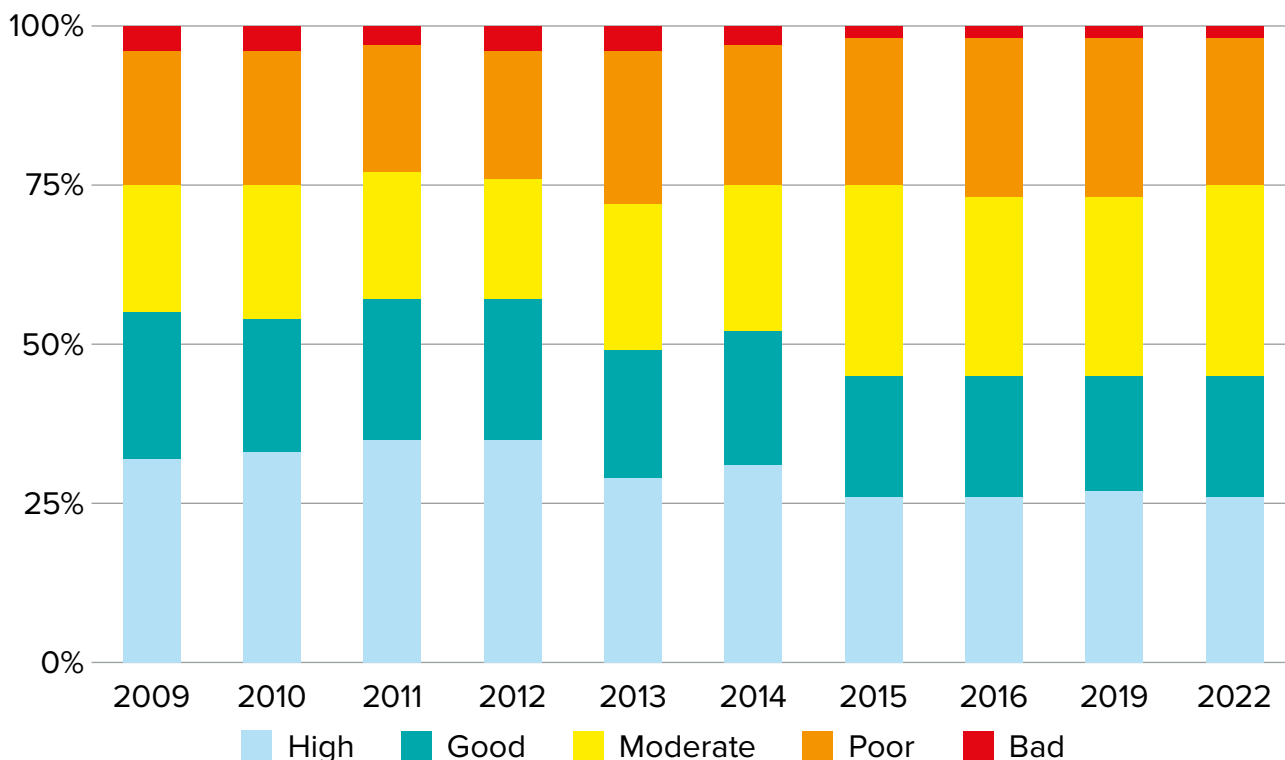
154 Environment Agency and Natural England, 'State of the Water Environment Indicator B3: Supporting Evidence' (22 May 2023) <www.gov.uk/government/publications/state-of-the-water-environment-indicator-b3-supporting-evidence/state-of-the-water-environment-indicator-b3-supporting-evidence> accessed 5 February 2024.

bodies also fail for phosphorus and nitrogen pollution. Nitrate is the largest pressure in groundwater bodies. With regard to chemical status, the failures are mostly driven by uPBTs.

The classification results for phosphate contribute most to the overall poor performance in surface water bodies. Through the one-out, all-out principle, this is a barrier to achieving a higher status across many water bodies. Figure 3.2 shows that the percentage of surface water bodies within each phosphate class has remained largely static from 2009 to 2022. The percentage at ‘good’ or ‘high’ has reduced slightly over the period.

The results are affected by methodologies and monitoring regimes changing over time. Nevertheless, it is not a picture of improvement, with pressures from phosphorus (including phosphate) remaining significant on surface water bodies. As noted by the EAC in relation to river pollution, high levels of phosphate account for more water bodies failing to achieve Good Ecological Status than any other water quality pressure.¹⁵⁵ This comes mostly from agriculture and wastewater treatment.

Figure 3.2. Percentage of surface water bodies in each phosphate class under each year of classification between 2009 and 2022 (Source: based on data published by the Environment Agency, 2023)¹⁵⁶



More broadly, the RBMPs highlight seven major pressures constraining water bodies from reaching their objectives, as shown in Figure 3.3. The top three pressures are physical modifications, pollution from agriculture and rural land, and wastewater. While physical modifications are the largest individual classified pressure, water pollution is the largest

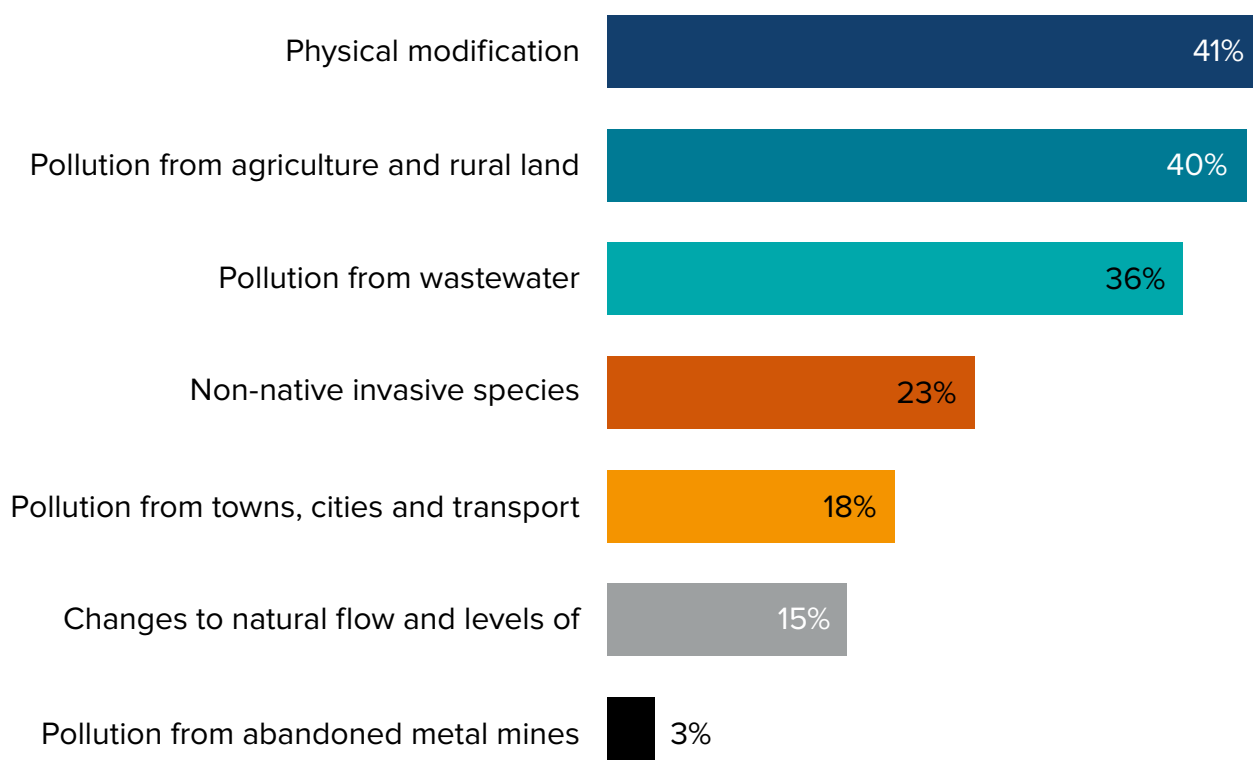
¹⁵⁵ House of Commons Environmental Audit Committee (n 140) 81; Environment Agency, ‘Phosphorus and Freshwater Eutrophication Pressure Narrative’ (2019) <https://consult.environment-agency.gov.uk/environment-and-business/challenges-and-choices/user_uploads/phosphorus-pressure-rbmp-2021.pdf> accessed 23 November 2023.

¹⁵⁶ Environment Agency, ‘Classifications Data for England’ (2023) <<https://environment.data.gov.uk/catchment-planning/v/c3-plan/England/classifications>> accessed 18 December 2023.

overall pressure when combining the sources from wastewater, rural areas, urban areas and transport, and abandoned metal mines.

Pollution from abandoned metal mines affects a relatively small proportion of the number of water bodies, with the scale of the other pollution impacts being much larger. Similarly, the proportion of water bodies affected by intermittent sewage discharges such as untreated or partially treated sewer overflows is 11% of the total number of water bodies.¹⁵⁷ Most of the pollution from wastewater comes from treated discharges at wastewater treatment works.

Figure 3.3. Top pressures affecting water bodies in England (Source: Defra, 2023). Note water bodies are commonly affected by more than one pressure, so the totals do not add up to 100%.¹⁵⁸



3.3 How England compares with other jurisdictions and nations

Many of the problems faced in England and the UK are not unique. A recent pan-European study¹⁵⁹ set out similar challenges in improving freshwater biodiversity across a range of countries. The comparative analysis undertaken in this project has also compared river basin management approaches and outcomes in England and Northern Ireland with those in other UK administrations, other European countries and selected jurisdictions in other parts of the world.¹⁶⁰

This section of the report compares progress in England with that in other countries, from which we summarise the following key facts.

157 Environment Agency, 'Challenges Data for England | Catchment Data Explorer' (2023) <<https://environment.data.gov.uk/catchment-planning/England/rnags>> accessed 20 February 2024. When only those discharges with a higher certainty (probable and confirmed) of impact are considered, the proportion reduces to 8% of water bodies.

158 Defra, 'Plan for Water' (n 4) 12.

159 Peter Haase and others, 'The Recovery of European Freshwater Biodiversity Has Come to a Halt' (2023) 620 Nature 582.

160 WSP (n 42).

Key facts:

- In the UK, England has by far the lowest proportion of surface water bodies at Good Ecological Status or better (16%). Scotland has the highest percentage (54%) followed by Wales (42%) and Northern Ireland (31%).
- England also has the lowest percentage of groundwater bodies at Good Quantitative Status (73%). Wales has the highest percentage (100%) followed by Scotland and Northern Ireland (both at 95%).
- While differences in pressures and physical factors will have an impact on these results, overall it is clear that the ecological status of surface water bodies and the quantitative status of groundwater bodies are considerably worse in England than in Scotland, Wales or Northern Ireland.
- None of the 27 EU member states has yet achieved the objectives of the WFD.
- Compared against all EU member states, the UK as a whole is at the lower range of the percentage of surface water bodies achieving Good Ecological Status or Potential.
- The performance of the UK is similar to that of countries with broadly similar river systems, physical geography and pressures from agriculture, urbanisation and industrialisation. It exceeds that of nine EU member states.
- However, the overall UK figures are positively affected by the more favourable status of surface water bodies in Scotland, Wales and Northern Ireland compared to England. If taken alone, England's performance exceeds that of only four EU countries (Netherlands, Luxembourg, Germany and Hungary).

3.3.1 Comparison across UK jurisdictions

We have compared the status of water bodies in England, Northern Ireland, Wales and Scotland from the third cycle RBMPs.¹⁶¹

Figure 3.4 shows the reported ecological status of surface water bodies for each administration. England, Wales and Northern Ireland reported the majority of their surface water bodies as achieving moderate ecological status while Scotland reported the majority of its surface water bodies as good or better. Scotland has the highest combined percentage for surface water bodies classified at Good (or high) Ecological Status or Potential (54% of 3,249 surface water bodies), followed by Wales (42% of 905 surface water bodies), Northern Ireland (31% of 496 surface water bodies) and England (16% of 4,658 surface water bodies). England therefore has by far the lowest proportion of surface water bodies at Good (or better) Ecological Status or Potential in the UK.

England also has the lowest percentage of groundwater bodies at Good Quantitative Status (73% of 271 groundwater bodies), compared with Scotland (95% of 403 groundwater bodies), Northern Ireland (95% of 75 groundwater bodies) and Wales (100% of 25 groundwater bodies). Wales has reported all of its groundwater bodies at Good Quantitative Status in the last two RBMP cycles.

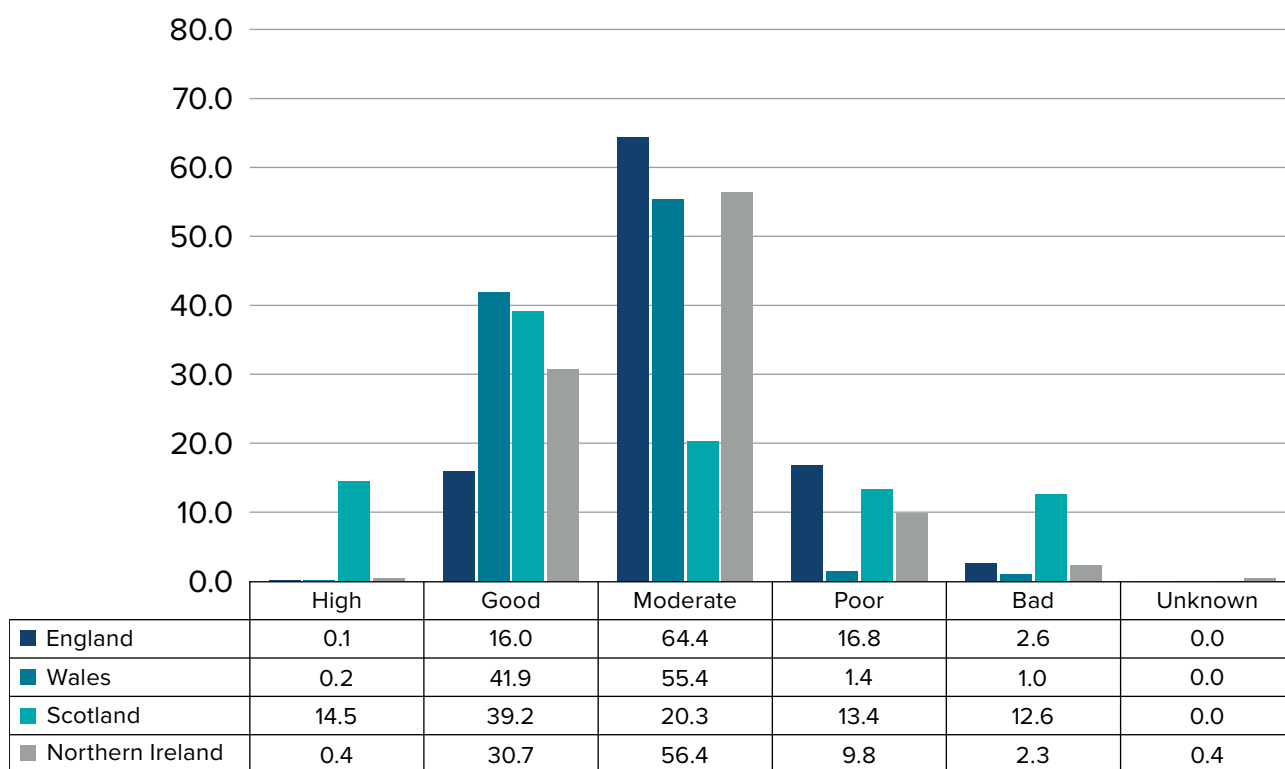
¹⁶¹ *ibid* 93–134.

Differences in the types and scales of pressures clearly have an impact on the ecological and quantitative status results in each administration. They will also affect the nature and practicality of measures that may be needed to realise improvements.

For example, Scotland, Wales and Northern Ireland have relatively lower population densities than England, affecting pollution pressures from towns, cities, transport and wastewater. Differing patterns of agriculture and industrialisation, as well as physical geography, topography and geology, will also have an effect. The comparative analysis report discusses this further.¹⁶²

In this context, England is not necessarily doing things worse than other parts of the UK. Each administration faces different scenarios. At the headline level of overall outcomes, however, the ecological status of surface water bodies and the quantitative status of groundwater bodies are considerably worse in England than in Scotland, Wales or Northern Ireland.

Figure 3.4. Overall ecological classifications in all water bodies (percentages) in 2019 (Source: WSP, 2023)¹⁶³



With regard to chemical status, Wales and England have both reported a decrease in groundwater bodies achieving Good Chemical Status since 2015. Scotland and Northern Ireland both reported an increase in the number of groundwater bodies achieving Good Chemical Status. However, each administration has applied a slightly different approach to chemical classification as set out in the comparative analysis report, making direct comparisons difficult.

¹⁶² *ibid.*

¹⁶³ *ibid* 108.

3.3.2 Comparison with EU member states

The comparative analysis also evaluated the progress and performance in achieving the WFD outcomes in the UK with progress in the 27 EU member states. A major challenge was that insufficient information was available in the public domain to look at progress for the third cycle RBMPs in EU member states, as most had not completed their reporting at the time of the research. This means that the analysis primarily used information from the second cycle RBMPs to understand the position in EU member states. While some further plans may have since been published, around half of the EU member states still had not completed or fully reported their third cycle plans by October 2023.¹⁶⁴

As in the UK, the analysis found that no EU member states had yet achieved the WFD Environmental Objectives. We focus our comments below on the ecological status of surface water bodies, with the full assessment provided in the comparative analysis report.¹⁶⁵

Figure 3.5 Percentage of waterbodies at Good (or high) Ecological Status or Potential across European countries in second cycle RBMPs, compared against third cycle classifications in the UK

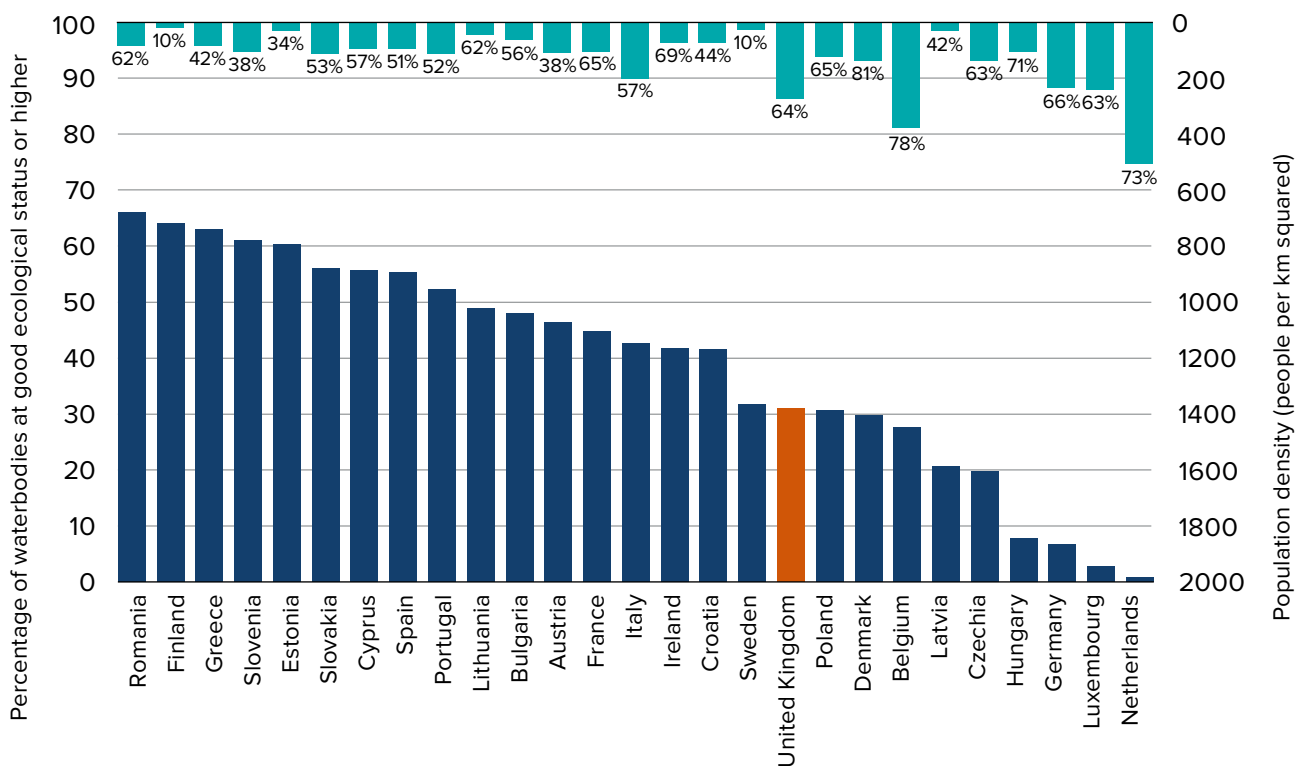


Figure 3.5 represents the percentage of water bodies at Good (or high) Ecological Status or Potential in EU member states and the UK. Population density bars (the reverse bar chart at the top of Figure 3.5) and the proportion of land covered by agriculture and urban areas (the percentage figures at the top of Figure 3.5) are also presented. These provide an indicative scale of pressures in each nation.

164 European Commission, 'Water Framework Directive' (11 December 2023) <https://environment.ec.europa.eu/topics/water/water-framework-directive_en> accessed 17 December 2023.

165 WSP (n 42) 7–79.

The UK is at the lower range of the percentage of surface water bodies achieving Good Ecological Status or Potential. Romania shows the highest figure at 66%.

The outcomes in the UK as a whole, while not yet close to achieving the WFD Environmental Objectives, are similar to those in many other countries when accounting for similar pressures. The UK's performance in achieving Good Ecological Status or Potential for surface water bodies exceeded that of nine EU member states and was similar to the outcomes in Sweden, Denmark and Poland.

As noted above, however, the overall UK figures will be heavily affected by the more favourable status of surface water bodies in Scotland, Wales and Northern Ireland compared with England. On its own, England's performance only exceeds that of four EU member states – Netherlands, Luxembourg, Germany and Hungary.

3.4 New and emerging pollutants

This section presents work in the project on new and emerging pollutants that may affect the water environment, from which we summarise the following key findings.

Key findings:

- A water quality stocktake has identified new and emerging pollutants, many of which are not currently subject to control under the WFD Regulations.
- Many of these substances also lack monitoring and detailed understanding of the risks that they pose.
- The research identified two substances (1,4-dioxane and fipronil), in particular, as very high risk and in common use by industry and the general public.
- The EU 'Watch List' mechanism and processes for setting environmental quality standards for such substances no longer apply to the UK.
- Without more attention from Government and the EA, these substances may increase threats to public health and the wider natural environment.

The aim of the water quality stocktake in this project¹⁶⁶ was to synthesise the latest technical information on substances of concern in order to identify key gaps in knowledge and provide recommendations for future work. This focused primarily on emerging substances or those for which significant new insights have become available, rather than more established pollutants such as nutrients, metals and synthetic chemicals that are already well known.

Following an initial screening of over 100 pollutants, the stocktake considered 25 pollutants or categories of key emerging pollutants, current pollutants with significant new knowledge, and new water quality pressures, factors or trends to address. The project analysed material on these 25 pollutants' primary sources, ecological and human health impacts, and relevant legislation.

¹⁶⁶ Atkins and WCA (n 43).

Factsheets prepared for these 25 pollutants are published alongside the report on the OEP’s website. Table 3.1 presents each pollutant considered and the type of pollutant they were classified as.

Table 3.1. Shortlist of pollutants and categories selected as ‘emerging pollutants’ or with ‘significant new insights’ (Source: Atkins and WCA, 2023)¹⁶⁷

Category or pollutant name	Pollutant type
Azole compounds	Pesticide/fungicide Personal care products
Alkylphenols	Industrial chemicals
Antibiotics*	Pharmaceutical Veterinary medicines
Bisphenol A and related substances	Industrial chemicals
Carbamazepine	Pharmaceutical
Cypermethrin	Biocide
Fipronil	Insecticide
Fluoxetine (Prozac or Oxactin)	Pharmaceutical
Halogenated solvents	Industrial chemicals
Imidacloprid	Insecticide
Industrial UVs	Industrial chemicals
Microplastics	Particulates
Non-steroidal anti-inflammatory drugs (NSAIDs)	Pharmaceuticals
Organophosphorus flame retardants	Industrial chemicals
Polycyclic aromatic hydrocarbons (PAHs)	Industrial chemicals
Parabens - alkyl esters of p-hydroxybenzoic acid	Personal care products
Polycyclic musks	Personal care products
Propranolol	Pharmaceutical
Phthalate esters	Industrial chemicals Endocrine disrupting chemicals
Tri-allate	Plant protection product - pesticide
Triclocarbon	Pharmaceutical
UV filters (sunscreen)	Personal care products
1-4 dioxane	Industrial chemicals

*Includes factsheets on ‘Macrolide antibiotics’ and ‘Antibiotics in the β -lactam family’.

The water quality stocktake identified significant knowledge gaps for many pollutants. These relate to, for example, their sources, the role of sediment sorption (how sediment affects the availability of chemical pollutants in the water column and controls bioavailability to organisms), risks of transformation products, endocrine disrupting properties, environmental and human health risk, the development of standards and the effectiveness of wastewater treatment processes.

167 *ibid* 13–15.

The analysis identified seven substances of particular concern to the aquatic environment and public health. These were then assessed further to understand the levels of risks they posed. This considered the extent, magnitude and future evolution of the risks posed by the pollutants to the aquatic environments of England and Northern Ireland. Table 3.2 sets out the risk rating for England for each substance assessed.

Table 3.2. Emerging pollutants for which risk assessments were undertaken showing the risk rating for England (Source: Atkins and WCA, 2023)¹⁶⁸

Pollutant	Description	Risk rating
1,4-dioxane	Industrial chemical, assigned highest priority under the EA's Prioritisation and Early Warning System (PEWS) review, potentially carcinogenic to humans and undergoing assessment for being persistent, bio-accumulative and toxic.	Very high risk
Bisphenol A	Industrial chemical with many uses and confirmed endocrine disrupting chemical, classified as a priority substance under the WFD.	High risk
Carbamazepine	Pharmaceutical, highlighted in the EA's PEWS and prioritised in an EA assessment of pharmaceuticals due to regular detection in monitoring programmes.	Moderate
Climbazole	Used in personal care products, representative of the azole class of fungicides and undergoing assessment in the EU as a potential endocrine disrupting chemical.	Moderate
Diclofenac	Pharmaceutical, representative of the non-steroidal anti-inflammatory drugs class of medicines, widely detected and included on the WFD 'watch list'.	High risk
Fipronil	Veterinary medicine (insecticide), classified as very toxic and widely detected in English waters.	Very high risk
Galaxolide	Used extensively in personal care products as a fragrance (synthetic musk), classified as very toxic and undergoing assessment in the EU as persistent, bio-accumulative and toxic and as a potential endocrine disrupting chemical.	High risk

Overall, the water quality stocktake observed that, as many of these are emerging substances, they are not yet all well monitored or subject to full control under the WFD Regulations or by other means.

The assessment identified two substances as presenting a very high risk to the aquatic environment in England. These are 1,4-dioxane (an industrial solvent), and fipronil (an insecticide used in pet treatments). Fipronil is on the WFD 'Watch List' (a list of emerging substances of concern for which the EA must carry out monitoring; see Annex 3). The EA has identified the potential need for environmental quality standards for both of these chemicals in its regulatory strategy for each substance.

¹⁶⁸ *ibid* 31–32.

Fipronil (Source: Atkins and WCA, 2023)¹⁶⁹

In the UK, fipronil is used as a veterinary medicine for the treatment of fleas, ticks and lice on cats and dogs. The most likely routes for emissions to surface water are: a) following 'spot-on treatment', washing pet bedding, bathing pets, walking dogs in the rain and dogs swimming (leading to input to the aquatic environment directly via contact with surface water); b) rainwater run-off; and c) effluent discharge from municipal wastewater treatment plants. Fipronil is also approved for use as a biocide for the control of insects. Fipronil is highly toxic to aquatic invertebrates and human health. It can cause damage to organs (specifically, the central nervous system) through prolonged or repeated exposure. Fipronil is considered persistent in the environment and is not readily biodegradable.

Climbazole (a fungicide used in personal care products) and carbamazepine (a pharmaceutical) were determined to present moderate risk to the environment and human health. Galaxolide (a fragrance used in personal and household products), bisphenol A (used in plastics and epoxy resins), and diclofenac (a pharmaceutical) were judged to pose high risks. The EU has proposed an environmental quality standard for diclofenac. The EA has identified the potential need for such standards for both diclofenac and bisphenol A in its regulatory strategy for each substance.

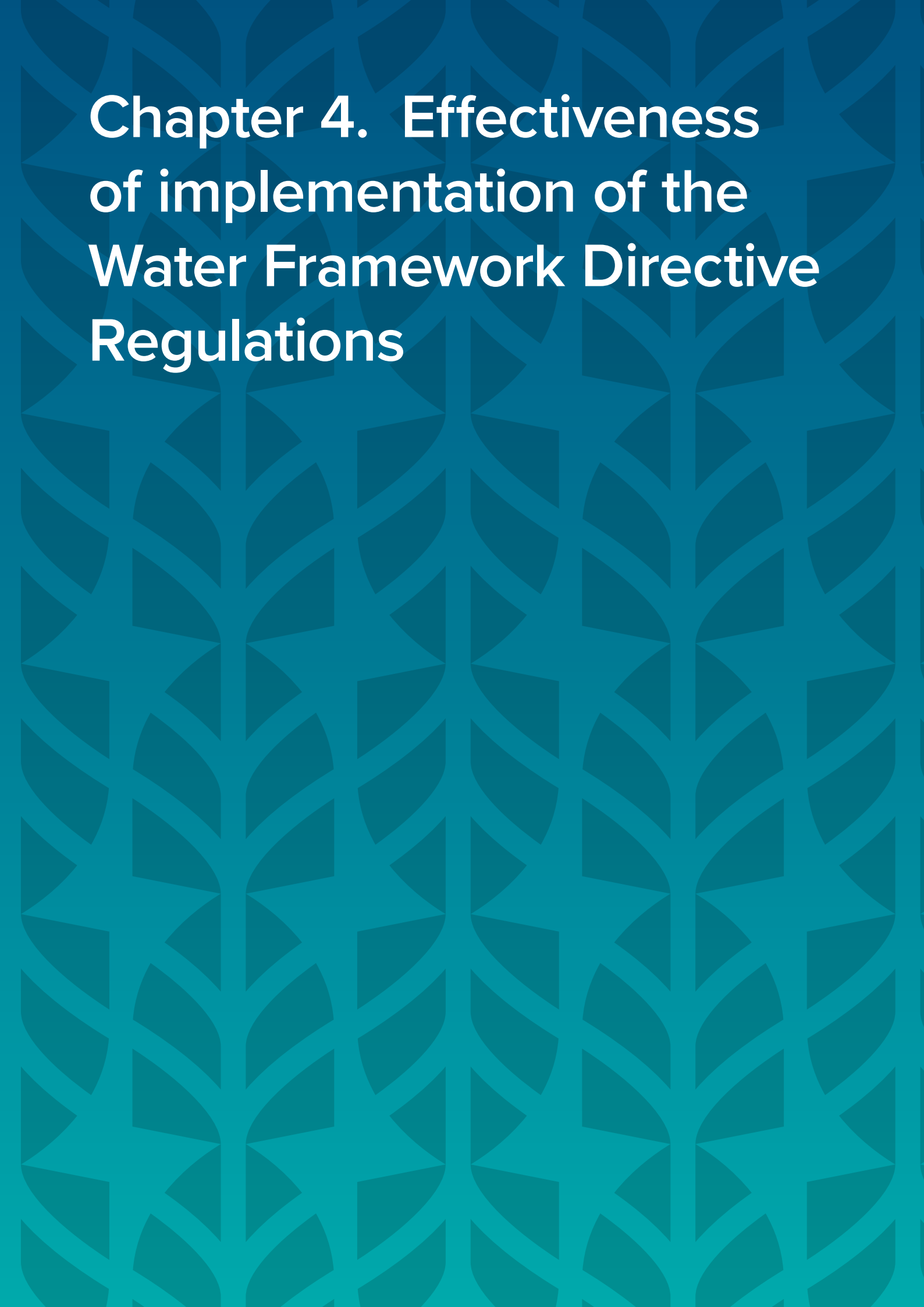
Our assessment is that, without further action by Government and the EA to address these new and emerging pressures through appropriate monitoring programmes and mechanisms in law, policy and operational practice, they may increase risks to the environment and human health.

Acting to address environmental harm that has already happened is challenging. This is illustrated by the Good Chemical Status objective under the WFD Regulations, for which the deadline has been extended to 2063 for surface waters. This is due to the widespread presence of uPBT substances, which it is considered will take this additional time to reduce.

As we note in Annex 3, the EU 'Watch List' mechanism and processes for setting environmental quality standards under the WFD no longer apply directly to the UK. Instead, the Secretary of State now has powers within the Environment Act 2021 to update the list of priority substances and derive the associated environmental quality standards following the UK's exit from the EU. In addition, there is an ongoing requirement on the EA to monitor for substances on the Watch List as it was when the UK left the EU, but not for any additional substances since added to the EU list.

Defra has acknowledged in this project that the process for identifying and developing environmental quality standards for substances in the future has not yet been defined. It said that it is currently considering its approach, and that this will indicate the degree to which England will remain aligned with the EU processes for identifying priority hazardous substances and environmental quality standards. This decision will also inform the EA's future work on the development of environmental quality standards. We discuss this issue further in Chapter 5.

¹⁶⁹ Atkins and WCA (n 43).



Chapter 4. Effectiveness of implementation of the Water Framework Directive Regulations

Chapter 4. Effectiveness of implementation of the Water Framework Directive Regulations

4.1 Introduction and approach

As we set out in Chapter 3, the current status of water bodies in England is far from meeting the WFD Regulations' Environmental Objectives. There is a significant gap between those intended outcomes and what is being achieved. In this chapter, we review the practical implementation of the WFD Regulations, considering ways in which this is both helping and hindering delivery of the Environmental Objectives.

We have broken down our assessment of the implementation of the WFD Regulations into five main areas (Sections 4.2 to 4.6). In each one, we address specific questions or issues relating to a particular theme. We note some aspects that have worked well and discuss areas where we think implementation can be improved. We summarise our key findings at the start of each section.

Section 4.2 concerns the setting and presentation of Environmental Objectives in the RBMPs. We look at:

- what the Environmental Objectives aim to achieve by 2027
- the likelihood of those Environmental Objectives with a 2027 deadline being met.

Section 4.3 looks at the development and delivery of Programmes of Measures to achieve the Environmental Objectives. It considers:

- economic analysis and the assessment of investment needs underpinning the Programmes of Measures
- the adequacy of Programmes of Measures to achieve the Environmental Objectives
- how Defra and the EA are approaching the requirement to make measures operational within three years of approval.

Section 4.4 assesses the application of exemptions when setting Environmental Objectives. It looks at:

- the basis for and use of exemptions in the RBMPs
- how those exemptions have been overseen, presented and justified.

Section 4.5 concerns the broader production and governance of RBMPs. It addresses:

- how the RBMPs are presented, including whether they are clear and usable
- public participation and consultation
- local engagement and action
- the need for up-to-date information to assess and manage risks to water
- the management of transboundary river basins
- the production of plans by statutory deadlines.

Section 4.6 concerns monitoring and reporting. It discusses:

- why monitoring is important
- the approach taken by the EA and others for monitoring the water environment
- how the EA's monitoring has evolved in light of changes in resourcing
- the merits of the 'one-out, all-out' principle in the classification of water bodies.

4.2 Environmental Objectives

We focus our analysis in this section on the 2027 Environmental Objectives for the ecological condition of surface waters and the quantitative status of groundwater. These are the most imminent, apply to most water bodies and have the closest relationship with Government's EIP23 commitment to '*restore 75% of our water bodies to good ecological status*' under the goal of 'clean and plentiful water'¹⁷⁰ (see Chapter 5). Section 4.4 looks more broadly at the use of Extended Deadline Exemptions and Less Stringent Objective Exemptions in setting Environmental Objectives for water bodies.

We summarise below the key findings from the analysis in this section that follows.

Key findings:

- The RBMPs set Environmental Objectives of Good Ecological Status or Potential for surface water, or Good Quantitative Status for groundwater, for 78% of all water bodies by the extended deadline of 2027. The other 22% of water bodies are subject to further exemptions.
- Absolute certainty when proposing and approving Environmental Objectives and Programmes of Measures is not required. Nevertheless, the Ministerial Guidance requires the EA to be satisfied that the Programmes of Measures can reasonably be expected to achieve the Environmental Objectives. It is also our view that this reflects the requirements of the WFD Regulations.
- However, the RBMPs present 'low confidence' in the 2027 objectives for most water bodies. This indicates a considerable lack of certainty about the overall ability of Programmes of Measures to achieve the Environmental Objectives.
- Having analysed the available information, our view is that this approach to setting Environmental Objectives may not comply with the requirements of the WFD Regulations or Ministerial Guidance.
- Combined with slow progress during implementation of the first and second cycle RBMPs, lack of sufficient, specific measures and insufficient funding in the third cycle, this indicates that the legally binding 2027 outcomes are not on course to be met for most water bodies. They appear more likely to be missed by a large margin.

Addressing these issues will require action in relation to the Programmes of Measures, on which we make recommendations in Section 4.3.

170 Defra, 'Environmental Improvement Plan 2023' (n 3) 98–99.

4.2.1 What do the Environmental Objectives aim to achieve by 2027?

Through the Environmental Objectives in the RBMPs, the EA has proposed and the Government has committed to a significant improvement in the condition of water bodies by 2027. This is shown in the box below.

Environmental Objectives by 2027

The third cycle RBMPs set Environmental Objectives to achieve Good Ecological Status or, for AHMWBs, Good Ecological Potential, for 77% (3,591 of 4,658¹⁷¹) of surface water bodies by 2027. They also set Environmental Objectives to achieve Good Quantitative Status for 90% (244 of 271) of groundwater bodies by 2027.

Combining these numbers, the RBMPs set Environmental Objectives of Good Ecological Status or Potential, or Good Quantitative Status, by 2027 for 78% (3,835 of 4,929) of all water bodies. Chapter 5 discusses how this relates to and underpins goals and targets under Government's EIP23 and the Environment Act 2021.

For the remaining water bodies (that is, 23% of surface water bodies and 10% of groundwater bodies, equating to 22% of all water bodies overall), further exemptions have been applied. This means their Environmental Objectives are to achieve less than 'good' or to reach 'good' for these ecological and quantitative elements by a later date. Section 4.4 looks at how exemptions have been applied.

In terms of chemical classification, the RBMPs set Environmental Objectives to achieve Good Chemical Status for 82% (221 of 271) of groundwater bodies by 2027. No surface water bodies have Environmental Objectives to meet Good Chemical Status by 2027 due to the presence of uPBTs. These are also all covered by exemptions which we discuss in Section 4.4.

4.2.2 The likelihood of achieving the 2027 Environmental Objectives

Confidence in the 2027 Environmental Objectives

For most of the 2027 Environmental Objectives, the RBMPs present 'low confidence' that the objectives will be achieved. This highlights a considerable lack of certainty that the objectives will be met by that date. We explain this and set out how many water bodies it affects below.

What does 'low confidence' mean?

The RBMPs explain but do not quantify 'low confidence'. Expressions of confidence for datasets and outcomes often come with a specific meaning. For example, 'high confidence' might mean a 99% or 95% probability, or 'more likely to happen than not' might mean a probability of greater than 50%. From discussions with Defra and the EA, however, we

¹⁷¹ Note that there is some variation in the reported number of surface water bodies, as discussed in Chapter 2, but the variation is not sufficient to alter the percentages calculated here.

understand that ‘low confidence’ does not have such a specific, quantitative meaning in this context. Rather, they have told us that it is used in a broad sense, reflecting a general, subjective judgement rather than a precise statistical one.

The approach of indicating ‘low confidence’ stems from the Ministerial Guidance issued by Defra to the EA on river basin management planning. We reproduce relevant extracts from the guidance below.¹⁷²

Ministerial Guidance – confidence in Environmental Objectives

Defra’s September 2021 Ministerial Guidance to the EA concerning river basin management planning states (with emphasis in **bold** added by the OEP):

*‘10.6 The Environment Agency will be more certain of meeting some objectives than others because of variations in the level of confidence that applies to the classification of a given water body and certainty about the effectiveness of proposed measures. There will also be uncertainty about when some of the measures needed to achieve an objective by 2027 will take place and in these situations the Environment Agency should indicate that the level of confidence associated with the objective being set is low. Where objectives can only be set with low confidence, it may be appropriate for the Environment Agency to refer to future government or industry measures and funding which are planned to bring benefits in the lifetime of the RBMP cycle which have yet to be realised and cannot be assessed; **but nonetheless would mitigate against low confidence in achieving the objectives.** For example, Defra’s Environmental Land Management reforms (ELM) planned for the early 2020’s aim to bring new environmental benefits, including reduced diffuse water pollution from agriculture.*

*10.7 Absolute certainty is not necessary for the setting of objectives, **provided the planning assumptions are clear and that estimates of the progress expected from measures that help improve status are included.** The Environment Agency should bear in mind that the WFD regulations make provision for the programmes of measures to be reviewed and for changes to be made if it appears that the objectives that have been set will not be met. The Environment Agency should, however, be satisfied that the programmes of measures can reasonably be expected to achieve the objectives.’*

What could this mean in practice?

We illustrate what this might mean in practice in the box below. This uses the example of surface water bodies with an Environmental Objective of Good Ecological Status or Potential, or better, by 2027. It looks at the number of surface water bodies and considers the range of possible outcomes. These extend from the ‘best-case scenario’ where all of the ‘low confidence’ 2027 Environment Objectives are achieved, to the ‘worst-case scenario’ where they are all missed.

¹⁷² Defra, ‘River Basin Management Planning Guidance’ (n 11) para 10.6-10.7.

Best- and worst-case scenarios for surface water bodies in 2027

England has **4,658 surface water bodies**. Of these, **3,591** surface water bodies have an Environmental Objective of achieving at least Good Ecological Status or Potential by 2027. This is 77% of those surface water bodies. Note that 758, or 16% of those 4,658 surface water bodies, had already achieved these outcomes in 2019. The rest of the surface water bodies (1,067 of 4,658, or 23%) are subject to further exemptions (see Section 4.4).

This may be considered the **'best-case scenario'**. If met, it would realise a 61% increase in the number of surface water bodies achieving at least Good Ecological Status or Potential by 2027, from 16% in 2019 to 77% in 2027.

In practice, however, **2,604 of these 3,591 surface water bodies** are flagged in the RBMPs as having **'low confidence'** that the 'good' or higher objective will be met by 2027. This is almost three quarters (73%) of those 3,591 surface water bodies for which this objective has been set.

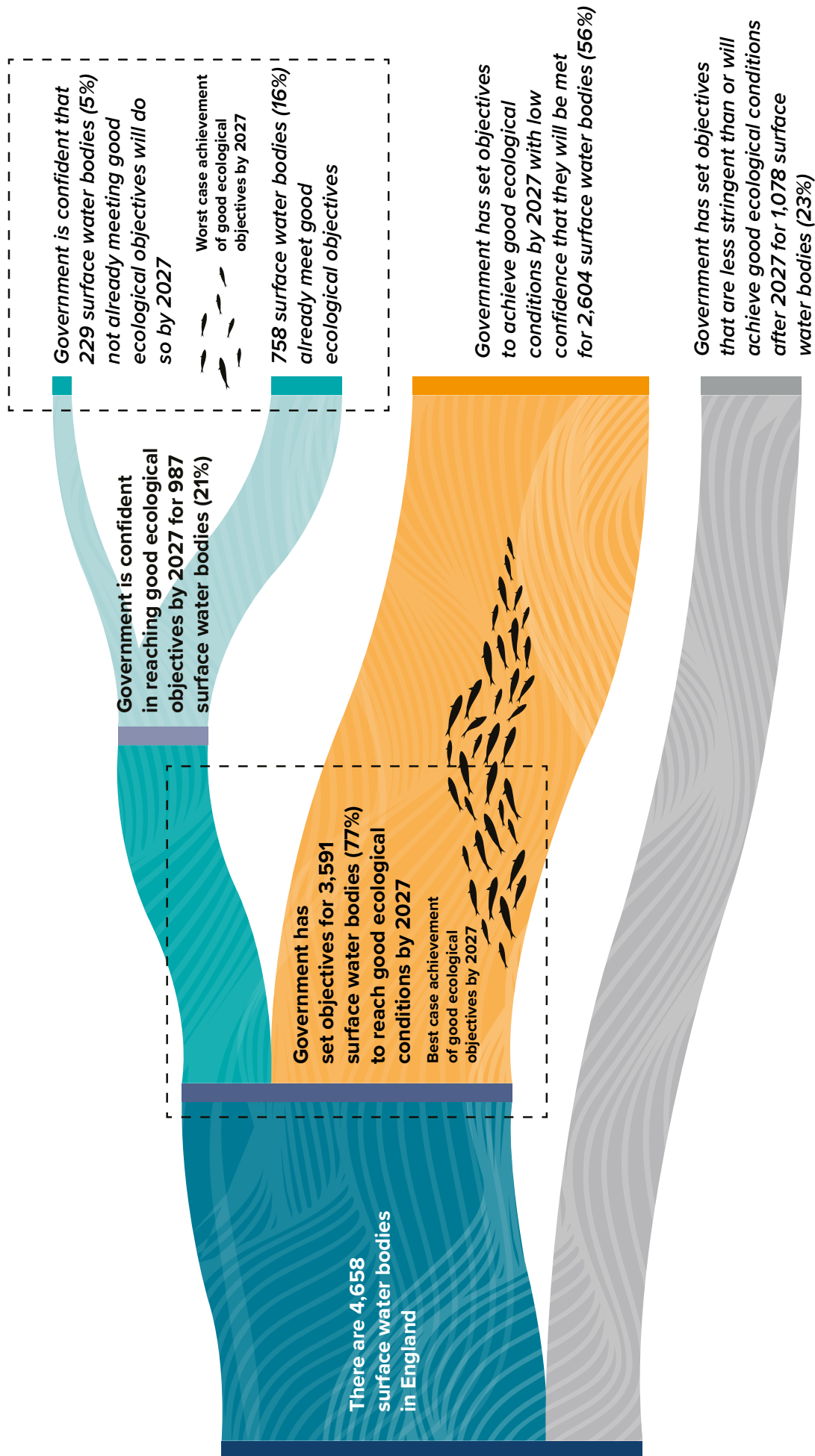
This leaves **987** of the 3,591 surface water bodies **where there is more than low confidence** that the good or higher Environmental Objective will be achieved by 2027. These 987 surface water bodies are **21%** of the total number of 4,658.

These 987 surface water bodies include 758 that already achieved this outcome by 2019 and are subject to the 'No Deterioration Objective' (which applies to all water bodies, regardless of their status objective). The objective of achieving at least Good Ecological Status or Potential by 2027 **only applies to 229 additional surface water bodies with more than low confidence**.

In a **'worst-case scenario'**, therefore, if the objective is missed for all 2,604 surface water bodies with low confidence, **this would equate to an increase of just 5%** in the number of surface water bodies achieving at least Good Ecological Status or Potential by the end of 2027, compared with the 2019 figure.

These scenarios are also illustrated in Figure 4.1.

Figure 4.1. Best- and worst-case scenarios for the ecological condition of surface water bodies by 2027 based on the Environmental Objectives in RBMPs



Why is there low confidence?

This attribution of low confidence in achieving outcomes appears to be because of uncertainty about the effectiveness and timing of the Programmes of Measures. This reflects uncertainty over when and if some measures will take place, including the introduction of policies (such as for Environmental Land Management schemes) that will allow practical measures to be implemented. A large amount of the uncertainty appears to stem from lack of sufficient investment. We discuss these issues in Section 4.3.

The RBMPs themselves state that confidence in achieving Environmental Objectives by 2027 depends on: (i) having confidence that the necessary actions will be implemented by 2027; and (ii) having confidence about which specific water bodies will benefit.¹⁷³ They go on to explain that where confidence in either of these aspects is low, the target date is expressed as ‘by 2027 (low)’.

Our view

The WFD Regulations require the setting of Environmental Objectives, and Programmes of Measures to achieve them, to meet specific outcomes prescribed by the legislation.¹⁷⁴ We accept that there may be some element of uncertainty about the classification of a given water body or the ability of Programmes of Measures to achieve a given Environmental Objective. However, the obligation is to achieve the Environmental Objectives by 22 December 2027, subject to exemptions. The legislation thus creates a specific and measurable outcome with which the responsible authorities must comply.

The Ministerial Guidance highlighted above refers to the need for mitigation where there is low confidence in Environmental Objectives. However, to achieve the Environmental Objectives by 22 December 2027, that mitigation would need to be sufficiently certain to counter the ‘low confidence’ in the Environmental Objectives. It is not apparent from the RBMPs that any attempt to mitigate ‘low confidence’ in the Environmental Objectives has been made.

From the publicly available information, it is therefore difficult to understand the basis on which the EA proposed, and the Secretary of State approved, the Environmental Objectives for 2027 with such evident ‘low confidence’ in achieving most of them. It is unclear what, if any, mitigation has been included or how that has been assessed as being sufficiently certain to deliver the Environmental Objectives.

Based on the information available, our current view is that this approach is not consistent with the Ministerial Guidance and may not comply with the requirements of the WFD Regulations.¹⁷⁵ We also refer here to the recent *Pickering* judgment.¹⁷⁶

¹⁷³ Environment Agency, ‘River Basin Management Plans, Updated 2022’ (n 105) para 5.

¹⁷⁴ Regs 3 and 12, WFD Regulations.

¹⁷⁵ See for example Reg 12(1)(a) and Reg 12(6), WFD Regulations.

¹⁷⁶ *Pickering Fishery Association v Secretary of State for Environment, Food and Rural Affairs* [2023] EWHC 2918 (Admin).

Pickering Fishery Association v Secretary of State for Defra (with emphasis in bold added by the OEP)

The recent judgment in *Pickering Fishery Association v Secretary of State for Defra* refers to the ministerial submission under which the final RBMPs were submitted to the Secretary of State for approval on 28 November 2022.¹⁷⁷ The submission acknowledges the ‘low confidence’ issue, with Defra stating that ‘*we have only low confidence that this [end of 2027] target can be met by the deadline*’.

The submission also appears to acknowledge that there are legal shortcomings but states that: ‘*Given the reference to these mitigating measures, we recommend approval of the RBMPs as they are the best product the EA can produce at this stage; both **aiming to remain compliant with the underlying legislation** and recognising the gap in progress towards 2027*’.

It is not clear what ‘mitigating measures’ are being referred to and the publicly available information does not set this out. However, it is clear from the available evidence that, notwithstanding any mitigating measures, Government has only low confidence in achieving the legally binding 2027 Environmental Objectives.

We present our recommendations to address this matter at the end of the next section, which looks at the related topic of the Programmes of Measures.

4.3 Programmes of Measures

This section considers whether the Programmes of Measures in the RBMPs are adequate to achieve the Environmental Objectives. In doing this, we examine in more detail how and why setting objectives with ‘low confidence’ is linked to uncertainty about Programmes of Measures. We also consider how and why the RBMPs ‘de-link’ certain aspects of the Programmes of Measures from the 2027 outcomes.

In summary, our key findings in this section, which are based on the analysis that follows, are as set out below.

Key findings:

- Overall, investment in measures to protect and improve the water environment does not appear sufficient to deliver the Environmental Objectives, or the related goals and targets of the EIP23 and Environment Act 2021.
- The EA’s analysis shows that the level of planned investment up to 2027 is only about 12% of that required to achieve the Environmental Objectives.
- Measures specific to individual RBDs, or especially individual catchments or water bodies, are limited or, in some cases, entirely absent and it is not explained how they will achieve the Environmental Objectives.

¹⁷⁷ *Pickering*, para. 77.

- RBMPs need only contain a ‘summary’ of the Programmes of Measures and Programmes of Measures can, if appropriate, be at a generic level. However, Environmental Objectives are water body specific, and Programmes of Measures are created to achieve those objectives. They should therefore demonstrate when and how the Environmental Objectives for individual water bodies will be met.
- Having analysed the available information, our current view is that this approach may not comply with the WFD Regulations or be consistent with the Ministerial Guidance. It prevents any meaningful analysis of how Programmes of Measures are expected to achieve the Environmental Objectives set at the water body level.
- These issues, combined with the ‘low confidence’ associated with most of the 2027 Environmental Objectives and the ‘de-linking’ of some measures from 2027 outcomes (meaning those measures are not expected to support those outcomes), lead us to conclude that the Programmes of Measures cannot reasonably be expected to achieve those objectives.
- We therefore conclude that this now triggers the WFD Regulations’ provisions which require the Secretary of State and the EA to take additional action where Environmental Objectives are unlikely to be achieved. This includes the obligation to ensure that such additional measures as may be necessary to meet those objectives are included in the Programme of Measures applying to the water bodies concerned.
- It is also our view, as set out in this section, that the EA and Government’s approach to implementation may not comply with the requirement in the regulations to make measures operational within three years of approval.
- We have additional concerns about the way that the Programmes of Measures ‘de-link’ some actions from the 2027 Environmental Objectives and present an unclear picture on their funding status. This is the case, for example, with Diffuse Water Pollution Plans.

4.3.1 Economic analysis and investment underpinning the Programmes of Measures

Economic assessment and ‘disproportionate costs’

Economic assessment is fundamental to river basin planning. The Ministerial Guidance requires the EA to work in partnership with stakeholders and other public bodies ‘*to secure cost-effective implementation of the WFD Regulations*’.¹⁷⁸ The guidance also clarifies that cost-effectiveness should be considered when identifying measures.¹⁷⁹

As set out in Chapter 2 (Section 2.2.6), and further discussed in Section 4.4, the WFD Regulations also provide for a system of statutory exemptions to the need to achieve the Environmental Objectives where the costs of doing so would be disproportionate. This is also discussed in the Ministerial Guidance.¹⁸⁰

¹⁷⁸ Defra, ‘River Basin Management Planning Guidance’ (n 11) para 3.6.

¹⁷⁹ *ibid* 3.14.

¹⁸⁰ *ibid* 12.10.

The approaches of the Ministerial Guidance and the EA towards economic assessment and the consideration of disproportionality are discussed further in the RBMP analysis.¹⁸¹ This describes how the Ministerial Guidance¹⁸² sets out a cost-benefit approach to assessing disproportionality, using monetised cost and benefit estimates. It indicates that sensitivity analyses and qualitative information should also be taken into account when assessing benefits. The EA has also produced internal guidance for assessing costs and benefits in producing RBMPs.¹⁸³

Investment requirements for the Programmes of Measures

The EA published an analysis of investment requirements to accompany the third cycle RBMPs.¹⁸⁴ We understand this reflects the EA's assessment of costs and benefits for the RBMPs as a whole, taking account of the Ministerial Guidance. It builds on an earlier impact assessment for the second cycle RBMPs,¹⁸⁵ but is not a comprehensive update of that earlier analysis.

The main change in the information between the second and third cycles is better evidence in the latter on the scale and costs of measures needed to reduce the damaging impacts of the water industry and agriculture. As outlined in Chapter 3, these are two of the main drivers of pressures on water bodies in England.

The EA's analysis of investment requirements for the third cycle RBMPs describes the likely scale of funding needed to pay for the Programmes of Measures. It also summarises the funds already committed (when the RBMPs were developed) to action between 2021 and 2027. Strikingly, the level of planned investment up to 2027 is only approximately 12% of that required to implement the Programmes of Measures. This is shown in the box below.

Investment requirements for the third cycle RBMPs (Source: based on information from the Environment Agency, 2022¹⁸⁶)

The EA's analysis of investment requirements indicates that achieving the Environmental Objectives would cost £51 billion (present value) while providing £64 billion (present value) in monetisable benefits alone.

The costs exclude ongoing work to prevent deterioration, which equate to some further £5 billion not broken down by sector.

Rural land management is the largest sector needing investment, with more than two thirds of the total required, followed by the water industry (Figure 4.2).

Figure 4.3 outlines the funds already committed, at the point of publication of the EA's investment analysis, to taking action to achieve the objectives in the plans. These amount to £6.2 billion (compared with £51 billion needed). This equates to approximately 12% of the level of investment required to achieve the Environmental Objectives in the plans.

181 WSP (n 41) s 4.2.2.2.

182 Defra, 'River Basin Management Planning Guidance' (n 11) s 12.

183 Nicole Shamier, 'Water Appraisal Guidance; Assessing Costs and Benefits for River Basin Management Planning' (Environment Agency 2017) <<https://s3-eu-west-1.amazonaws.com/data.defra.gov.uk/WaterQuality/wfd/Economics+options+appraisal.zip>> accessed 31 January 2024.

184 Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (n 5).

185 Environment Agency, 'River Basin Management Plans: Impact Assessment' <www.gov.uk/government/publications/river-basin-management-plans-impact-assessment> accessed 13 November 2023.

186 Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (n 5).

The water industry (and therefore bill payers) are the main contributor, providing almost three quarters of the investment commitments. However, that figure represents less than half of the investment needed in that sector.

There is, therefore, significant under-investment in the planned measures, including those necessary to achieve 2027 outcomes. This supports the conclusion that, without significant further investment, the Environmental Objectives in the RBMPs cannot be met by the extended deadline of 2027.

There is also a major reliance on actions by water companies to realise improvements. They implement an investment programme identified through the AMP process (see Chapter 2, Section 2.4.2) and ultimately paid for by bill payers. There is limited evidence that policy measures in other sectors, including agriculture and transport, will be sufficient to drive a balanced delivery and achieve overall outcomes. For example, the delayed Environmental Land Management schemes will unfortunately come too late to achieve the 2027 objectives.

We recognise that further expected funding from the water industry (and therefore from bill payers) up to 2027 is not yet reflected in the investment analysis. This is because funding for the next WINEP will be confirmed after Ofwat approves water company business plans and price limits in 2024 for the AMP8 period (2025 to 2030).

AMP8 is expected to provide significant additional funding in the water sector, including for environmental improvements. Some of this funding will be allocated to measures for achieving the Environmental Objectives. The amount that will be allocated to measures and which measures will be funded through AMP8 are not yet known. As a result, we cannot assess its specific contribution to achieving the Environmental Objectives or other environmental outcomes. However, the funding element allocated to measures for achieving the Environmental Objectives would have to be very significant, applied rapidly and in a targeted way to tackle major pressures, to assist with progress towards meeting the 2027 Environmental Objectives.

This issue also illustrates a point that we highlight below in Section 4.3.2. It concerns the inability of the EA to identify or implement all of the measures needed in RBMPs which are outside its control and dependent on other decisions to be taken later. This reflects the fact that the EA can only take the necessary actions where Government has given it the tools and resources to do so.

For example, as noted in Chapter 2 (Section 2.5.1), the House of Lords Industry and Regulators Committee has observed a lack of effective co-ordination between the EA and Ofwat on issues such as EA outputs not aligning with what Ofwat deems financeable, and ineffective information-sharing.¹⁸⁷ Ofwat has no specific functions in the WFD Regulations. It is, however, one of the many 'public bodies' which must have due regard to the RBMPs. We discuss issues with this aspect of the WFD Regulations and associated governance arrangements in Chapter 5.

¹⁸⁷ House of Lords Industry and Regulators Committee (n 135) 49.

Further investment

The Plan for Water, published in April 2023, gives further information on delivering Government's 'clean and plentiful water' goal in the EIP23.¹⁸⁸ It notes increased funding, such as further support for nature-friendly farming through grants and advice. It also highlights additional major investments in the water industry, the largest being a further £56 billion of capital investment by 2050 as part of the 'Storm Overflows Discharge Reduction Plan', alongside ongoing AMP investment.

The Storm Overflows Discharge Reduction Plan¹⁸⁹ is required by law other than the WFD Regulations¹⁹⁰ to address a prominent issue of long-standing concern. It will also contribute to Environmental Objectives under the WFD Regulations.

However, for the purposes of the WFD Regulations, the investment in storm overflows only addresses a small part of the problem. As discussed in Chapter 3, other water pressures are causing bigger environmental problems than storm overflows. These other pressures are not receiving the same attention or resources to meet the Environmental Objectives as required by law, or to achieve the related EIP23 goals and Environment Act targets.

Our view

These analyses show a lack of clear and sufficient confirmed funding to implement RBMPs. This is a key underpinning issue for practical implementation of the WFD Regulations. It will also affect the achievement of the related EIP23 and Environment Act goals and targets.

Given their dates of publication, the assessments of RBMP investment requirements will not reflect the more recent Defra Plan for Water. The latter also has significant financial implications including new funding commitments. It is not clear how these will affect the picture of RBMP investment requirements and commitments produced by the EA. However, with the exception of the Storm Overflows Discharge Reduction Plan, the new funding in the Plan for Water still appears to be an order of magnitude less than that needed for the RBMPs to address the main pressures.

It is also not yet clear how much additional funding AMP8 will provide to reduce environmental impacts from the water industry and in particular what funding will be allocated to measures towards achieving the Environmental Objectives. In any case, that will not address significant pressures from other sectors which we discuss in Chapter 3.

As noted in the *Pickering* judgment it may also be the case that having to set out measures to achieve Environmental Objectives at the water body level will involve additional resources.¹⁹¹

188 Defra, 'Plan for Water' (n 4).

189 Defra, 'Storm Overflows Discharge Reduction Plan' (n 133).

190 S. 141A, Water Industry Act 1991, as amended by the Environment Act 2021.

191 *Pickering*, para. 145.

Figure 4.2. Investment requirements for the Programmes of Measures in £M (Source: based on data published by the Environment Agency, 2022)¹⁹²

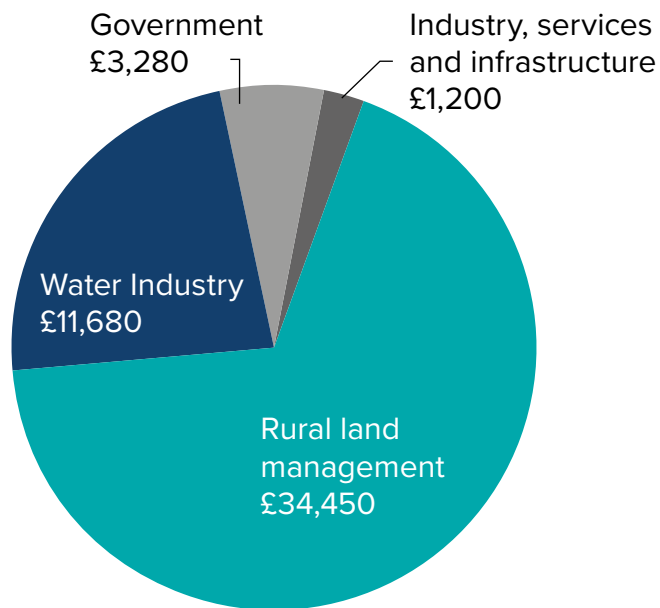
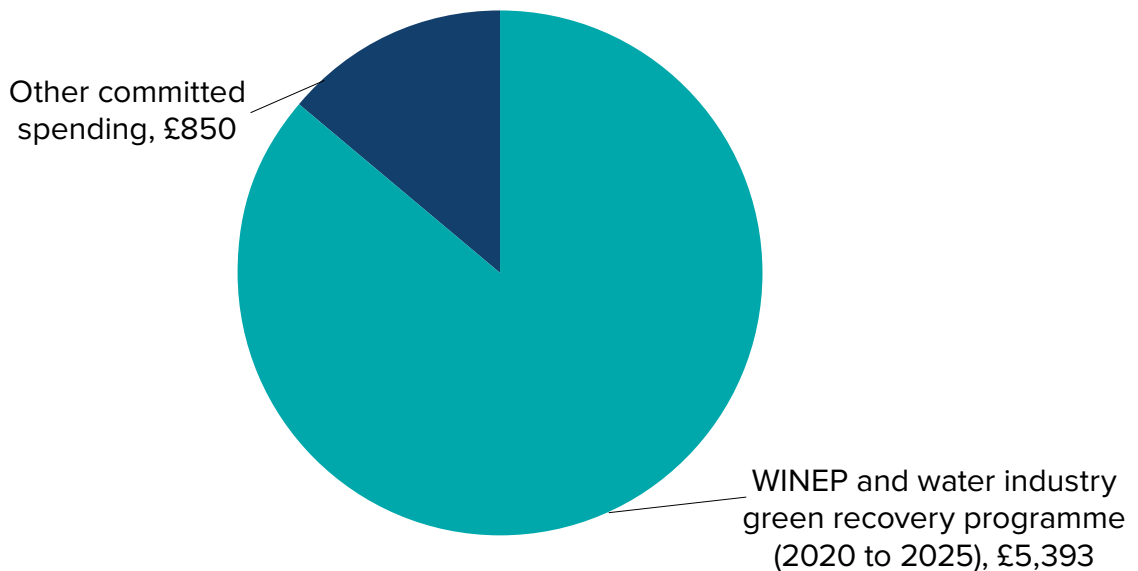


Figure 4.3. Funding for the 2021-2027 Programmes of Measures in £M (Source: based on data published by the Environment Agency, 2022)¹⁹³



192 Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (n 5).

193 *ibid.*

4.3.2 Adequacy of the Programmes of Measures to achieve Environmental Objectives

Presentation of Programmes of Measures

The RBMPs approved by the Secretary of State set out information relating to the Programmes of Measures in several ways as shown in the box below.

Information in the RBMPs on the Programmes of Measures

The RBMPs include all of the following, which can be accessed via the ‘summary programme of measures’ link on the ‘landing page’ for each RBMP:

- A document entitled ‘**summary programme of measures**’.¹⁹⁴ This contains generic information that is the same for all RBDs. It includes the so-called ‘Topic Action Plans’ which summarise measures relevant to specific topics such as those dealing with particular types of waters (for example, chalk streams or bathing waters) and drivers of pressures.
- A document entitled ‘**summary programme of measures – mechanisms**’.¹⁹⁵ This also contains generic information that is the same for all RBDs. It describes the main types of mechanisms that are included in the Programmes of Measures. This covers, for example, controls on point and diffuse sources of pollution and on the use and reduction of priority substances.
- Downloadable spreadsheets containing the **summary Programmes of Measures data for each RBD**.¹⁹⁶ These list the measures and mechanisms that form part of the Programmes of Measures for the RBDs. As described below, however, many of the measures are generic and not specific to any given RBD. The spreadsheets also differentiate between those measures that are ‘linked to 2027 outcomes’ and those that are ‘not linked to 2027 outcomes’. We explain further what this means below.

Substance of Programmes of Measures

Under the WFD Regulations, the Programmes of Measures in RBMPs are meant to be applied to achieve Environmental Objectives set at the water body level. However, most of the measures specified are generic or national. The summary Programmes of Measures spreadsheets therefore attribute these measures to ‘all’, ‘multiple’ or ‘various’ water bodies and ‘multiple’ objectives. It is often not clear what impact they would have at the water body level, or even at the catchment or RBD level.

Measures that are specific to individual RBDs are limited. Measures at the individual catchment or water body level are limited or, in some cases, entirely absent. This makes

194 Environment Agency, ‘River Basin Management Plans, Updated 2022: Summary Programmes of Measures - 5. Topic Action Plans’ <[195 Environment Agency, ‘River Basin Management Plans, Updated 2022: Summary Programmes of Measures – Mechanisms’ <\[www.gov.uk/guidance/river-basin-management-plans-updated-2022-summary-programmes-of-measures-mechanisms\]\(http://www.gov.uk/guidance/river-basin-management-plans-updated-2022-summary-programmes-of-measures-mechanisms\)> accessed 29 November 2023.](http://www.gov.uk/guidance/river-basin-management-plans-updated-2022-summary-programmes-of-measures/5-topic-action-plans#:~:text=This%20section%20contains%20topic%20action,Planning%20Guidance%20(September%202021),> accessed 16 November 2023.</p></div><div data-bbox=)

196 Environment Agency, ‘Measures Data for England’ <<https://environment.data.gov.uk/catchment-planning/England/measures>> accessed 16 November 2023.

it difficult to understand how measures are expected to achieve the Environmental Objectives. The box below gives some examples derived from the Programmes of Measures spreadsheets.¹⁹⁷

Examples of measures in RBMPs and their relevance to specific water bodies

- There are 153 measures listed in the **Anglian RBMP**, of which 43 are ‘linked to 2027 outcomes’. However, only 34 of these measures (of which 32 link to 2027 outcomes) apply to one or more specific, named water bodies. The remaining measures apply either to ‘multiple’ or ‘various’ water bodies (which are not identified specifically) or to ‘all’.
- The **Humber RBMP** contains 141 measures, of which only 16 are ‘linked to 2027 outcomes’. Only four of these apply to one or more specific, named water bodies, with three linked to 2027 outcomes.
- The **Severn RBMP** contains 119 measures, only seven of which are linked to 2027 outcomes. Just four of these measures apply to one or more specific, named water bodies, and none of them is linked to 2027 outcomes.

In many instances, the measures in RBMPs are not expressed as clear, specific actions that will deliver tangible improvements, whether at the water body level or more widely. Rather, these measures are expressed in a more general form with the specific action to be determined under other initiatives, instruments, policies or schemes. We illustrate this in Table 4.1 below with some examples reproduced from the Programmes of Measures spreadsheets.

Table 4.1. Examples of measures in the Programmes of Measures spreadsheet

Measure / Mechanism	Measure information
Water Industry Asset Management Plan Price Review 2019 Water Industry National Environment Programme schemes – Habitat improvements	Habitat restoration or creation and species recovery. E.g. river and lake restoration, removing barriers to fish movement, tackle Invasive Non Native Species, achieve objectives for water-dependent Sites of Special Scientific Interest and European sites, ¹⁹⁸ actions to conserve and enhance priority habitats and species.
Water Industry Asset Management Plan Price Review 2019 Water Industry National Environment Programme schemes – catchment schemes	Catchment schemes e.g. Farm nutrient management plans and soil testing - improved farming practice.
Abstraction Plan delivery - Priority Catchments	Working collaboratively with all stakeholders to deliver integrated catchment solutions to mitigate the impact of climate change and unsustainable abstraction. Update Abstraction Licence Strategy with findings from priority catchments by 31 July 2021.

¹⁹⁷ *ibid.*

¹⁹⁸ This refers to Special Areas of Conservation and Special Protection Areas under the Conservation of Habitats and Species Regulations 2017.

Measure / Mechanism	Measure information
EA Environment Programme and Flood and Coastal Risk Management capital programme	Diffuse pollution control initiatives, recovery of priority species - habitat restoration or creation and reintroducing species.

This means that, while there are exceptions (such as hydromorphological aspects with weir removal and fish passage work), in many cases the information for measures in the approved RBMPs does not identify specific actions that will be implemented to achieve Environmental Objectives.

Requirements for measures that are effective at the water body level

Based on the available information, we are currently of the view that there is a failure to set out Programmes of Measures for, or link them to pressures at, the water body level, or even at the catchment or RBD levels. We consider that this is one of the most significant gaps in implementation of the WFD Regulations. As a result, monitoring and evaluation are more difficult and there is a general lack of transparency and accountability for actions at a water body or catchment scale. Again, this is also informed by the recent *Pickering* judgment.

The *Pickering* decision

The decision in *Pickering* underlines the need for the EA to consider what Programmes of Measures are needed to meet the WFD Regulations' Environmental Objectives. This can include generic measures that apply across a range of water bodies, either across the country or the RBD. The level of detail needed will vary. However, the EA must consider what measures are necessary to achieve the Environmental Objectives for each water body.¹⁹⁹

The Judge in *Pickering* went further, commenting as follows on the approach taken to establishing Programmes of Measures in the third cycle RBMP for the Humber RBD: '*Given that the environmental objectives are water body specific, and the Programme of Measures is created to achieve those objectives, it is counterintuitive to suggest that the measures in the Programme of Measures could be wholly generic and not focused on whether, when and how the environmental objectives designated for the individual water body would be met.*'²⁰⁰

Demonstrating further by way of an example why Programmes of Measures cannot be wholly generic, *Pickering* discusses one of the 'basic measures' required; that of measures to address point source discharges. Giving the specific example of environmental permit limits for wastewater treatment works,²⁰¹ the Judge commented that the decision as to whether an individual discharger needs to be more tightly controlled can only be made on a water body specific basis. Even if it might be argued that the review of discharges could be wholly generic, that cannot be correct where the fundamental purpose of the 'measures' is to achieve compliance in respect of objectives which are water body specific.²⁰²

199 *Pickering*, para. 128.

200 *Pickering*, para. 134.

201 Reg 20, WFD Regulations; see also Art 11(3)(g), WFD.

202 *Pickering*, para. 135.

Funding for measures and their links with 2027 objectives: the example of Diffuse Water Pollution Plans

It is clear that water body level measures are also needed to address other pressures on individual water bodies. For example, another ‘basic measure’ required in the Programmes of Measures is for there to be measures to address diffuse sources of pollution.²⁰³ This led to the EA starting a process of designating certain areas as ‘Water Protection Zones’. These are now encompassed in ‘Diffuse Water Pollution Plans’ (DWPPs).

The summary Programmes of Measures identify the EA’s intention to continue progressing the implementation of DWPPs. The RBMPs do not describe their effect on particular water bodies, instead linking them to ‘various’ (non-specific) water bodies and to ‘multiple’ Environmental Objectives. The application of the intended DWPPs at particular locations is presumably known, though not reflected in the RBMPs. It is unclear what effect they will have, however, because most of the DWPPs have not been produced yet.

In addition, the evidence put before the court in another case is that there is insufficient funding for these DWPPs.²⁰⁴ Scrutiny of the RBMPs also highlights a concern in this area regarding their approach towards ‘de-linking’ measures from the 2027 objectives. These issues with DWPPs are illustrated further in the box below.

Diffuse Water Pollution Plans

In 2015, Government agreed to produce DWPPs for sensitive sites as soon as reasonably practicable. However, as of November 2023, only 6 out of the 37 sites reportedly had DWPPs in place.²⁰⁵ This appears inconsistent with the requirement to make measures operational within three years of their approval, which we discuss in Section 4.3.3 below.

The third cycle RBMPs state that the EA and Natural England will continue to progress DWPPs where the site condition is affected by diffuse water pollution. However, the position remains unclear, for two reasons.

Firstly, the spreadsheet²⁰⁶ setting out the summary Programmes of Measures has a number of measures said to be ‘linked to 2027 outcomes’ and a larger number that are ‘not linked to 2027 outcomes’. In the Humber RBD, for instance, there are 16 measures ‘linked to 2027 outcomes’ and 125 measures ‘not linked to 2027 outcomes’. The latter include DWPPs.

The basis for marking a measure as ‘not linked to 2027 outcomes’ is said to be due to uncertainty about the specific locations where improvements will occur. However, as DWPPs are plans for specific protected sites, the suggestion that there could be uncertainty about where improvements will occur appears contradictory. In turn, this calls into question the EA’s distinction between measures ‘linked to 2027 outcomes’ and those ‘not linked to 2027 outcomes’.

203 Reg 20, WFD Regulations; see also Art 11 (3)(h) WFD.

204 R(WWF-UK) v Secretary of State for Environment, Food and Rural Affairs [2021] EWHC 1870 (Admin)

205 Shosha Adie, ‘Water Pollution Plans Promised in Court Stalled for over a Decade’ *ENDS Report* <www.endsreport.com/article/1845997?utm_source=website&utm_medium=social> accessed 16 November 2023.

206 Environment Agency, ‘Measures Data for England’ (n 196).

Secondly, the spreadsheet states that it contains planned measures ‘*where funding has been committed or there is an established funding mechanism*’. This includes DWPPs. However, in the 2021 case *R(WWF-UK) v Secretary of State*, both the EA and Natural England gave evidence that there was a lack of additional funding from Defra to complete the implementation of DWPPs, compounded by budget cuts. This suggests that it may not be the case that all the measures do, in fact, have committed funding or an established funding mechanism in place.

Annex 5 presents additional information concerning some other specific sources of pollution and pressures. It considers nutrient management plans, highway drainage, climate change and nature-based solutions.

Strategic environmental assessment screening

Further information on the specificity and impacts of the Programmes of Measures is included in the EA’s Strategic Environmental Assessment screening for the RBMPs. As outlined in Chapter 2 (Section 2.3.3), the EA determined that it did not need to conduct such assessment for the third cycle RBMPs on the basis of the plans making only minor modifications to those of the second cycle.²⁰⁷

As a result, the EA concluded that the third cycle RBMPs ‘*are unlikely to have significant effects on the environment*’. Looking in more detail at the EA’s analysis, it said that: ‘*Individual elements or water body status objective may change; however, there will not be a significant difference in the overall picture of objectives at an RBD scale or for England*’. It also said that: ‘*For the third cycle of RBMPs, there will be changes to the measures designed to move towards these objectives*’.

In several cases, however, the screening appears to have concluded that no significant impact could be assessed, because the changes in measures that might lead to such an impact had not yet been determined. The box below gives examples.

Measures in RBMPs identified as ‘**not yet known**’ in the Strategic Environmental Assessment screening (emphasis in bold added by the OEP)

*‘The Farming Rules for Water, introduced in April 2018, may lead to new measures relating to soil and erosion regulation, soil carbon storage, nutrient cycling and raw water quality. There may be changes in the agricultural sector and land management as a result of EU Exit and the new Agriculture Bill (new Environmental Land Management scheme). Although these changes are **not yet fully known**, from an agricultural perspective the measures are unlikely to change significantly from cycle 2 and any environmental impacts are considered to be beneficial*’.²⁰⁸

207 Environment Agency, ‘River Basin Management Plans’ (n 116).

208 *ibid* 4.7.

In relation to ‘changes to measures in the catchment level government funded improvements programme’ the screening said that: ‘Measures for government funded improvements will be updated in line with developing Department for Environment, Food & Rural Affairs Local Integrated Delivery and Nature Recovery Network. These changes are **not yet known**’.²⁰⁹

For the topics of possible changes in relation to ‘the Highways England environment programme’ and ‘the abandoned metal mines programme’, the screening report simply stated that: ‘These changes are **not yet known**’.²¹⁰

This suggests that the RBMP process has not in practice led to the determination of all measures needed to deliver the Environmental Objectives. Rather, it appears to have set Environmental Objectives, but then not been able to determine fully how to achieve them or the likelihood of doing so because the changes in measures needed (including by other authorities or under other regimes) were ‘not yet known’.

Our view

Under the WFD Regulations, Programmes of Measures are ‘to be applied in order to achieve’ the Environmental Objectives.²¹¹ This is reiterated by the requirement for additional measures and action where the objectives are unlikely to be met.²¹²

Overall, based on the available information we consider that the Programmes of Measures cannot reasonably be expected to achieve the 2027 Environmental Objectives. This conclusion follows from a combination of the ‘low confidence’ associated with those objectives and the related lack of funding and specificity of measures to deliver them.

The first problem is that the Programmes of Measures in the RBMPs are not fully funded. This is clear from the EA’s investment analysis, when compared with funding committed by Government.

The second problem is that Programmes of Measures lack specificity. RBMPs must include a summary of Programmes of Measures. However, the EA has confirmed to us during the course of this project that there is no additional analysis of what RBD or water body specific measures will be needed standing behind the RBMPs. It is counterintuitive to suggest that wholly generic Programmes Measures could deliver Environmental Objectives set at the water body level. Programmes of Measures are therefore too generic and prevent any analysis of how they are expected to achieve the Environmental Objectives at the water body level.

The final area of concern is that many elements of the Programmes of Measures lack certainty and are not time-bound. It is not clear whether certain Programmes of Measures will be implemented and if so, when that will happen. It is therefore not possible to assess their contribution to achieving the Environmental Objectives. This may also be inconsistent with the requirement to make measures operational within three years of approval, which we discuss in Section 4.3.3 below.

209 *ibid* 4.9.

210 *ibid* 4.8, 4.10.

211 Reg 12(1), WFD Regulations.

212 Reg 25, WFD Regulations.

These problems also have implications in respect of public participation, including consultation on draft RBMPs, which we discuss in Section 4.5.2.

These are not new issues. The European Commission's compliance check of the second cycle RBMPs noted similar points. It suggested that the plans should state clearly, for all RBDs, to what extent basic measures or supplementary measures will contribute to objectives. It also highlighted the need to identify sources of funding to facilitate the successful implementation of measures.²¹³

In our view, this inability of the Programmes of Measures to meet the Environmental Objectives now triggers the requirement in the WFD Regulations for additional action where those objectives are unlikely to be achieved.²¹⁴ This includes an obligation on the Secretary of State and the EA to ensure that such additional measures as may be necessary to achieve those Environmental Objectives are included in the Programme of Measures applying to the relevant water bodies. The need for such additional action is also recognised in the Ministerial Guidance, as noted in the extracts from the guidance earlier in this chapter (Section 4.2.2).

As we outline in Chapter 2 (Section 2.2.9), such additional measures can be brought forward at any time, and if necessary can be included in a 'supplementary plan'.

Recommendation 1: We recommend that the Secretary of State and the EA take urgent action in accordance with Regulation 25 of the WFD Regulations. This should include taking action to ensure that Programmes of Measures contain the additional measures that are necessary to achieve the Environmental Objectives, including those to be met by 2027. Programmes of Measures should be produced with specific and time-bound measures that demonstrate with sufficient certainty how Environmental Objectives will be met at the water body level. This should also include sufficient and confirmed funding to meet those outcomes.

Recommendation 2: In support of Recommendation 1, we recommend that Government and the EA prepare an updated economic analysis and assessment of investment requirements for the RBMPs. This should take account of new commitments since the RBMPs were approved, for example in the Plan for Water, and additional measures included in the Programmes of Measures under Regulation 25 to achieve the Environmental Objectives, including those to be met by 2027. It should include a comprehensive update of the EA's 2015 impact assessment, which was not carried out in 2022, and should be produced alongside the identification of additional measures under Recommendation 1 to demonstrate the adequacy of the investment to meet the Environmental Objectives.

4.3.3 Making measures operational within three years

The WFD Regulations require that, where a Programme of Measures is updated, any new or revised measures must be made operational within three years.²¹⁵

213 European Commission, '6th Implementation Report of the Water Framework Directive' (2021) <https://environment.ec.europa.eu/topics/water/water-framework-directive/implementation-reports_en> accessed 15 November 2023.

214 Reg 25, WFD Regulations.

215 Reg 12(7), WFD Regulations.

Interpretation and implementation by Government

We understand that Defra and the EA's interpretation of this requirement relates in part to putting in place national measures under which specific physical or regulatory action will or may be taken later. They do not consider that it means physical or regulatory actions to protect or improve the water environment, which may be taken under those tools, must happen in this same time period. Such actions may, in their view, be pursued later under those enabling mechanisms.

Defra and the EA have told us that where a new Programme of Measures has been introduced, for example a National Environment Programme under the 2019 water industry price review, they would expect work to implement the programme to have started within three years. However, they have said that this does not mean that all the individual actions that form part of that programme need to be completed within three years of an updated RBMP being published. They have added that they would expect additional Programmes of Measures (meaning additional to those included in the RBMPs) to be identified and started within the lifetime of the RBMPs, whether that being the first or second three-year period of each six-year RBMP cycle.

This interpretation is reflected in the summary Programmes of Measures which reflect things that are to be decided at a future date under other decision-making mechanisms. We highlighted this earlier in Sections 4.3.1 and 4.3.2. For example, some of the elements included in the Programmes of Measures are associated with the 2024 water industry Price Review or Environmental Land Management Schemes. Both are still under development. They are identified in the Programmes of Measures as 'not linked to 2027 outcomes'.

The Programmes of Measures also contain a number of items that stem from the 2019 water industry Price Review, including for the purposes of habitats improvements, improved farming practice and sewage treatment improvements. These are 'linked to 2027 outcomes'. However, it is not possible to tell from the information in the plans when the individual measures will be implemented.

In contrast, the Ministerial Guidance sets out what appears to be a different view.²¹⁶ It states that the EA should '*ensure that those measures for which it is responsible (as deliverer or regulator) are applied, so that the third cycle programme is 'made operational' by 22 December 2024.*^[217] *Any planned delivery deadlines for the third cycle programme beyond 22 December 2024 must be agreed with Defra.*' It also says that, for measures delivered or regulated by others, the EA '*should liaise with those responsible to assist the Secretary of State in ensuring that these measures are made operational.*'

The guidance gives examples of permits being amended by 22 December 2024 where necessary. It does not deal with the timing of development and subsequent implementation of measures such as the water industry Price Review or Environmental Land Management schemes. Nor does it cover DWPPs, in relation to which Section 4.3.2 above highlights delays in production.

²¹⁶ Defra, 'River Basin Management Planning Guidance' (n 11) para 14.25-14.27.

²¹⁷ This reference to 22 December 2024 reflects a period of three years from the date when the third cycle RBMPs should have been approved.

Our view

Based on our understanding of Defra and the EA's approach to this provision as set out above, our current view is that it may not comply with the WFD Regulations. It may leave the actual delivery of practical measures uncertain and open-ended under whatever other legislation or policy provides for those measures.

In contrast, things are usually considered to have been 'made operational' once they start working to achieve their intended effect. We think the requirement that measures be 'made operational within three years' therefore normally would be understood to mean that any new or revised measures, once confirmed, should be physically put in place or implemented in practice in that time.

In this context, we recognise that full delivery of significant infrastructure projects, for example, may not always be practical within three years. To support the regime's effectiveness, we suggest this should be judged by exception and (as suggested by the Ministerial Guidance) agreed with Defra. Such extensions should not be standard practice, however, and should reflect a valid justification.

Further, in those cases where making measures operational within three years is not possible for valid reasons, their introduction should still be timetabled rather than open ended. For instance, the relevant authority should ensure that all necessary decisions are in place, resources are available and implementation is being expedited. This should include progress on a site-by-site basis, for example with DWPPs, as well as with regional or national measures.

Recommendation 3: In relation to the requirement to make measures operational within three years of approval, we recommend that measures in the Programmes of Measures be time-bound, and implemented accordingly, in alignment with the Environmental Objectives and their intended dates of achievement. This should include the implementation of specific physical and regulatory actions, as well as the development of necessary enabling policy measures and funding mechanisms. We also recommend that Defra and the EA review and clarify their approach to this provision as part of Defra's review of implementation of the WFD Regulations. This should ensure clear alignment between legal requirements, policies, funding, guidance and operational practice.

4.4 Presenting and justifying exemptions

As we note in Section 4.2.1 above, the RBMPs rely extensively on exemptions under the WFD Regulations in setting Environmental Objectives. We have reviewed where they have been applied, to what effect and with what justification. Our key findings in this area, which are based on the analysis in this section, are as follows.

Key findings:

- The WFD Regulations require exemptions and the reasons for them to be set out in the RBMPs. However, there is a lack of robust and transparent justification for exemptions in the RBMPs, which makes scrutiny difficult.
- Based on the information gathered during this project, our current view is that this may not comply with the WFD Regulations. We think that at least some level of substantive information about why an exemption has been applied should be available at the water body level through the relevant RBMP.
- For the same reasons, we consider that the EA may not have actively involved the public in the exemption process. Our current view based on the information gathered during this project is that this may not comply with the public participation provisions in the WFD Regulations.
- More generally, accessing the information on exemptions is complex and may be difficult for the non-expert user to manage and understand.

4.4.1 Application of exemptions

As set out in Chapter 2, the WFD Regulations allow for various further exemptions from the need to meet the Environmental Objectives by the extended 2027 deadline. The RBMP analysis report²¹⁸ includes further details of the exemptions applied in the third cycle RBMPs, which are briefly summarised below.

The Extended Deadline Exemption and Less Stringent Objective Exemption (outlined in Section 2.2.6) are relied on commonly in the RBMPs. The EA provides five reasons for applying these exemptions in the RBMPs (often in combination):²¹⁹

- Extended Deadline Exemption: Technical infeasibility
- Extended Deadline Exemption: Disproportionate costs
- Extended Deadline Exemption: Natural conditions
- Less Stringent Objective Exemption: Technical infeasibility
- Less Stringent Objective Exemption: Disproportionate costs

The most frequently used exemption is the Extended Deadline Exemption. It has been applied to extend the deadline for achieving 'Good Chemical Status' to 2063 for all surface water bodies, using the justification 'natural conditions – chemical status recovery time'. This is due to the presence of uPBT chemicals in surface water bodies. Defra has described the 2063 deadline as '*a modelling prediction by the Environment Agency on how long it will take for the levels to dissipate under the exemption.*'²²⁰ We have not assessed the accuracy of this prediction or the modelling that underpins it but understand that there is currently no practical intervention that can remove these pollutants from the environment.

218 WSP (n 41) ch 4.

219 *ibid.*

220 Defra, 'Coverage on Water Targets and River Basin Management Plans' <<https://deframedia.blog.gov.uk/2022/12/24/coverage-on-water-targets-and-river-basin-management-plans/>> accessed 21 December 2023.

The Less Stringent Objective Exemption is the second most frequently applied. The RBMPs set a less than 'Good' status objective in relation to the ecological status of 19% of surface water bodies. Exemptions have also been used in relation to achieving Good Quantitative Status and Good Chemical Status in groundwater.

As outlined in Section 2.2.7, the WFD Regulations also provide for exemptions where there is a failure to meet Environmental Objectives due to natural causes or '*force majeure*',²²¹ or modifications to the physical characteristics of water bodies.²²² However, these exemptions are sufficiently rare in the RBMPs as to not require particular consideration. We therefore do not discuss them further in this report.

4.4.2 Assessment of the use of exemptions

Requirements for presentation of and reasons for exemptions in RBMPs

Where an Extended Deadline Exemption is applied, the relevant RBMP must set out the extended deadline and the reasons for it. The plan must also summarise the measures to be applied to bring the water body progressively to a condition that meets the Environmental Objectives by the extended deadline. The next update of the RBMP must include a review of the implementation of those measures and a summary of any additional measures necessary.²²³

The RBMPs must also set out the objectives and the reasons for any use of Less Stringent Objectives Exemptions. Where such an exemption is applied, the next review of the Environmental Objectives and Programmes of Measures must include consideration of whether a less stringent objective should continue to be set.²²⁴

Ministerial Guidance

The Ministerial Guidance discusses the use of exemptions. For example, it states that if disproportionate costs (see Section 4.3.1) are used as the basis for an exemption, the reasons for doing so should be clearly set out in the RBMPs, together with an explanation of what alternative financing mechanisms were considered and why they were not used. It adds that, if possible, underlying data and assessments used to inform the decision must be available to the public.²²⁵ The guidance also says that the '*information reported to ministers should be sufficient to determine whether exemptions have been applied appropriately*'.²²⁶

Information in the RBMPs on reasons for exemptions

The RBMPs set out information on exemptions at different levels. General information on the circumstances for using exemptions is presented in the generic documents²²⁷ that form part of the materials common to all the RBMPs.

221 Reg 18, WFD Regulations.

222 Reg 19, WFD Regulations.

223 Reg 16(6)-(7), WFD Regulations.

224 Reg 17(6), WFD Regulations.

225 Defra, 'River Basin Management Planning Guidance' (n 11) s 13.

226 *ibid* 12.24.

227 Environment Agency, 'River Basin Planning Process Overview' (n 111) s 4.1 and 4.2; Environment Agency, 'River Basin Management Plans, Updated 2022' (n 105) s 5.

Information on exemptions for specific water bodies can be found by following links to the EA's 'Catchment Data Explorer'.²²⁸ There, an objectives dataset can be viewed or downloaded. Within the Catchment Data Explorer and the objectives dataset, the reasons for the use of exemptions are provided at the following levels: overall water body; ecological, chemical or quantitative status; component status (for example priority hazardous substances, biological quality elements, physico-chemical quality elements); and element status (for example invertebrates and phosphate).

Table 4.2 reproduces selected data from the EA's objectives spreadsheets²²⁹ to illustrate how exemptions²³⁰ are presented. In these examples, both Less Stringent Objectives and further Extended Deadline Exemptions have been applied.

228 Environment Agency, 'England | Catchment Data Explorer' <<https://environment.data.gov.uk/catchment-planning/v/c3-plan>> accessed 5 December 2023.

229 These are viewable in downloadable objectives data files accessible at: Environment Agency, 'Objectives Data for England' <<https://environment.data.gov.uk/catchment-planning/England/objectives>> accessed 16 November 2023.

230 Note that the EA uses the expression 'alternative objective' to refer to an objective set under an exemption.

Table 4.2. Illustrative information on water body exemptions

RBD	Water Body	Year	Status	Classification Item	Reasons for Alternative Objectives
Humber	Lacey Beck / River Freshney Catchment (to N Sea)	2033	Moderate	Biological quality elements – fish	Disproportionately expensive/ Disproportionate burdens Technically infeasible/No known technical solution is available Natural conditions/Ecological recovery time (N.B. all reasons apply to the same biological quality element, i.e. fish)
Thames	Cerney Wick Brook (source to Thames)	2039	Moderate	Biological quality elements – fish, invertebrates, macrophytes and phyto-benthos	Disproportionately expensive/ Disproportionate burdens (invertebrates) Technically infeasible/No known technical solution is available (macrophytes and phyto-benthos) Natural conditions/Ecological recovery time (fish) (N.B. different reasons apply to different biological quality elements as shown)

Further high-level information concerning the reasons for not achieving Good Status is also available for individual water bodies in the Catchment Data Explorer. For instance, for the ‘Laceby Beck’ water body in Table 4.2,²³¹ this includes the 2019 classification results for all elements, the assessment of reasons for not achieving Good Status (described generically), and the approved Environmental Objectives. Where the Environmental Objectives are less than ‘good’ by 2027 (in this example, ‘moderate’ by 2033), the reasons are stated using the language shown in Table 4.2.

The reader of the RBMP covering ‘Laceby Beck’ will therefore see an exemption for ‘fish’ (one of the biological elements of the ecological classification). This has the objective of ‘moderate’ by 2033. However, the RBMP gives no reason for this, other than as shown in Table 4.2. The materials do not explain, for example, what was technically infeasible, or why action was judged disproportionately expensive (such that its cost would exceed the benefit as specified in the Ministerial Guidance).²³²

Information in the RBMPs on review of exemptions and measures

The WFD Regulations require that Programmes of Measures be reviewed every six years.²³³ In the case of a Less Stringent Objective Exemption, that includes a review of that objective and whether it should continue to be set. For an Extended Deadline Exemption, it includes an obligation to set out in the RBMP a review of measures implemented to progressively bring the water body in line with the Environmental Objectives by the extended deadline, and any additional measures necessary.²³⁴

In practice, all water bodies other than those that achieved the Environmental Objectives by the original 2015 deadline in the WFD²³⁵ were subject to Extended Deadline Exemptions. The summary Programme of Measures in the RBMPs is therefore one and the same as the summary of measures needed to progressively bring water bodies subject to an Extended Deadline Exemption in line with the Environmental Objectives by the extended deadline. We discuss our findings and views on the adequacy of the Programmes of Measures in Section 4.3.2 above.

Similarly, the RBMPs do not contain specific detail that sets out how Less Stringent Objective Exemptions in the second cycle RBMPs were reviewed, at the level of individual water bodies for the third cycle plans. Rather, the RBMPs state in general terms that *‘the water body status objectives set in the 2015 river basin management plans have been reviewed and, where necessary, updated’*.²³⁶

However, the EA has told us that Less Stringent Objective Exemptions and their justifications were reviewed as part of the process of reviewing and updating water body status objectives. The EA also noted that the overall approach to this process is described in the RBMPs, along with explanations of the justifications for setting alternative objectives.

231 Environment Agency, ‘Laceby Beck / River Freshney Catchment (to N Sea)’ <<https://environment.data.gov.uk/catchment-planning/v/c3-plan/WaterBody/GB104029067530>> accessed 5 December 2023.

232 Defra, ‘River Basin Management Planning Guidance’ (n 11) para 12.10-12.19.

233 Reg 12(6), WFD Regulations.

234 Regs 16(7) and 17(7), WFD Regulations.

235 See Section 2.2.4 for an explanation of the original deadline in the WFD.

236 Environment Agency, ‘River Basin Management Plans, Updated 2022’ (n 105) s 5.

Public participation in and scrutiny of exemptions

As we note above, the RBMPs only provide general information on why exemptions are applied. They do not explain and justify in any substance how exemptions have been used at the individual water body level. This will act as a barrier to public participation and scrutiny.

This does not necessarily mean the exemptions are unjustified in substance at an individual level. The EA has stated that its decision-making process for exemptions is based on guidance issued by the EU's Common Implementation Strategy,²³⁷ the Ministerial Guidance and draft guidance produced by the 'UK Technical Advisory Group' on the WFD.^{238 239} The UK technical Advisory Group was set up as a partnership of the UK environment and conservation agencies to provide coordinated advice on the science and technical aspects of the WFD.²⁴⁰

In the second cycle RBMPs, high level information on the links between pressures, exemptions and measures was reported to the 'Water Information System for Europe' (WISE).²⁴¹ Following the UK's exit from the EU, this reporting was not undertaken for the third cycle. As a result, while it is possible to see a connection in the third cycle RBMPs to the applicable status elements (via the Catchment Data Explorer), the link back to pressures is more difficult to follow. The pressure driving the exemption at the quality element level is therefore less transparent in this third cycle.

The EA has explained that while it holds no central record of the substantive basis and justification for exemptions, information held on this topic at its local offices can be requested. The EA also confirmed that the same applies for information on the review of Less Stringent Objective Exemptions.²⁴²

Accessibility of information on exemptions

As we explain above, headline information about the use of specific exemptions is available at the water body level. However, that summary information can only be extracted by the relatively skilled user who knows where to look and how to use the Catchment Data Explorer and the objectives dataset²⁴³ that supports the RBMPs.

This is quite a complex task. It requires cross-referencing between the objectives dataset (which has more than 160,000 rows of data) and the information for individual water bodies

237 European Commission, 'Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance Document No. 3, Analysis of Pressures and Impacts' (2003) <[https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20\(WG%202.1\).pdf](https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20(WG%202.1).pdf)> accessed 15 November 2023.

238 UK Technical Advisory Group on the Water Framework Directive, 'Draft Principles for an Objective Setting Framework for River Basin Management Planning in Accordance with the Water Framework Directive (Public Working Draft)' (2004) <www.wfduk.org/sites/default/files/Media/Setting%20objectives%20in%20the%20water%20environment/Principles%20for%20an%20objective%20setting%20framework_Draft_010904.pdf> accessed 31 January 2024.

239 UK Technical Advisory Group on the Water Framework Directive, 'UKTAG Recommendations on a Consistent List of Reasons for Setting Alternative Objectives (Working Draft)' (2009) <www.wfduk.org/sites/default/files/Media/Setting%20objectives%20in%20the%20water%20environment/Standard%20list%20of%20reasons%20for%20setting%20alternative%20objective_Final_010508.pdf> accessed 31 January 2024.

240 Environment Agency, 'River Basin Management Plans, Updated 2022: Record of Consultation and Engagement' (22 December 2022) s 2.3 <www.gov.uk/government/publications/river-basin-management-plans-updated-2022-record-of-consultation-and-engagement/river-basin-management-plans-updated-2022-record-of-consultation-and-engagement> accessed 31 January 2024.

241 European Environment Agency, 'WISE Freshwater' <<https://water.europa.eu>> accessed 15 November 2023.

242 The OEP has not asked to see information that would be needed to assess individual exemptions or their reviews. Such an assessment would require extensive information-gathering and analysis of individual decisions beyond the scope of this project.

243 Environment Agency, 'Objectives Data for England' (n 230).

on the Catchment Data Explorer. This may be difficult for the non-expert user to access and understand.

Oversight and approval of exemptions

The EA does not determine any exemptions, but rather submits them as part of the proposed Environmental Objectives for approval by the Secretary of State.²⁴⁴

Defra and the EA told us that Defra is consulted on, and ensures that, the EA's approach to applying exemptions complies with the regulations. They also said that Defra is not in a position to check the exemptions for every individual water body, and that this is delegated to the EA as the delivery body.

Defra's Ministerial Guidance to the EA states that, in relation to disproportionate costs, *'information reported to ministers should be sufficient to determine whether exemptions have been applied appropriately'*.²⁴⁵ It also states that: *'Disproportionality is a political judgement informed by economic information'*.²⁴⁶

We would therefore expect Defra's oversight, while not extending to checks on individual exemptions, to include some assessment of how exemptions have been determined, justified and presented in the proposed RBMPs, to ensure they comply with the Ministerial Guidance.

We understand Defra did not undertake such assurance checks before the plans were approved by the Secretary of State. We are therefore not clear about the basis on which the Secretary of State approved the exemptions, which appear inconsistent with the Ministerial Guidance.

Our view

Overall, based on the information gathered during this project, we consider that the approach adopted by the EA towards providing information about Extended Deadline and Less Stringent Objective Exemptions in the RBMPs may not comply with the requirements of the WFD Regulations.

The requirement is for the RBMPs to set out the exemption and the reasons for it. While the RBMPs note the exemptions used, they do not set out the reasons for them in any substance. Simply stating that something is considered disproportionately expensive, for example, does not amount to justifying or explaining it. Nor do the RBMPs provide specific information at the water body level on how exemptions and corresponding measures are kept under review. We are therefore unsure of the legal basis on which Defra approved this aspect of the RBMPs.

We recognise that the EA has said that information on exemptions held at its local offices can be requested. However, this is not the same as justifying them in the RBMPs. It is also a barrier to transparency and public participation.

²⁴⁴ Reg 12, WFD Regulations.

²⁴⁵ Defra, 'River Basin Management Planning Guidance' (n 11) 41.

²⁴⁶ *ibid* 12.10.

It also follows that the failure to set out reasons behind the use of an exemption in the RBMPs (outside of generic reasons) may also be contrary to the WFD Regulations' public participation requirements.²⁴⁷ Section 4.5.2 considers these further.

More broadly, we see scope to improve how the exemptions are presented in the RBMPs to make them more readily accessible and understandable, and to improve substantive assurance by Defra and ministers.

The obligation to 'set out' an exemption and the reasons for it applies equally to the other exemptions under the WFD Regulations.²⁴⁸ As a point of comparison, on the limited occasions where an exemption is sought due to modifications to physical characteristics of water bodies,²⁴⁹ we note that the EA does more than setting out the type of exemption. It also provides specific data on the reasons for it.

For these cases, the EA has produced a separate spreadsheet setting out all of the circumstances where this particular exemption applies, detailing the water bodies concerned and the schemes that affect them.²⁵⁰ Taking a similar approach to providing information to justify other exemptions could be a path to better meeting the WFD Regulations' obligations, aiding public scrutiny and public participation.

The European Commission's compliance check of the second cycle RBMPs similarly made recommendations to improve the justification and transparency of exemptions.²⁵¹ As outlined above, we still see room for improvement in this area.

Recommendation 4: We recommend that Defra and the EA review and improve how exemptions are justified and presented in the RBMPs to ensure they are appropriate, clear and transparent. We recommend specifically that RBMPs should include at least an outline of the substantive justifications for individual exemptions at the water body level. The approach to how exemptions are determined, justified and presented should also be subject to greater oversight by Defra before the RBMPs are approved by the Secretary of State.

4.5 Production, presentation and governance of River Basin Management Plans

This section looks at a range of wider issues concerning the production, presentation and governance of RBMPs. Our key findings, which are based on the analyses in this section, are as follows.

247 Reg 29(2)(d) WFD Regulations.

248 Regs 18(3) and 19(6), WFD Regulations – see Section 2.2.7.

249 Reg 19, WFD Regulations.

250 See the so-called 'Regulation 19 spreadsheet' which is accessible through a link in: Environment Agency, 'River Basin Management Plans, Updated 2022' (n 105) s 5.

251 European Commission, '6th Implementation Report of the Water Framework Directive' (n 213).

Key findings:

- The RBMPs have facilitated a better understanding of the current state of the water environment, including at a water body level. However, they are complex and hard to navigate. This is a barrier to public participation and could be making it more difficult for public bodies to have regard to the RBMPs.
- There remain significant gaps in the information provided in the RBMPs, including a lack of available information about water body level measures to address pressures and justification of exemptions. As a result, the public consultation on the draft RBMPs may not have met legal requirements concerning the provision of information to the public and consultation.
- Government was an early adopter of the 'Catchment Based Approach'. An increased emphasis on Catchment Partnerships could help to drive improved outcomes. However, they would need a clear remit and adequate funding.
- The EA produced risk assessments looking at the pressures of human activities on water bodies for the first cycle RBMPs and updated them for the second cycle. They were not updated for the third cycle.
- There has been cooperation between authorities in England, Scotland and Wales on transboundary RBDs. While there are examples of cross-border partnerships and actions, there are other instances where it is not clear how measures are co-ordinated in practice across the borders.
- The third cycle RBMPs were delayed by the Covid-19 pandemic. The fourth cycle plans should be approved by 22 December 2027.

4.5.1 How the River Basin Management Plans are presented

Chapter 2 of this report outlines the structure of the RBMPs (see Section 2.3.3). The sections above in this Chapter give additional detail on how they present Environmental Objectives, Programmes of Measures and exemptions.

Overall, the structure and substance of the RBMPs can be hard to understand. As we note in Chapter 2, each one consists of multiple documents, most of which are the same from one plan to the next.²⁵² Working through the documents for a single RBMP to find information specific to the RBD in question can be a challenge. Many other stakeholders in the project have expressed the same view. In effect it can become a 'paperchase' through multiple different documents and links. There is not a single, clear flow for each individual plan.

The RBMPs and supporting documents contain a lot of detailed information. However, it is not always clear where to look in order to access the more technical information. We also recognise that the technical nature of some of the material inevitably makes it difficult for non-specialists to understand.

²⁵² Environment Agency, 'River Basin Management Plans' (n 8).

There are also significant gaps which we note in this chapter. These include information that links pressures on specific water bodies with measures to achieve their Environmental Objectives, and the reasons for exemptions.

The RBMPs provide national, consistent data sets that are regularly maintained and updated. These include the EA's 'Catchment Data Explorer'.²⁵³ Through this, users can explore and download information at the water body level on classification status, the elements used for classification and progress across the RBMP cycles. It also appears relatively easy to navigate between information for different water bodies.

However, some stakeholders with considerable experience in this area have reported that, while they find the Catchment Data Explorer reasonably comprehensive, some aspects of it are difficult to use. In particular, they have suggested that it requires more specialist knowledge and expertise to interpret the maps and information spreadsheets at the RBD or catchment level, rather than just for individual water bodies. The information available through the explorer also offers no link back to measures at the water body level. This means that users can see information on the problem and the target, but not the action plan. The full DPSIR picture is not there.

Our view

RBMPs should be specific, clear, accessible, and understandable. However, we and other stakeholders have found aspects of them complex and hard to navigate.

We recognise that it may be necessary for RBMPs to refer and link to supporting technical information. However, the DPSIR narrative for the RBD and its water bodies should be apparent from the RBMP for that RBD. This should include sufficient, clear and relevant information about classification status, measures and exemptions.

We also consider that the RBMPs' complexity could exacerbate a risk that we discuss further in Chapter 5. This relates to the duty of public bodies to 'have regard to' the RBMPs. We consider that the current structure or presentation of the plans may not clearly support the implementation of this duty. We note, additionally, that some public bodies will have operational remits that cover adjacent and sometimes multiple RBDs. This means they may have to consider two or more RBMPs in parallel.

Recommendation 5: We recommend that Defra and the EA adjust the structure, presentation and content of RBMPs for future cycles. For each RBD, the RBMP should provide the 'driver-pressure-state-impact-response' information for the RBD as a whole and each water body. It should be clear in the RBMPs how the measures will achieve the Environmental Objectives at the water body level. The RBMPs should also be adjusted to make the next cycle of plans and supporting documents clearer, and more reader- and user-friendly, including through the provision of a non-technical summary.

253 Environment Agency, 'England | Catchment Data Explorer' (n 229).

4.5.2 Public participation and transparency

There is significant public and media debate around the state of water bodies and the need for improvements, at both national and local levels. Capturing and considering these views is a key element in ensuring a partnership approach for managing the status of water bodies.

The WFD Regulations contain provisions to ensure transparency and public engagement in river basin planning. The EA must provide opportunities for the public to participate in the development of Environmental Objectives and Programmes of Measures and in the preparation of RBMPs.²⁵⁴ This includes a duty to publicise draft proposals and plans and consult on them. There is also a right of access to background documents and information used in developing draft RBMPs.²⁵⁵

The Ministerial Guidance, meanwhile, states that:²⁵⁶

'8.7. The main purpose of the consultation is to bring about transparency and facilitate public engagement in the river basin planning process. To help achieve this, the consultation should include workings and explanations of the reasons for the proposed planning cycle objectives, including the considerations which have informed proposals for the use of the alternative objectives. This should help those likely to be affected to understand the reasoning behind the proposed changes.'

8.8. The consultation should propose environmental objectives for each water body in the river basin district and programmes of measures to achieve those objectives. The consultation should also provide an estimate of the scale of actions and improvements that might be delivered. This estimate should be based on an assumed level of available national funding related to the most directly relevant programmes and an assumed level of additional voluntary action through local efforts.'

As discussed above, we consider that there are gaps in the RBMPs concerning Programmes of Measures and justification of exemptions. This information was not, to our knowledge, made available to the public during consultation on the draft RBMPs.²⁵⁷ The EA has confirmed that the draft plans on which it consulted in 2021 did not contain significant additional information compared to the final plans. The EA also confirmed that no significant additional information was provided at the consultation stage beyond that in the draft plans. According to the EA, the most significant change in content between the draft and final plans was further development of the summary Programmes of Measures, and in particular the addition of the Topic Action Plans.

This means that it is possible that not all legally required information was provided to the public during consultations concerning the preparation of the RBMPs.

254 Regs 12(2)(b) and 29, WFD Regulations.

255 Art 14, WFD. Reg 3 of the WFD Regulations makes the obligations under the WFD directly applicable.

256 Defra, 'River Basin Management Planning Guidance' (n 11) para 8.7-8.8.

257 Environment Agency, 'Draft River Basin Management Plans: 2021' (22 October 2021) <www.gov.uk/government/collections/draft-river-basin-management-plans-2021> accessed 2 January 2024.

This is discussed further in the *Pickering* case. The Judge commented that the purpose of such public consultation and right of access to background documents ‘*is to allow active involvement and consultation. This aligns closely with the domestic law on consultation... where the second reason is to permit intelligent consideration and response to the proposal*’.²⁵⁸

Our view

Based on the information we have gathered during this project, the OEP’s view is that there may have been a failure to carry out a lawful public consultation on the draft RBMPs. This is in view of our conclusions set out earlier in this chapter on the omission of certain information in the draft plans concerning Programmes of Measures and explanations of the reasons for the use of exemptions.

The European Commission’s compliance check of the second cycle RBMPs noted a similar issue. The review recommended consulting the public in a way that takes into account the plans’ purpose and complexity.²⁵⁹

Recommendation 6: We recommend that Defra and the EA improve the approach to public consultation on the draft plans for future cycles. This should ensure it supports full, active and informed public consultation including in relation to Environmental Objectives, at both the RBD and water body levels, measures to achieve those objectives, and the review and justification of exemptions.

4.5.3 Local engagement and action

In Section 4.3.2, we state our view based on the available information that there is a failure to set out Programmes of Measures for, or link them to pressures at, the water body level, or even the catchment or RBD levels. A wide range of stakeholders have also raised the importance of increasing the focus on local water outcomes and means to pursue them.

As acknowledged in *Pickering*, considering what Programmes of Measures may be needed at a water body specific level may involve additional resources.²⁶⁰ Based on the evidence of some stakeholders (see box below), one way to effectively target Programmes of Measures at the water body level could be to make better use of ‘Catchment Based Approach’ partnerships. This section considers the role for these partnerships in the WFD Regulations.

Examples of stakeholder views on the importance of increasing focus and activity to achieve local water outcomes

National Farmers’ Union: ‘*We would be in support of farmer-led catchment initiatives. Abstractor and cluster groups of farmers ensure that the agriculture sector can lead the way in the development of catchment level improvements and collaborative working between stakeholders and also ensure ownership.*’

²⁵⁸ *Pickering*, para. 152.

²⁵⁹ European Commission, ‘6th Implementation Report of the Water Framework Directive’ (n 213).

²⁶⁰ *Pickering*, para. 145.

The Wildlife Trusts highlighted the importance of taking a catchment based approach to management of the water environment. They said that: *‘The Plan for Water’s support for the Catchment Based Approach, CaBA, is welcome, but the efforts of local Catchment Partnerships will not be successful without further reforms.’*

Stakeholder meeting: Stakeholders who met in London (see Annex 2) broadly agreed that catchment partnerships can be valuable and have been shown to be effective in some areas. However, they also noted that these partnerships need proper funding to ensure that they can make a difference.

The Catchment Based Approach

The development and implementation of RBMPs, which are intended to act at a water body scale, in essence reflects a catchment based approach. Catchment Based Approach partnerships²⁶¹ were designed to take forward this approach and embed locally-tailored and driven collaborative, integrated working at a catchment scale. Government was an early adopter and supporter of this approach and piloted partnerships from 2011, before providing wider support to partnerships across England. They were intended to be a major enabling tool for delivery.

Most stakeholders have suggested that current Catchment Based Approach partnerships have provided a useful forum for coordinated action. However, views on their effectiveness have been mixed. We note, also, that they have little power (and no statutory power), no clearly defined remit and limited resources.

For example, the National Farmers Union also told us it considers that: *‘Catchment Partnerships have a poor track record on meaningful engagement with farmers and they are simply far too numerous for the NFU to engage with every one of them – the agricultural voice is effectively excluded from planning and implementation in many catchments as a result.’* They suggested reinstating RBD-level liaison panels to improve agricultural engagement water planning and implementation.

More broadly, stakeholders have also suggested the partnerships have not been able to deliver measures at scale as they lack the funding or status to do so. Each Catchment Based Partnership group receives annual funding of only £15,000 from Government. Stakeholders in our project have suggested that this limits the partnerships to small projects with a high reliance on volunteers and work on a ‘best endeavours’ basis. This is corroborated by observations from the EAC that *‘Ministers should examine means to increase the funding and resources available to them [catchment partnerships] so as to achieve more effective coordination of all stakeholders across each river catchment in measures to improve water quality’*.²⁶²

The Defra Plan for Water, meanwhile, states the intention *‘to take us further and faster, based on taking a systematic, local, catchment-based approach, in a coordinated and collaborative way, using both nature-based solutions and investment in infrastructure involving communities, water companies, and businesses’*.²⁶³

261 Defra and Environment Agency (n 109).

262 House of Commons Environmental Audit Committee (n 140) para 74.

263 Defra, ‘Plan for Water’ (n 4) 5.

Our view

We recognise the importance of working at a local level and in partnership with stakeholders in protecting and improving the water environment. With a lack of overall improvements across the RBDs they operate in, the scale and pace of the current approach appears inadequate. The evidence in this project suggests that increased emphasis on Catchment Based Partnerships could help to drive improved outcomes. However, they would need a clear remit and adequate funding.

We therefore give a cautious welcome to Defra's general intent, stated in the Plan for Water, to '*take a systematic, local, catchment-based approach*'. However, the Plan for Water does not say what this means in practice or how it might differ from the current approach under the WFD Regulations.

We also note the mixed views of stakeholders on the success and impact of the Catchment Based Approach partnerships to date. This is exacerbated by their current limited funding. This highlights a need, as Defra takes forward its Plan for Water and review of the WFD Regulations, to give careful consideration to the role, design and enabling framework for the Catchment Based Approach partnerships.

We suggest this should start from a clear view of the remit of the partnerships, defined by their intended role and the value they will add on top of the actions or functions of public authorities or individual partnership members. We also suggest that Government clarify the partnerships' funding, accountability and governance to ensure they are aligned with their intended remit and role.

As we discuss in Chapter 5 (Section 5.5.2), it is also important to consider how to align land and water use management plans, to ensure an integrated approach and optimise the achievement of environmental outcomes. Again, a Catchment Based Approach is one possible way of supporting this, as it brings together the key stakeholders in land and water use planning. Ensuring coherence of the Catchment Based Approach with other developing spatial strategies and plans will, therefore, also be important so that they complement one another and deliver multiple benefits. Local Nature Recovery Strategies, the Land Use Framework and Environmental Land Management schemes will be particularly important.

The Environment Act 2021²⁶⁴ requires local authorities and other responsible authorities to prepare and publish Local Nature Recovery Strategies. There is an opportunity for Government to embed locally tailored catchment solutions through them. However, these strategies are not spatially catchment based. Therefore, the Catchment Based Approach and partnerships potentially have a significant role to play in supporting catchment specific solutions across responsible authority boundaries, as long as their remit is clearly defined and adequately funded.

264 Ss. 104-106, Environment Act 2021.

Recommendation 7: We recommend that Government, in seeking to extend the reach of Catchment Based Approach partnerships, more clearly define their role and functioning, and then organise and fund them so they can deliver as intended. This will require a closer alignment with the contents of the Programmes of Measures, relating to individual water bodies and catchments, and clarification of the role of partnerships in identifying and supporting the implementation of those measures where appropriate. We also recommend that Government determine how best to further develop partnership working in conjunction with other plans covering water, nature, land use and other development.

4.5.4 Assessing and managing pressures on water bodies

The WFD Regulations require the EA to assess the impact of human activities on the status of water bodies in each RBD.²⁶⁵ The information must be reviewed and, where appropriate, updated every six years.

From the RBMP analysis,²⁶⁶ we understand that the EA produced these assessments (which the EA called ‘risk assessments’) for the first cycle RBMPs and updated them for the second cycle. For the third cycle, however, while the risk assessments were reviewed again, they were assessed by the EA as appropriate and not updated. The EA has advised us that it has not yet determined if it will update the risk assessments for the fourth cycle RBMPs.

The EA published the risk assessment methodologies alongside the 2015 RBMPs.²⁶⁷ They were broken down into methodologies for nine different pressures such as abstraction and flow, chemicals and metals, phosphorus from sewage treatment works and invasive non-native species.

The RBMP analysis found the nine risk assessments to be generally comprehensive, broadly covering the main pressures directly affecting the chemical and ecological status of water bodies. However, it also noted some limitations. These include low confidence in the physical modification risk assessment methodology and gaps in the understanding of different types of morphological pressures. In addition, there was no specific climate change risk assessment. While climate change was considered in some of the assessments (such as the one on the faecal indicator organisms) it was not covered in others, presenting a potential gap.

For example, the risk assessment for groundwater abstraction noted that there was no consistent methodology to assess the impacts of climate change on groundwater recharge. This assessment (published alongside the 2015 RBMPs) stated that a project in 2013 was expected to deliver climate change forecasts of groundwater recharge. It said that the EA would use this information, as well as addressing other points, in the further development of the methodology for the next round of RBMPs. However, this updated information has not been found in the third cycle RBMPs.

²⁶⁵ Reg 5(1)(b), WFD Regulations.

²⁶⁶ WSP (n 41) s 2.2.3.2.

²⁶⁷ Environment Agency, ‘River Basin Planning Process Overview’ (n 111) s 3.4.

Our view

This review of the risk assessments without updating them means that planning for the third cycle has assumed that the risks are the same as those for the second. We question this, for example in view of risks from emerging substances (see Chapter 3), progress in the implementation of measures, changes in economic circumstances and the latest information on the risks from climate change. In respect of the last of these, two UK climate change risk assessments (2017²⁶⁸ and 2022²⁶⁹) have been published since the WFD Regulations' risk assessments were last updated.

We consider that the EA should update the risk assessments in the fourth cycle to ensure they are robust and take account of the latest evidence and information. We also suggest that it would be beneficial for this to be done in coordination with the related review of the economic analyses of water use in each RBD. This is required to be undertaken by the Secretary of State and reviewed every six years.²⁷⁰ As we note in Chapter 2 (Section 2.3.5), this has not been updated since 2005.

Both of these assessments form part of the underpinning material to be taken into account in developing Environmental Objectives and Programmes of Measures.²⁷¹

Recommendation 8: We recommend that the EA update its assessments of risks to water bodies from the pressures caused by human activities, including climate change as well as infrastructure and domestic and commercial development, when it next reviews them for the fourth cycle RBMPs. We also suggest that, in tandem, Defra update the related economic analyses of water use in each RBD in the next review of these analyses on behalf of the Secretary of State.

4.5.5 Managing transboundary river basins

England has transboundary RBDs with Scotland and Wales. The WFD Regulations provide for cooperation between England and Wales in relation to their shared RBDs. Parallel legislation does the same for the Anglo-Scottish RBDs (see Section 2.3.1).

The RBMP analysis conducted in this project found that there has been work done to identify and plan to address transboundary areas of concern, as well as acknowledgement of the need to co-ordinate in addressing them.²⁷²

For instance, England and Wales provide a similar mapping platform to show monitoring points in the shared RBDs. In the Severn RBD, England and Wales coordinate on measures to control key challenges. There are also catchment partnerships and local case studies that show coordination to deliver improvements.

Regarding the Anglo-Scottish RBDs, the Solway Tweed is mostly in Scotland but has a large area in England. A small fraction of the Northumbria RBD is in Scotland. The summary of the

268 Defra, 'UK Climate Change Risk Assessment 2017' (2017) <www.gov.uk/government/publications/uk-climate-change-risk-assessment-2017> accessed 19 December 2023.

269 Defra, 'UK Climate Change Risk Assessment 2022' (2022) <www.gov.uk/government/publications/uk-climate-change-risk-assessment-2022> accessed 19 December 2023.

270 Reg 7, WFD Regulations.

271 Reg 12, WFD Regulations.

272 WSP (n 41) s 5.

Solway Tweed RBMP on the EA website²⁷³ discusses the principles of taking a collaborative approach, aligning initiatives and pooling resources. The summary of the Programme of Measures, however, is for England only.

The actual Solway Tweed RBMP, meanwhile, is published on the website of the Scottish Environment Protection Agency.²⁷⁴ This contains general information on measures to improve cross-border water bodies. Both documents discuss the EA and the Scottish Environment Protection Agency working in partnership and having a shared vision. However, it is difficult to find information that specifically demonstrates coordination of the Programme of Measures for the RBD as a whole.

Our view

The RBMPs and accompanying documentation for the transboundary RBDs show there has been work done to identify and plan to address transboundary areas of concern. Some of the information to understand this was accessed through websites linked to the RBMPs, rather than in the plans themselves, meaning it was not straightforward to find it without some effort. In addition, while there are some examples of coordinated, cross-border partnerships and actions, there are other instances where it is not clear how measures are coordinated in practice.

4.5.6 Producing plans by the statutory deadlines

The third cycle RBMPs were due by 22 December 2021. The EA published the draft plans for consultation on 22 October 2021. It published updates to the plans on 21 October 2022, submitting them at the same time and via the same means for the Secretary of State's approval. The plans were approved unchanged by the Secretary of State and published on 22 December 2022.

Defra has explained that the RBMPs were not published in 2021 due to delays arising from diverting EA resources to the Covid-19 pandemic. As specified in the regulations, the next cycle of RBMPs is due to be approved by 22 December 2027.

4.6 Ensuring effective monitoring and reporting

This section looks at monitoring and reporting under the WFD Regulations. Our key findings from the analyses in this section are summarised as follows.

Key findings:

- Real term reductions in monitoring budgets have affected the EA's ability to provide a comprehensive overview of the state of the water environment.
- There is a lack of transparency on the EA's monitoring programmes and how they work together.

273 Environment Agency, 'Summary of the Solway Tweed River Basin Management Plan in England' <www.gov.uk/government/publications/solway-tweed-river-basin-management-plan/summary-of-the-solway-tweed-river-basin-management-plan-in-england> accessed 16 November 2023.

274 Scottish Environment Protection Agency, 'The River Basin Management Plan for the Solway Tweed River Basin District 2021 Update' (2021) <www.sepa.org.uk/media/594087/211221-final-rbmp3-solway-tweed.pdf>.

- Government has an opportunity to rectify the situation through its revised monitoring strategy. We have recommended that Government adopt an improved monitoring plan in our recent EIP progress report.
- There is no ongoing, independent evaluation programme for the WFD Regulations. This reflects wider evaluation gaps in the EIP²³. To maximise effectiveness, monitoring the water environment should be integrated into a broader evaluation programme.
- There have been concerns about the ‘one-out, all-out’ principle in water body classification. We consider this primarily an issue of how information is presented and reported. We suggest that Defra explore possible better ways to communicate the process and progress, without lowering levels of protection or lessening ambition.

4.6.1 Why monitoring is important

Under the WFD Regulations, the EA must apply and keep under review programmes for monitoring water status. These must be sufficient to establish a coherent and comprehensive overview of water status in each RBD.²⁷⁵

As set out in Chapter 2, monitoring underpins implementation of the WFD Regulations. It provides information to help understand the drivers and pressures on water bodies as well as monitoring for the various elements used to build the overall picture of their status. This knowledge is a key building block in setting Environmental Objectives and deciding on action to achieve them. Monitoring also provides a feedback loop on the effectiveness of measures, so they can be adjusted as needed.

Overall, therefore, monitoring is fundamental to understanding the state of the water environment, determination of measures, progress on objectives and emerging issues. As such, monitoring needs to be robust, appropriate, and accurate. It does, however, come at a cost, although much less than that needed to implement measures to protect and improve the environment (see Section 4.3.1).

Our first EIP progress report²⁷⁶ highlighted concerns over reductions in monitoring across many parts of the environment. It recommended that Government develop a purpose-driven environmental monitoring programme. We said that it should identify and fill critical data gaps, focusing firstly on the issues of greatest environmental concern. Government’s monitoring, assessment and reporting framework should provide the data, information and knowledge needed to understand if environmental goals and targets are being met and capture the influence of pressures and drivers.

A recent EAC report highlights reductions in biodiversity and water quality monitoring over many years.²⁷⁷ The EAC has also concluded that the EA’s monitoring programme is too narrow and recommended that the EA extend the number of substances it is regularly

275 Reg 11, WFD Regulations.

276 Office for Environmental Protection, ‘Taking Stock: Protecting, Restoring and Improving the Environment in England’ <www.theoep.org.uk/taking-stock> accessed 16 November 2023.

277 House of Commons Environmental Audit Committee (n 140) paras 334–335.

monitoring in rivers.²⁷⁸ The Topic Action Plans that accompany the Programmes of Measures identify monitoring as a key priority area.

As part of this project, we have considered progress made by the EA in updating its monitoring programme in the water environment and the wider 'Prioritisation and Early Warning System' (PEWS). We also consider the status of strategic evaluation programmes to understand progress and enable more effective implementation.

4.6.2 Approach to water monitoring

The WFD Regulations require surveillance, operational and investigative monitoring. In broad terms, surveillance monitoring is intended to establish the overall state of the water environment at a strategic level. Operational monitoring is concerned with assessing the state of individual water bodies. The EA also undertakes investigative monitoring to understand the pressures affecting water bodies or evaluate changes arising from measures. In principle, the monitoring programme allows for drivers, pressures, state, impact, and response to be monitored.

The EA's monitoring programmes are further supported by water industry monitoring programmes such as under WINEP, the UK Chemical Investigation Programme²⁷⁹ and, increasingly, the deployment of 'event duration monitoring' for storm overflows.

4.6.3 Funding and evolution of the Environment Agency's monitoring programme

The EA's monitoring activity that informs river basin management planning is partly funded by Government. Most of the funding comes from chargeable activities through the regulation of licences and permits.

The Topic Action Plan notes that in recent years government funding has reduced.²⁸⁰ It does not state why or by how much. There have also been concerns expressed in Parliament about reduced funding for EA staffing and monitoring. For example, a debate in November 2022 noted that Government had '*more than halved the Agency's [overall] environmental protection budget from £170 million in 2009-10 to £76 million in 2019-20*'.²⁸¹

The water quality stocktake²⁸² undertaken in this project has also observed this constraint in relation to the EA's PEWS. This is an EA monitoring and horizon-scanning programme that considers risks posed by emerging contaminants to water, biota, soils, and sediments. While it is not a statutory mechanism under the WFD Regulations, it provides an important component of understanding hazardous chemicals that may affect the state of the water environment, and may therefore come under regulation in the future.

278 *ibid* 41.

279 UK Water Industry Research, 'Chemical Investigations Programme' <<https://ChemicalInvestigations.ukwir.org/sign-up-and-access-the-chemical-investigations-programme-data-access-portal/>> accessed 18 December 2023.

280 Environment Agency, 'River Basin Management Plans, Updated 2022' (n 194) s 5.1.2.

281 Hansard, 'Environment Agency: Enforcement Budget' <<https://hansard.parliament.uk/commons/2022-11-17/debates/29A0035B-708A-4796-8C52-395CA86C7C54/EnvironmentAgencyEnforcementBudget>>.

282 Atkins and WCA (n 43).

The stocktake found the system relatively robust for well-established pollutants. However, it noted that lack of funding was limiting the development of evidence for emerging pollutants, and hence confidence in assessments of their risks.

The EA has advised the OEP that its total monitoring budget (combining all sources of funding) for water quality monitoring between 2016/17 and 2022/23 varied from £29 million to £32 million. The budget in 2022/23 was the highest over the period. However, when accounting for inflation, it is a real-term cut.

This excludes funding for the operational running of PEWS, which is funded separately via Defra and the EA's chemicals programmes. It does, however, include funding for the environmental monitoring for emerging substances in surface waters and groundwater which underpins PEWS.

The monitoring programme is funded mostly from chargeable activities through the regulation of licences and permits. Wider monitoring not associated with these activities is funded by Government. This funding component has varied from over £7 million to under £3 million between 2016/17 and 2022/23, with the last year's budget also a real-term cut compared to the 2016/17 figure.

The additional funding from the Natural Capital and Ecosystem Assessment programme, which is part of the total monitoring budget, funds new surveillance monitoring requirements. This is welcome, but does not make-up for the shortfall caused by other real-term cuts.

The EA has informed us that it is reviewing its water monitoring programmes and developing a revised strategy, which goes beyond legal requirements under the WFD Regulations. This provides an opportunity to develop better monitoring regimes.

A lack of transparency on the monitoring programmes has led to confusion among stakeholders, expressed during this project, regarding the various aspects of the EA's monitoring programme and how they work together. This new monitoring programme also offers scope to address this issue.

Our view

The approach adopted by the EA is pragmatic but has been constrained by the budget reductions. There needs to be an adequate balance between a nationally co-ordinated core programme, including surveillance, and locally targeted operational monitoring, with additional funding for investigations.

In our last EIP progress report, we recommended that Government publish a transparent monitoring programme for the water environment, setting out how it will fulfil its monitoring obligations under law and maintain adequate monitoring of current and emerging major pressures and drivers. Further to that recommendation, we note here that Government is developing a more holistic approach to monitoring the water environment. This is a welcome development. It should ensure that PEWS, in particular, is adequately funded.

Overall, monitoring should be adequately resourced to provide a solid evidence basis to implement the WFD Regulations in a way that best supports delivery of intended outcomes as well as meeting legal requirements.

Effective implementation also requires policy evaluation. We are concerned that Defra does not appear to be filling gaps in evaluating the effectiveness of the RBMPs or realisation of the related EIP23 goal of ‘clean and plentiful water’.

For example, technical information on implementation previously was reported to the European Commission and assessed under a technical framework operated by the European Environment Agency.²⁸³ The UK is no longer reporting this information following EU exit. Defra does not appear to have filled this evaluation gap. It recently published an evaluation strategy²⁸⁴ identifying the EIP23 as a major component of its evaluation portfolio and clean water as a priority outcome. There is, however, still no monitoring and evaluation framework for this priority nor the EIP, despite the latter being committed to in 2018.

Such a monitoring and evaluation framework is an important part of implementation. It forms part of the feedback loop to track progress towards goals and objectives and understand whether measures are working.

Recommendation 9: We recommend that Defra develop and implement a coherent and nested monitoring and evaluation framework for the state of the water environment and progress on measures to improve it. This should include a clear relationship between monitoring for individual water bodies, catchments and river basin districts under the WFD Regulations through to wider monitoring and evaluation of the water-related goals and targets of the EIP23.

4.6.4 The one-out, all-out principle

Water body classification under the WFD Regulations combines biological and chemical quality assessments. It follows the so-called ‘one-out, all-out’ principle whereby water body status is determined by the lowest of the applicable quality element classifications. Section 2.2.3 and Annex 4 outline how this works.

As we note in Chapter 3 (Section 3.2.3), progress in individual elements may be overlooked for specific water bodies if only the overall status is considered under the one-out, all-out principle. However, progress can be reported not just in overall terms, but also for individual supporting elements. Detailed analysis needs both overall status and individual parameters, and a clear understanding of how many and on which parameters a water body is making progress or failing. Indeed, the EA has done this in the RBMPs, with the information being available through the Catchment Data Explorer. However, the information is not clearly and readily available in an easily usable summary form.

Some commentators, including the EA’s former Chief Executive²⁸⁵ and the National Farmers’ Union (see box below) have called for the one-out, all-out principle to be changed because they see it as ‘masking’ progress. This reflects the fact that the condition of a water body can improve in various respects, but its overall status may not change if one element remains the same as before.

283 European Environment Agency (n 242); European Commission, ‘6th Implementation Report of the Water Framework Directive’ (n 213).

284 Defra, ‘Evaluation Strategy for Defra’ (19 September 2023) <www.gov.uk/government/publications/defra-evaluation-strategy/evaluation-strategy-for-defra> accessed 8 February 2024.

285 Sir James Bevan, ‘In Praise of Red Tape: Getting Regulation Right’ (4 August 2020) <www.gov.uk/government/speeches/in-praise-of-red-tape-getting-regulation-right> accessed 27 November 2023.

This issue attracts much interest and controversy. Stakeholders in this project expressed views varying between abandonment of the one-out, all-out approach, adjustment of it, or retention of the principle unchanged.

In a submission to this project, the National Farmers' Union called for review of the one-out, all-out principle. It said that:

'Farmers and others may be undertaking costly actions but with little impact on the improvement of the overall health of a water system. While we recognise the overall health of a waterbody depends on a variety of elements, basing a target on achieving a high standard for each element makes it very difficult to achieve in practice. Of course, targets should be challenging but they should also be realistic, otherwise those working hard to achieve them are at risk of becoming demotivated.'

Moreover, the 'one out, all out' rule [...] acts to obscure progress made on the underlying indicators and give a misleading picture of waterbody health. This approach also risks demotivating stakeholders, such as farmers, who have worked hard to help improve waterbodies and are told it counts for nothing. Instead, we suggest that a waterbody could be assigned good status even if one or two underlying indicators do not quite make the grade, where improving those indicators would either make little difference to the overall waterbody or prove disproportionately costly.'

We note that such a 'masking' effect does not appear to have arisen at a national scale in relation to the overall lack of progress (and in fact the slight decline) shown by the fall from 17% of surface water bodies at Good Ecological Status or Potential in 2015 to 16% in 2019. On this point, the third cycle RBMPs confirm that: *'The ecological status of a water body is derived from the status of individual tests or quality elements. At a national level there has been no significant change in the status of these quality elements.'*²⁸⁶ In other words, while such a 'masking' effect could occur at the level of an individual water body, it does not appear to have occurred at the national level for all water bodies combined.

It has also been suggested that one-out, all-out may lead to sub-optimal use of resources. This is because it might favour action to bring water bodies to Good Status over other measures that could bring greater improvement (for example, from 'bad' to 'moderate') without reaching 'good' overall.

However, we consider this is largely a question of how the legislation is (or should be) applied and its outcomes communicated rather than its intended or inevitable effect. One-out, all-out is not a legal constraint in this regard because there is no requirement to achieve overall Good Status where an exemption can be justified in the Environmental Objectives. In addition, utilising the provisions on exemptions, different objectives can be set for the individual elements that apply to a water body. One-out, all-out should not, therefore, push authorities towards a sub-optimal outcome if the provisions on exemptions are used correctly. This should allow resources to be applied in the most effective way.

286 Environment Agency, 'River Basin Management Plans, Updated 2022' (n 15) s 2.

Similar issues concerning the one-out, all-out principle have arisen across the EU. The 2019 EU ‘fitness check’ of the WFD²⁸⁷ also considered this matter. Its conclusion was to maintain one-out, all-out as an overall indicator while developing, at national level, better indicators to show progress. These could be around improvements in the status of individual elements or within the status band for the overall and individual assessments. This is now being considered further as part of the 2022-24 Work Programme under the EU’s ‘Common Implementation Strategy’ for the WFD.²⁸⁸

Our view


Overall, we consider that the multi-element RBMP classification system for waters is soundly based. This includes the one-out, all-out principle to determine overall status and define Environmental Objectives. Each part of the assessment plays its part in an effective monitoring and evaluation framework, supporting course correction where needed. It also reflects the different components that, collectively, determine the overall state of different water bodies.

We recognise that classification results based solely on one-out, all-out do not provide a complete picture when setting objectives or communicating overall progress. However, we consider that this is an issue of how the data is used, presented and reported. It is not, in our view, a fundamental question of whether one-out, all-out is a good approach to assess overall status, define Environmental Objectives, and report on progress against them. As long as the full data and evidence are considered alongside the overall classifications, they can be used to support the most cost-effective targeting of effort.

In its review of the implementation of the WFD Regulations, therefore, we suggest that Defra explore possible ways to communicate better the process and progress, without lowering levels of protection and lessening ambition.

287 European Commission, ‘Fitness Check of the Water Framework Directive and the Floods Directive’ (2 April 2020) <https://commission.europa.eu/publications/fitness-check-water-framework-directive-and-floods-directive_en> accessed 21 November 2023.

288 European Commission, ‘CIS Work Programme - Stock-Taking and Way Forward’ (16 November 2023) <<https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/84dfae5d-1a13-4046-94c9-0bba379ce7b0/details>> accessed 20 December 2023.



Chapter 5. Effectiveness of the legal and policy framework

Chapter 5. Effectiveness of the legal and policy framework

5.1 Introduction and approach

This chapter assesses the effectiveness of the WFD Regulations as a legal framework to protect and improve the water environment. While Chapter 4 looks at implementation, in this chapter we focus on the efficacy of the legal framework itself and its position within the broader legal and policy landscape in England.

We have structured our assessment in this chapter around four key themes, as follows. We summarise our key findings at the start of each section.

Section 5.2 considers the relationships between environmental states, drivers and pressures and activities to monitor, evaluate and learn from efforts to improve the environment. It looks at:

- how the WFD Regulations create an integrated framework to understand states, drivers and pressures and implement monitoring and evaluation
- gaps in that framework which are creating barriers to understanding underlying drivers and trends in the state of the water environment.

Section 5.3 discusses the extent to which the WFD Regulations support a long-term vision in relation to the water environment. It discusses:

- the ambition reflected in the WFD Regulations' Environmental Objectives
- their potential contributions to the goals and targets of the EIP23 and Environment Act 2021, as well as Global Biodiversity Framework targets.

Section 5.4 looks at coherence of the WFD Regulations and Environmental Objectives with broader water law, policy and targets. It considers, specifically:

- Environment Act water targets
- Government's policy goal of 'clean and plentiful water' in the EIP23, which includes the target to *'restore 75% of water bodies to good ecological status'*
- Environment Act biodiversity targets
- other water management plans
- the EIP23 more broadly, and Defra's Plan for Water.

Section 5.5 examines issues of governance concerning the WFD Regulations and RBMPs. It addresses questions of:

- accountability for delivery of the WFD Regulations and the RBMPs
- the legal duties on public authorities under the WFD Regulations and the need for consistent decision-making and 'WFD assessment'.

5.2 Understanding environmental states, pressures and drivers and implementing effective monitoring, evaluation and learning

An effective legal framework for protecting and enhancing water must establish mechanisms for understanding and assessing drivers and pressures affecting the water environment. It also needs to ensure the availability of data to understand underlying drivers and trends, as well as monitoring improvement and assessing progress towards objectives.

We summarise below the key findings from the analysis that follows.

Key findings:

- Overall, the WFD Regulations provide an integrated framework for understanding environmental states, drivers and pressures and implementing monitoring and evaluation based on a sound technical approach. This provides a basis through which tangible and effective action could be planned and taken.
- However, there are some gaps that are creating barriers to understanding underlying drivers and trends in the state of the water environment. This is also creating barriers to scrutiny and public participation.
- Better reporting on drivers and pressures and greater focus on addressing risks from emerging substances are key priorities.

5.2.1 Overall approach of the WFD Regulations

The regulations provide for an integrated approach addressing aquatic ecosystems as a whole. Water management can be tailored to local conditions and coordinated across administrative and geographic boundaries. This forms the basis of the governance framework that, if implemented effectively, should enable Defra, the EA and others to pursue the Environmental Objectives with ambition, drive and purpose.

The approach of the WFD Regulations is designed to be evidence based and informed by local conditions. It reflects the ‘driver-pressure-state-impact-response’ (‘DPSIR’) approach outlined in Chapter 2 (Section 2.2.1). This aims to understand the relationship between environmental effects, their causes and measures taken.

The WFD Regulations require assessment of drivers and pressures affecting the water environment, monitoring to gather information about the state of the water environment and classification of the status of all water bodies.²⁸⁹ The six-year cycle allows the information gathered and proposed under the WFD Regulations about drivers, pressures, status, impact and planned responses to be recorded and subject to public scrutiny. The RBMPs should serve a key governance function in driving forward delivery of the Environmental Objectives, as we discuss in Section 5.5.

²⁸⁹ Regs 5, 6 and 11, WFD Regulations.

Programmes of Measures must include the basic measures listed in the WFD Regulations. Basic measures are broadly divided into those regulated under ‘assimilated law’ (previously ‘retained EU law’) for the protection of water other than the WFD Regulations,²⁹⁰ such as the Urban Waste Water Treatment (England and Wales) Regulations 1994, and those additionally introduced by the WFD Regulations.²⁹¹ However, there is some degree of overlap.

The latter include measures to address diffuse pollution, for example from agriculture and urban runoff, and point source discharges.²⁹² They also include measures to tackle other pressures such as water abstraction and impoundment, physical habitat modifications and measures to eliminate priority substances such as uPBTs.²⁹³ There is also a requirement to include measures to address ‘any other significant adverse impacts on the status of water’.²⁹⁴ One example of this could be measures to tackle invasive, non-native species (see Chapter 3, Figure 3.3).

Our view

Our overall view is that the fundamental structure and approach of the WFD Regulations are broadly sound and fit for purpose. We therefore consider that a strong and effective legal regime can be built on the existing framework, while also taking opportunities to improve upon it as we discuss in the sections below.

In the Plan for Water, Government commits to reviewing the implementation of the WFD Regulations.²⁹⁵ We support this action, which provides an opportunity to strengthen the law in these key areas and improve how it is implemented. However, it is essential that this review does not result in lowering current levels of protection or lessening ambition.

Recommendation 10: We recommend that Government retain the fundamental underlying structure and approach of the WFD Regulations, while also consulting on proposals to improve the legal and governance framework to produce a regime that is stronger and includes mechanisms for better implementation. Central aspects of the WFD Regulations that we consider should be retained include:

- Integrated protection of all water body types to cover aquatic ecosystems as a whole.
- Ambitious Environmental Objectives based on strong scientific underpinnings and evidence. This should include retention of the ‘No Deterioration’ principle and targets for the ecological, chemical and quantitative health of surface water and groundwater.
- An integrated, multi-element approach to classifying water bodies and determining if overall Environmental Objectives are met, while providing for assessment and reporting of progress towards these objectives at a more detailed level for the various individual elements monitored.

290 Reg 20(2), WFD Regulations; see also Art 11.3(a) WFD (as amended by Para.7(a), Part 1, Sch. 5, WFD Regulations); see also S. 5(4) Retained EU Law (Revocation and Reform) Act 2023.

291 Reg 20(2)(b)-(l), WFD Regulations.

292 Reg 20(2)(g) and (h), WFD Regulations.

293 Reg 20(2)(e), (i) and (k), WFD Regulations.

294 Reg 20(2)(i), WFD Regulations.

295 Defra, ‘Plan for Water’ (n 4).

- An evidence-based framework using the ‘driver-pressure-state-impact-response’ model to address key pressures and enable tailoring to local conditions.
- Coordination across administrative and geographic boundaries.
- Public participation provisions to enable and encourage active involvement of interested parties.

5.2.2 Gaps

Reporting and availability of data

The WFD Regulations provide for ongoing monitoring to understand the state of the water environment.²⁹⁶ However, as we note in Chapter 4, the EA did not report data from monitoring for the third cycle RBMPs concerning the high level links between pressures, exemptions and measures. This is contrary to the position for the first and second cycle RBMPs. During those cycles, the UK was participating in a voluntary, EU-wide scheme for reporting data to the ‘Water Information System for Europe’ (‘WISE’).²⁹⁷

WISE provides an online portal for a wide range of water related information, serving users from EU institutions to the general public.²⁹⁸ It has supported public scrutiny and public participation in relation to the WFD, including, in the past, information on implementation in England.

The reporting and publication of this data aided scrutiny of the first and second cycle RBMPs. In particular, it helped with understanding the link between pressures, measures and exemptions at the water body level. The reduced reporting and information in the third cycle has therefore made it more difficult to scrutinise the RBMPs. It has also created barriers to public participation in the plans.

Watch List mechanism

The EA’s monitoring programme must cover pollution to surface water bodies by so-called ‘priority substances’ (see Annex 3).²⁹⁹ This is a list of surface water pollutants identified as presenting significant risks to or via the aquatic environment. There are environmental quality standards for each pollutant, which must be met for a water body to be classified as ‘good’.³⁰⁰

There is also a list of substances of emerging concern in respect of water pollution that the EA must monitor for.³⁰¹ This list is based on a ‘Watch List’ of substances originally compiled by the European Commission.³⁰² The purpose of the ‘Watch List’ is to gather data about

296 Reg 11, WFD Regulations.

297 European Commission and European Environment Agency, ‘Water Information System for Europe (WISE)’ <<https://water.europa.eu/>> accessed 23 January 2024.

298 European Commission, ‘About WISE’ <<https://water.europa.eu/#about>> accessed 23 January 2024.

299 Art 11, WFD Regulations.

300 Reg 6, WFD Regulations. See also Annex V to the WFD and the Environmental Quality Standards Directive.

301 Commission Implementing Decision (EU) 2022/1307 of 22 July 2022 establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC of the European Parliament and of the Council.

302 European Commission, ‘Surface Water’ <https://environment.ec.europa.eu/topics/water/surface-water_en> accessed 23 January 2024. See also Article 8b, Environmental Quality Standards Directive.

substances of emerging concern, so that they can be considered for inclusion in the list of priority substances. The EA also has a relatively comprehensive existing monitoring programme for substances of emerging concern, as described in Chapter 4 (Section 4.6).

The European Commission must review the EU ‘Watch List’ every two years, so that new and emerging substances of concern can be added to the list as needed.³⁰³ Following EU Exit, however, the EA will not be required to monitor for any new substances added to the EU list. There has been no direct replacement of the ‘Watch List’ mechanism in England. Instead, the Secretary of State has a discretionary power, under the Environment Act 2021, to update the list of priority substances and derive the associated environmental quality standards.³⁰⁴ There is no timescale for the exercise of this discretionary power.

Defra has acknowledged in this project that the process for identifying and developing environmental quality standards for substances has not yet been defined. It said that it is currently considering its approach, and that this will indicate the degree to which England will remain aligned with the EU processes for identifying priority substances and environmental quality standards. This decision will also inform the EA’s future work on the development of environmental quality standards.

Our view

The WFD Regulations apply a structural model based on the management of water in natural units (river basins or catchments) covering all types of water bodies, and applying an integrated, DPSIR approach at the ecosystem level. In this context, the WFD Regulations remain highly relevant as an effective legal framework through which tangible and effective action could be planned and taken.

However, some gaps are creating barriers to scrutiny and public participation, and to understanding underlying drivers and trends in the state of the water environment.

The OEP’s view is that the EA should publish information about drivers, pressures, status, exemptions and measures at the water body level. We address this issue in Chapter 4 (Section 4.5.1). This would be consistent with public participation requirements contained in the WFD Regulations.

As we note above, Defra has also acknowledged that the process for identifying and developing environmental quality standards for substances in the future has not yet been defined. In the meantime, as set out in Chapter 3, new and emerging chemical risks to the water environment in England may be receiving inadequate attention.

Recommendation 11: We recommend that Defra determine how to approach the monitoring and regulation of new and emerging chemicals in reviewing the implementation of the WFD Regulations. In particular, we highlight the need for Defra to establish effective processes to replace the former EU ‘Watch List’ mechanism and for setting environmental quality standards. This should ensure the WFD Regulations can provide a continuing framework for addressing new and emerging threats.

303 Ibid.

304 S. 89, Environment Act 2021.

5.3 Creating a vision

This section considers the extent to which the WFD Regulations create a vision for environmental protection and improvement. Our key findings based on the analysis in this section are as follows.

Key findings:

- The WFD Regulations reflect an ambitious, outcome-based approach to environmental law, as well as specifying processes to achieve those outcomes. They aim to return water bodies to a condition that is at or close to a natural state.
- Accordingly, the statutory Environmental Objectives in the WFD Regulations are ambitious. If achieved, they will significantly improve the water environment and make important contributions to the related goals and targets of the EIP23 and Environment Act 2021, as well as Global Biodiversity Framework targets.

Our assessment of the Environmental Objectives

As we explain in Chapters 1 and 2, the Environmental Objectives of the WFD Regulations include preventing deterioration of the status of water bodies, and protecting, enhancing and restoring water bodies, aiming to achieve Good Status.

With reference to the WFD and its 'daughter directives', the regulations set the quality elements and parameters to be assessed and the standards they must meet to be assessed as 'good'. The objective is to ensure overall ecosystem integrity, by applying the 'one-out, all-out' principle (see Section 2.2.3). Exemptions to the Environmental Objectives may be applied for an individual water body if certain conditions are met, due to disproportionate expense, technical infeasibility or natural conditions (see Section 2.2.6).

The regulations then provide a basis to set Environmental Objectives for individual water bodies and establish Programmes of Measures to meet them.³⁰⁵ This allows the tailoring of measures to local conditions, supporting the DPSIR framework.

Our view

Achieving Good Status as defined by the WFD Regulations would significantly improve the state of water bodies in England and would make an important contribution to the related goals and targets of the EIP23 and Environment Act 2021, as well as Global Biodiversity Framework targets.

The provisions on exemptions reflect the reality that certain circumstances may justifiably prevent the achievement of the Environmental Objectives by the deadline or to the standard specified in the WFD Regulations. They therefore provide flexibility to adjust standards and deadlines in individual cases. When used appropriately, the review requirements for exemptions should maintain an ongoing drive for further protection and improvement of the water environment over time.

³⁰⁵ Reg 12, WFD Regulations.

5.4 Setting targets and coherent strategy and policy

Chapter 4 presents our assessment of the Environmental Objectives in the RBMPs. In summary, our key finding in Chapter 4 is that the Environmental Objectives are unlikely to be achieved without significant additional investment, measures and initiatives. As things stand, the 2027 Environmental Objectives appear more likely to be missed by a large margin. To be clear, however, we consider that this principally reflects how the legislation has been implemented rather than being intrinsic to the design of the WFD Regulations.

The WFD Regulations and Environmental Objectives should form part of an ambitious, comprehensive and coherent wider suite of water law, policy and targets. Collectively, this should drive the changes needed to achieve Government's vision, ambitions and legal obligations, including the Environmental Objectives and those specified through the EIP23 and Environment Act targets as well as international commitments (see Sections 1.2.4 and 2.1.4) We focus on assessing whether this is the case in this section. Our key findings in this area, based on the analysis in this section, are as follows.

Key findings:

- There is a lack of clear coherence between the Environmental Objectives in the RBMPs and the targets and goals of the Environment Act, EIP23 and Plan for Water.
- There is also a lack of integration between different water management plans and the objectives they contain. The Government has noted this in its Plan for Water and committed to '*make the whole framework more outcome-focussed and fully integrated with other environmental plans and government delivery plans,*' which we support.
- More broadly, the overall water law and policy framework is complex and risks being incoherent. This may be creating barriers to achieving the Environmental Objectives and wider outcomes that depend on them.

5.4.1 Setting targets

Environment Act water targets

In early 2023, the Government set four legally binding water targets under the Environment Act 2021,³⁰⁶ to be met by 31 December 2038.³⁰⁷ The targets were set after approval of the RBMPs in December 2022.

The four targets are to: (i) reduce nitrogen, phosphorus and sediment from agricultural land by 40%; (ii) reduce phosphorus from treated wastewater by 80%; (iii) halve the length of rivers polluted by abandoned metal mines; and (iv) reduce water demand by 20%.

The targets therefore aim to reduce specific pressures rather than achieve an overall state of the water environment.

306 S. 1, Environment Act.

307 The Environmental Targets (Water) (England) Regulations 2023, Statutory Instrument 2023 No. 93.

The contribution these targets will make to achieving the Environmental Objectives has not been quantified. The scale of contribution is also uncertain. For example, as we note in Chapter 3, pollution from abandoned metal mines is a relatively minor pressure in the context of the water environment. It is unclear what overall impact addressing this pressure will have on the status of individual water bodies.

The water demand target, meanwhile, is per capita. When considering the impacts of external factors such as population growth and climate change, it is unclear what, if any, contribution meeting this target will have towards the Environmental Objectives.

In terms of pace, the 2038 timescale suggests that many of the actions to deliver the targets will not be implemented in time to contribute to achieving the Environmental Objectives by 2027.

‘Clean and plentiful water’ policy goal

Post-dating approval of the RBMPs in December 2022, Government published its EIP23 on 31 January 2023.³⁰⁸ The EIP23 revised Government’s previous 25 Year Environment Plan³⁰⁹ and is the current EIP for England. It also contains interim targets in respect of the Environment Act water targets and reconfirms Government’s ‘clean and plentiful water’ policy goal as previously set out in the 25 Year Plan.³¹⁰ The EIP23 states that this goal is to be achieved ‘*by improving at least 75% of our waters to be close to their natural state as soon as is practicable*’.³¹¹

At the start of the ‘clean and plentiful water’ goal chapter, the EIP23 contains a list of targets and commitments.³¹² Defra has confirmed to us during this project that this is intended as a list of targets and commitments that will contribute to achieving the overarching ‘clean and plentiful water’ goal.

The list of targets and commitments includes the Environment Act water targets and a commitment to ‘*restore 75% of water bodies to good ecological status*’.³¹³ There is no explicit reference to other Environmental Objectives under the WFD Regulations, such as the requirement to aim for Good Chemical Status for both surface water and groundwater. In addition, the target is not time-bound and it is not explained how the 75% figure has been arrived at. The document also expresses no intended outcome for the remaining 25% of water bodies. The intended relationship between this target and the WFD Regulations’ Environmental Objectives is thus unclear from the published documents.

We have discussed this with Defra. They have clarified that the target is not intended to alter legally binding commitments to achieve the Environmental Objectives by the statutory deadlines, including the requirements to aim for Good Chemical Status for both surface water and groundwater and to aim for Good Quantitative Status for groundwater. Although it is not made explicit in the EIP23, Defra considers that all these elements will contribute to the overarching ‘clean and plentiful water’ goal. This is also acknowledged in the EA’s

308 Defra, ‘Environmental Improvement Plan 2023’ (n 3).

309 Defra, ‘A Green Future: Our 25 Year Plan to Improve the Environment’ (n 18).

310 *ibid* 25.

311 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 98.

312 *ibid* 99.

313 *ibid* 99.

guidance on the RBMPs, which states that the plans are ‘the foundation’ for delivering the Government’s EIP and the ‘clean and plentiful water’ goal.³¹⁴

We also understand from Defra that ‘good ecological status’ in the EIP23 has a broader meaning than in the WFD Regulations. We explain this in the box below.

‘Good Ecological Status’ in the WFD Regulations and EIP23

‘Good Ecological Status’ is only used in the WFD Regulations for the ecological condition of non-AHMWB surface waters (see Section 2.2.3). In contrast, Defra has told us that, as used in the EIP23, ‘good ecological status’ is intended to cover not just these water bodies, but also AHMWBs (for which the WFD Regulations refer to ‘Good Ecological Potential), and groundwater bodies (for which the regulations refer to ‘Good Quantitative Status).

In other words, the EIP23 uses ‘good ecological status’ as a general term which covers the ecological condition (Good Ecological Status or Potential) of surface water bodies, and the quantitative status (Good Quantitative Status) of groundwater bodies.

As set out in Chapter 4 (see Section 4.2.1) we have determined that the RBMPs set Environmental Objectives of Good Ecological Status or Potential, or Good Quantitative Status, by 2027 for 78% of all water bodies. The EIP23 does not explain the discrepancy between this figure and its commitment to ‘*restore 75% of water bodies to good ecological status*’.

This means that this particular target of the EIP23 will be met by 2027 if these Environmental Objectives are achieved. As we discuss in Chapter 4, however, we consider this highly unlikely.

Our view

Based on the above, it is clear that delivery of the Environmental Objectives in the RBMPs is the foundation for achieving Government’s overarching ‘clean and plentiful’ water policy goal. Failing to deliver the Environmental Objectives will therefore lead to failure to achieve this aspect of the EIP23.

At the same time, not including all the Environmental Objectives in the EIP23 means that this relationship is not made explicit in the published documents. There is therefore a lack of clarity and a risk that the policy goal is viewed as being incoherent with existing legal commitments.

We therefore suggest that Defra publicly confirm the position on how the ‘clean and plentiful water’ goal and the Environmental Objectives relate to one another as it takes forward its Plan for Water.

314 Environment Agency, ‘River Basin Management Plans’ (n 8).

Environment Act biodiversity targets

Government has also set legally binding biodiversity targets under the Environment Act 2021, with the ‘apex target’ being to halt species decline by 2030.³¹⁵ The EIP23 builds on this, identifying an apex goal of ‘thriving plants and wildlife’ to which all the other EIP23 goals will contribute and acknowledging that halting the decline in our biodiversity will support achievement of this goal.³¹⁶

The main drivers of biodiversity decline are habitat loss and land use change, pollution, invasive species, unsustainable use of our resources, and climate change.³¹⁷ These drivers of decline align strongly with many of the pressures identified in Chapter 3, which RBMPs aim to address and which are limiting water bodies in achieving Good Status.

Achieving the Environmental Objectives will therefore play a crucial role in delivering the Environment Act biodiversity targets and the ‘thriving plants and wildlife’ goal. The positive impact that achieving Good Status in surface water bodies would have on species abundance is acknowledged in Defra’s biodiversity targets evidence pack.³¹⁸ Since the WFD Regulations include coastal water bodies, there is also overlap between achieving the Environmental Objectives and the Environment Act 2021 marine protected areas target.³¹⁹

Despite this important contribution, there appears to be a lack of coherence between the Environmental Objectives and the Environment Act biodiversity targets in terms of how progress towards them is to be evaluated. This makes it difficult to determine how progress towards achieving the Environmental Objectives is contributing towards nature recovery as envisioned in the Environment Act biodiversity targets and the EIP23 goal of ‘thriving plants and wildlife’.

Our view

To enable a better understanding of delivery against the Environment Act biodiversity targets, we have recommended in our latest EIP progress report³²⁰ that Government should adopt more explicit and granular monitoring and evaluation to support assessment of both target delivery and real-world improvement. We recommend the disaggregation of species abundance and extinction risk indices into meaningful groups, with line of sight to relevant drivers and pressures.

The overlaps between the species covered in the WFD Regulations’ biological quality tests and those considered in the species abundance targets provide an opportunity for this. For example, many of the fish and invertebrate species used in the WFD biological classifications are also considered through the species abundance targets. In addition, many of the WFD elements provide understanding of the pressures and drivers on the water environment.

Many stakeholders in this project have suggested that the best overall indicator of health within the surface water environment is biological health. Our view is that the biological elements (fish, invertebrates, macrophytes and diatoms) underpinning ecological status

315 The Environmental Targets (Biodiversity) (England) Regulations 2023, Statutory Instrument 2023 No. 91.

316 Defra, ‘Environmental Improvement Plan 2023’ (n 3) 9, 10.

317 Defra, ‘Biodiversity Terrestrial and Freshwater Targets Detailed Evidence Report’ (n 36).

318 *ibid* 46.

319 The Environmental Targets (Marine Protected Areas) Regulations 2023, Statutory Instrument 2023 No. 94.

320 Office for Environmental Protection, ‘Progress in Improving the Natural Environment in England 2022/2023’ (n 1).

provide a reasonable proxy and line of sight on how freshwater species are supporting the overall achievement of the species abundance targets.

However, it will be important to retain other elements of the WFD Regulations' classification tests. Biological quality elements provide an important medium- to long-term understanding of the state of the environment based on outcomes. Other quality elements such as levels of ammonia and phosphorus provide a short- to medium-term understanding of pressures and enable timely responses and course correction in Programmes of Measures.

Objectives in other water management plans

The broader water management landscape comprises a variety of different plans that play an important role in the sustainable management of water and environmental protection. These plans have a range of different legal and policy drivers. As with RBMPs, the plans are the drivers for measures and are also designed to guide public bodies in decision-making.

The targets and commitments in these plans are both complementary to the Environmental Objectives while also having the capacity to compete with them. This is because they address different pressures and risks, such as flood risk. It is therefore important to ensure that targets and commitments in these plans align with and do not hinder the achievement of the Environmental Objectives in the RBMPs.

We set out in Table 5.1 a summary of some of the current key plans relevant to water management in England. The table is illustrative rather than exhaustive.

Table 5.1. Summary of key water management plans and planning cycles in England

Plan Name	Cycle	Summary information
River Basin Management Plans (RBMPs)	6 years	These are statutory plans made under the WFD Regulations and produced by the EA. The plans set out Environmental Objectives to protect and improve the state of water bodies in each RBD and summary Programmes of Measures to achieve them. The RBMPs are updated every six years.
Water Company Business Plans	5 years	Produced as part of a statutory process, these are the business plans for individual water companies. They include information on asset management, investment, maintenance, operational and other activities that the company plans to take to meet statutory and non-statutory obligations.
Water Resources Management Plans (WRMPs)	5 years	These are statutory water company plans that are developed during the Asset Management Plan (AMP) period and outline how water companies will ensure that there is enough water to meet the future needs of people, businesses and the environment. The plans include information on supply and demand management and set out measures to reduce water use and increase efficiency. The WRMPs are updated every five years.

Plan Name	Cycle	Summary information
Drought Plans	5 years	These are statutory water company plans with close links to WRMPs that are developed during the AMP period. They outline how water companies will manage water supply during periods of drought. The plans set out measures to reduce demand, increase efficiency, and manage water resources to maintain supplies. They are updated every five years.
Drainage and Wastewater Management Plans (DWMPs)	5 years	These are water company plans that are developed during the AMP period and outline how water companies will manage the drainage and wastewater system to provide effective and efficient services. The plans include information on investment, maintenance, and operational activities. They are updated every five years. The plans are to be made statutory under the Environment Act 2021.
Regional Water Resources Plans	5 years	These are non-statutory water company plans. The National Framework for Water Resources aims to set out strategies for resilient water supplies, encompassing sectors like public water supply, agriculture and industry, while aligning with the Government's environmental goals. The framework guides five regional water resources planning groups to create strategic, non-statutory plans to meet national water needs over the next 25 years.
National and Local Flood Risk Management Strategies	No set statutory interval	These are statutory plans for how the EA and Lead Local Flood Authorities (LLFAs) will manage the risk of flooding and coastal erosion in England at the national and local levels. The EA produces the national strategy, while LLFAs produce the local strategies. The plans set out objectives, policies, and measures to reduce the risk and impact of flooding. There is no set statutory interval for updating the plans, although there is a requirement to state when they will be reviewed.
Flood Risk Management Plans (FRMPs)	6 years	These were statutory plans for how the EA and LLFAs will manage the risk of flooding and coastal erosion in England at the RBD and local level. They were produced by the EA and LLFAs and set out objectives, policies, and measures to reduce the risk and impact of flooding. The FRMPs were updated every six years on a cycle aligned with that of the RBMPs. The current (and final) plans cover the period 2021-2027. The legislation that provided for the FRMPs was repealed under the Retained EU Law Act at the end of 2023.
Storm Overflows Discharge Reduction Plan	N/A	This plan, published by Government in August 2022 to meet a requirement in the Environment Act 2021, deals with the specific issue of reducing storm overflow sewage spills and their harmful impacts. This is a one-time plan to meet statutory requirements under other legislation, with a non-statutory pledge to review in 2027.

We discuss below structural barriers relating to matters such as planning cycle length and geographic reach that could be hindering alignment of the objectives in these plans with the Environmental Objectives in the RBMPs.

In Section 5.5 below, we go on to discuss in further detail the governance mechanisms that dictate the relationship between the substance of water plans and RBMPs, concentrating in particular on water company plans.

Water company plans and RBMPs

Several of the plans in Table 5.1 above are developed by or with the involvement of water companies in connection with the five-yearly AMP period for water companies. The AMP period is linked to the regular price reviews used by Ofwat to set the allowable price increase for consumers.

There is a high risk of conflicting objectives when considering water company plans and RBMPs, with water companies needing to carefully consider how they can ensure that customers are provided with a water supply that is both secure and environmentally sustainable. The AMP cycle provides the EA with the opportunity to engage with water companies concerning their obligations under the WFD Regulations regarding both delivery and ‘WFD assessment’.³²¹

‘WFD assessment’ broadly means that water companies must ensure the plans they produce prevent the deterioration of any water body, support the achievement of the Environmental Objectives in the RBMPs and do not hinder the achievement of ‘Good Status’ for any water body in the future. We explain this process in detail and discuss its efficacy in ensuring that water company plans reflect WFD requirements in Section 5.5 below.

Regarding delivery of measures, on the other hand, water companies align their business plans with the AMP period and Ofwat uses their investment estimates as part of its price review. Water company business plans include information on asset management, investment, maintenance, operational and other activities that the company plans to take to meet statutory and non-statutory obligations. This includes actions needed to meet obligations under the WFD Regulations and other water law, for example delivering Programmes of Measures contained in the RBMPs for which they have implementation responsibility.

The AMP period operates a five-yearly cycle, while the RBMPs are reviewed on a six-year cycle. Accordingly, some elements of the Programmes of Measures in the RBMPs are planned actions by water companies that are not certain, as they are subject to budgeting and confirmation during the upcoming AMP cycle.

As discussed in Chapter 4 (see Sections 4.3.1 to 4.3.3), this creates uncertainty about the delivery of Programmes of Measures. This is of particular concern given that, as we note in Chapter 3 (see Figure 3.3), pollution from wastewater is a key pressure on the water environment. Water companies therefore play a crucial role in the of delivery of measures to address that pressure.

³²¹ Reg 33, WFD Regulations.

In a submission to the OEP in this project, Water UK has said that it would like to see the planning periods for these various plans aligned, so that recommendations from RBMPs are available in time to be included in AMP cycles, to better couple delivery with environmental ambition. According to Water UK, *'this is currently not the case and often leads to years of unnecessary delay in taking action.'*

There are also geographical difficulties, since water company-led plans are based on administrative boundaries associated with the geographic region served by the water company developing the relevant plan. The Ministerial Guidance acknowledges these issues, stating that *'As with other plans, there will be difficulties with planning cycles and geographical boundaries.'*³²²

Flood plans and RBMPs

There is potential synergy and complementarity between FRMPs, national and local flood risk management strategies (referred to together in this section as 'flood plans') and RBMPs. Not only can flood plans contribute to achieving the Environmental Objectives, but achieving the Environmental Objectives can also help to reduce flood risk. For example, improving the hydro-morphology of rivers can increase the amount of water they are able to carry, thereby reducing flood risk. Conversely, while flood plans are designed to address flood risk, they can also contribute to achieving Environmental Objectives under the WFD Regulations by reducing the risk of polluting substances contained in floodwaters reaching the aquatic environment.

At the same time, there is the potential for conflict between the Environmental Objectives and the objectives of flood plans. The WFD Regulations contain provisions that enable competing objectives to be addressed where RBMPs and flood plans are properly aligned. For example, when water bodies need to be modified to prevent flooding, the WFD Regulations contains provisions to ensure proper assessment and justification of that intervention and whether mitigation of any negative effects is required. This requires joined-up planning and co-ordination.

There is therefore a need to ensure that RBMPs and flood plans are well-aligned. The EA and LLFAs are also under a legal duty to carry out WFD assessment when preparing flood plans, to ensure that they support and do not hinder the achievement of the Environmental Objectives.³²³

FRMPs were required under the Flood Risk Regulations 2009. The Flood Risk Regulations were developed to transpose the EU Floods Directive into English law.³²⁴ Following EU Exit, they were revoked at the end of 2023 under the Retained EU Law Act.³²⁵ The EA has confirmed that the current FRMPs for 2021-2027 will continue to be implemented until the end of that period. Flood risk management strategies, meanwhile, are required under the Flood and Water Management Act 2010. This is separate domestic legislation not derived from EU law.

322 Defra, 'River Basin Management Planning Guidance' (n 11) para 15.22.

323 Reg 33, WFD Regulations.

324 Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks.

325 Para. 1, Sch. 1(1), Retained EU Law (Revocation and Reform) Act 2023.

Government explained the basis for revoking the Flood Risk Regulations 2009, thereby removing the need to produce FRMPs in May 2023, as follows.³²⁶

‘This legislation duplicates requirements to assess, plan for and manage flood risk set out in domestic legislation in England through the Flood and Water Management Act 2010. Removing this will therefore remove duplication and reduce burdens on local authorities and the Environment Agency. This will allow them to focus on their duties in domestic legislation to assess, plan for and manage flood risk. We have committed to longer term reforms to local flood risk management planning by 2026 so that every area of England will have a more strategic and comprehensive plan that supports long-term local action and investment.’

There are many similarities between FRMPs and flood risk management strategies. These include requirements to assess flood risk, set objectives for managing flood and coastal erosion risk, propose measures to achieve those objectives and carry out a cost-benefit analysis in relation to measures.³²⁷ Both regimes also require plans at different levels: the EA was under a duty to produce FRMPs at the RBD level for all flood risk sources, while LLFAs needed to produce FRMPs at the local level for flood risk from sources other than the sea, main rivers and reservoirs.³²⁸

On the other hand, the Flood and Water Management Act 2010 requires the EA to produce a national flood risk management strategy that covers flood risk from all sources,³²⁹ while LLFAs must produce local flood risk management strategies to address flood risk from surface runoff, groundwater and ordinary watercourses.³³⁰

A key difference is that the FRMPs previously produced at the RBD level have no direct equivalent under domestic law. Instead, flood risk management strategies are produced at the national and local level. Hence, there is a possibility that the move away from FRMPs in favour of flood risk management strategies could work against the objective of better integrating water and flood planning.

There is also a difference in planning cycle length. There was a duty to review and update FRMPs every six years,³³¹ while the duty in relation to flood risk management strategies is simply to state how and when they will be reviewed.³³² However, the EA has committed in the current National Flood Risk Management Strategy (published in 2020) to reviewing this within six years, in 2026.³³³

There is therefore some misalignment between planning cycles, since the next cycle of RBMPs is due to be approved by 22 December 2027. There may also be misalignment between the RBMP planning cycle and the review of local flood risk management strategies. Again, this increases the risk of incoherence between flood plans and the RBMPs.

326 Department for Business and Trade, ‘Schedule of Retained EU Law’ (17 May 2023) <www.gov.uk/government/publications/schedule-of-retained-eu-law> accessed 29 January 2024.

327 Reg 27, Flood Risk Regulations 2009 (now revoked) and ss. 7 and 9, Flood and Water Management Act 2010.

328 Regs 25 and 26, Flood Risk Regulations 2009 (now revoked).

329 S. 7, Flood and Water Management Act 2010.

330 S. 9, Flood and Water Management Act 2010.

331 Regs 29 and 30, Flood Risk Regulations 2009 (now revoked).

332 Ss. 7(2)(h) and 9(4)(h), Flood and Water Management Act 2010.

333 Environment Agency, ‘National Flood and Coastal Erosion Risk Management Strategy for England’ 16 <https://assets.publishing.service.gov.uk/media/5f6b6da6e90e076c182d508d/023_15482_Environment_agency_digitalAW_Strategy.pdf> accessed 5 February 2024.

In addition, when producing FRMPs, the EA and LLFAs were under a specific legal duty to have regard to the RBMPs for the area.³³⁴ While there is no direct equivalent to this specific duty in the Flood and Water Management Act 2010, preparing and adopting national and local flood risk management strategies would trigger the general duty on the EA and LLFAs to have regard to the relevant RBMP when exercising their functions so far as affecting an RBD.³³⁵ This means they will need to carry out WFD assessment of these plans, to ensure they support and do not hinder achievement of the Environmental Objectives.

The EA has previously issued guidance on preparing FRMPs that includes a section on co-ordinating the plans with RBMPs, to ensure that they are consistent with the Environmental Objectives.³³⁶ It is unclear from publicly available information whether there is guidance available on ensuring that flood risk management strategies are consistent with the Environmental Objectives. However, the EA is a statutory consultee for local flood risk management strategies produced by LLFAs.³³⁷ The EA is also a statutory consultee for any Strategic Environmental Assessment undertaken as part of developing the strategy. This notwithstanding, there is a risk that producing separate but co-ordinated plans could reduce their coherence.

Our view

We have identified practical barriers to the co-ordination of RBMPs with other water management plans relating to cycle planning length, geographical reach and the integration of plans. This risks incoherence between these different plans and the commitments they contain with the RBMPs and the Environmental Objectives. Government's commitment in the Plan for Water to a 'more streamlined' policy and legal framework, 'with greater join-up between water and flood planning' suggests that this risk is more than theoretical.³³⁸

Meanwhile, it will be important to also consider any practical barriers to the effective inter-relationship between the RBMPs and other plans, in particular the EIP23 and the Plan for Water, as we discuss in Section 5.4.2 below. Like water industry plans, though to a different period, EIPs operate on a five-yearly review cycle.³³⁹ The current EIP23 will be reviewed in 2028. The production cycles for other important land management plans will also need to be considered.

The Plan for Water states that Government will '*better integrate water and flood planning by reforming River Basin Management Plans and flood risk management planning – ensuring integration with water company plans.*' It also states that it will '*align water and flood planning with Local Nature Recovery Strategies and the future Land Use Framework to make sure we are taking actions – especially nature-based solutions – where they will have the biggest impact.*'

This aligns with Government's statement made when revoking the Flood Risk Regulations 2009 that it has committed to longer term reforms to local flood risk management planning. Defra has confirmed to us that Government's commitment is to reform the

334 Reg 27(5)(c) Flood Risk Regulations 2009 (now revoked).

335 Reg 33, WFD Regulations.

336 Environment Agency, 'Flood Risk Management Plans (FRMPs): How to Prepare Them' (18 May 2022) <www.gov.uk/guidance/flood-risk-management-plans-frmps-how-to-prepare-them> accessed 29 January 2024.

337 S. 9(6), Flood and Water Management Act 2010.

338 Defra, 'Plan for Water' (n 4) 24.

339 S. 10, Environment Act 2021.

current approach to local flood and coastal erosion risk planning by 2026, before the current FRMP cycle comes to an end, so that every area will have a more strategic and comprehensive local plan.

More broadly, we consider that there is a need for better alignment between the RBMPs, currently updated every six years, the various water industry related plans and the EIP23, currently updated every five years, and other plans. There should be clarity of sequencing and interactions so that one plan can feed consistently into another in the way that is intended.

Such increased alignment in production cycles and processes between these different plans could help to optimise outcomes in terms of the delivery of the Environmental Objectives. We therefore support Government's intention stated in the Plan for Water to streamline the water policy and legal framework, including to make it more outcome-focused and fully integrated with other environmental plans and government delivery plans.³⁴⁰

5.4.2 Coherence with other strategy and policy

EIP23

The EIP23 contains a list of actions designed '*to deliver against our goals and targets*'.³⁴¹ The goals and targets include the Environment Act water targets, the 'clean and plentiful water' goal and the target of 'improving 75% of water bodies to good ecological status'. However, the EIP23 does not explain the relative contribution of planned actions to the Environment Act water targets or the Environmental Objectives.

Meanwhile, the EA's guidance on the RBMPs acknowledges that they are the foundation for delivering the EIP23 and the 'clean and plentiful water' goal.³⁴² The summary Programmes of Measures in the RBMPs include specific measures that refer to the aims of the EIP23 and the Environment Act water targets. Such measures include those to reduce nutrient pollution and pollution caused by harmful metals from abandoned mines. However, the EIP23 does not itself explain whether or how all delivery actions relating to the 'clean and plentiful water' goal will be integrated into RBMPs. The same is true of the Plan for Water, which elaborates on the EIP23 'clean and plentiful water' goal.

Defra accepts in EIP23 that while it remains committed to the 'clean and plentiful water' goal, '*to drive the scale of progress and improvements needed for the water system, wholesale transformation is required*'.³⁴³ To address this, it states that Government is '*developing a suite of new policy interventions designed to transform how we manage the water system in a holistic way, as well as targeted action on each component of the water system*'.³⁴⁴

EIP23 also makes a specific reference to data from the European Environment Agency which: '*shows that it will be very challenging for most EU Member States to achieve good ecological status for all water bodies in the time frame of the Water Framework Directive*.'

340 Defra, 'Plan for Water' (n 4) 24.

341 Defra, 'Environmental Improvement Plan 2023' (n 3) paras 107–123.

342 Environment Agency, 'River Basin Management Plans' (n 8).

343 Defra, 'Environmental Improvement Plan 2023' (n 3) 102.

344 *ibid*.

England's performance is comparable with equivalent Northern European countries on water quality, bathing water and urban waste water treatment directive compliance.³⁴⁵

These statements in EIP23 appear broadly consistent with the OEP's own findings (set out in more detail in Chapter 4) that the current Programmes of Measures will not be enough to achieve the Environmental Objectives approved by the Secretary of State in the RBMPs. It is unclear how EIP23 delivery actions affect this picture.

The Plan for Water

To add further to existing water law and policy, in April 2023 Government published its water policy paper, the Plan for Water.³⁴⁶ The paper is framed as a plan for delivering the Government's 'clean and plentiful water' goal. It is therefore a non-statutory plan that sits under the EIP23. Its role in delivery is unclear, given that the RBMPs have been acknowledged as the foundation for delivering the 'clean and plentiful water' goal. However, it is possible that the plan is an attempt to bridge the gap we identify in Chapter 4 between the Programmes of Measures approved in the RBMPs and what is needed to deliver the Environmental Objectives.

The Plan for Water refers to the objective of 'restoring 75% of waters to good ecological status'.³⁴⁷ We discuss in Section 5.4.1 above how this relates to and is dependent on delivery of the WFD Regulations' Environmental Objectives.

The Plan for Water also commits to reviewing the implementation of the WFD Regulations, *'to improve on-the-ground water outcomes whilst retaining our goal to restore 75% of water bodies to good ecological status'*.³⁴⁸ As an example of what might change, there is a reference to improved *'targeting of investment to ensure environmental improvements are done where they will have the greatest impact'*.³⁴⁹ In Chapter 4 (Section 4.3.1), we note that this has not previously been the case.

The Plan for Water summarises a 'transformative' approach to water management that essentially resembles the features of the current WFD Regulations framework.³⁵⁰ As a specific example, it states that: *'To improve management of the water system, we will take an approach that considers all pressures in the round, rather than in isolation. This integrated approach to water management is the foundation of our plan for water.'*³⁵¹

This further underlines the EA's acknowledgement that the RBMPs are the foundation for the 'clean and plentiful water' goal.³⁵² The Plan for Water also contains information about key pressures on the water environment and summarises policy issues and initiatives. However, like the EIP23 it does not explain the intended contribution of the different measures to achieving targets and commitments such as the Environmental Objectives and the Environment Act water targets.

345 *ibid* 106.

346 Defra, 'Plan for Water' (n 4).

347 *ibid* 1.2.

348 *ibid*.

349 *ibid*.

350 *ibid* 1.

351 *ibid* 21.

352 Environment Agency, 'River Basin Management Plans' (n 8).

In terms of integrating Plan for Water actions into RBMPs, Defra has told us that actions in the Plan for Water are not intended or needed to meet the Environmental Objectives set under the WFD Regulations. We find this difficult to understand, however. It appears to be at odds with the stated purpose of the Plan for Water to deliver clean and plentiful water, which as we note above is reliant on achieving the WFD Regulations' Environmental Objectives, coupled with the need for additional measures to meet those objectives as we highlight in this report.

Our view

The WFD Regulations and their Environmental Objectives sit within a complex, somewhat fragmented wider framework of water law and policy. The interaction between different measures, and any hierarchy among them, are not clear. There is also a need to quantify the contribution that different water-related goals and targets will make to one another and how actions to achieve all goals and targets will be co-ordinated.

We see a lack of coherence between the Environment Act water targets and the scale and pace of change required to meet the Environmental Objectives. As a result, it is unclear what contribution the Environment Act targets will make towards the Environmental Objectives by their due dates. Meanwhile, the EIP23 and the Plan for Water list actions and policy initiatives, but do not explain the relative contributions of these measures towards the Environmental Objectives.

Achieving the Environmental Objectives will also make an important contribution towards Government's 'thriving plants and wildlife' goal and the Environment Act biodiversity targets. Again, however, we consider that there needs to be increased coherence between the measurement of progress for the different targets, so that this contribution can be quantified.

Meanwhile, the RBMPs are acknowledged as the foundation for achieving the 'clean and plentiful water' goal, but there is no information about whether or how actions listed in the EIP23 or the Plan for Water will be integrated into Programmes of Measures summarised in the RBMPs. On the contrary, Government has expressed its view to the OEP in this project that actions in the Plan for Water are not required for meeting the Environmental Objectives. This is despite the 'low confidence' in achieving the Environmental Objectives by 2027 and apparent lack of sufficient measures to deliver them.

Recommendation 12: We recommend that, in further developing the Plan for Water and reviewing implementation of the WFD Regulations, Defra: i) clarify how the WFD Regulations' objectives and the goals and targets of the Environment Act, EIP23 and Plan for Water relate and contribute to each other for both surface water and groundwater, including chemical status; (ii) review their coherence with other water law and policy and broader environmental and sectoral law; and (iii) review and rationalise the overall wider suite of relevant plans and measures, including their timings and plan periods, to ensure that their alignment and sequencing serves to optimise outcomes.

5.5 Governance

This section looks at governance issues in relation to the WFD Regulations.

An effective legal framework for protecting and improving the water environment requires clear governance arrangements that drive delivery on the ground. This should include clarity about who is accountable, how decisions are made and how delivery of the Environmental Objectives contained in the RBMPs will be assured across government and other public bodies with functions relevant to RBDs.

Our key findings from the analysis in this section are as follows.

Key finding:

- Overall, when coupled with the implementation issues noted in Chapter 4, a picture emerges of the WFD Regulations succeeding in technical analysis and creating a vision but currently lacking robust governance mechanisms to create accountability and drive delivery of outcomes.
- Following approval of the RBMPs, the EA only has control over implementing some elements of the Programmes of Measures. The bodies and mechanisms for delivery of Programmes of Measures are numerous and sometimes unclear, with no single body having overall accountability for their delivery. This is creating barriers to transparency and scrutiny concerning the delivery of Programmes of Measures.
- The WFD Regulations create a general duty on Defra and the EA to secure compliance with the WFD, which applies to a wide range of their regulatory functions. There is also a general duty on all public bodies (including Defra and the EA) to have regard to the relevant RBMP when exercising their functions so far as affecting an RBD. These duties trigger the need for 'WFD assessment' in certain circumstances (we discuss what this means below). In this regard:
 - While the EA has specific procedures for WFD assessment for some activities, Defra does not, instead relying on more general processes.
 - The evidence suggests that there is a lack of consistent guidance about how to carry out WFD assessment.
 - It is unclear what internal guidance public authorities other than the EA and Defra have in place concerning how to carry out WFD assessment.
 - There is no free-standing duty to consult the EA when carrying out WFD assessment.
- These gaps in respect of WFD assessments are creating barriers to transparency, accountability and scrutiny of decision-making and could be leading to non-compliant or inconsistent decision-making working against the achievement of the Environmental Objectives.
- Defra has the power to issue guidance and directions on the WFD Regulations to any public body. However, there are no transparent processes for reviewing implementation and issuing guidance.

5.5.1 Accountability for delivery

While the Secretary of State maintains general responsibility for implementation of the WFD Regulations,³⁵³ the EA delivers many of the functions under the regulations.

As explained in Chapter 2, the EA must prepare and submit to the Secretary of State proposals for Environmental Objectives and Programmes of Measures to achieve them. The Secretary of State must then approve the Environmental Objectives and Programmes of Measures, with or without modifications, or reject them.

Measures in Programmes of Measures where bodies other than the EA have responsibility

Once the RBMPs have been approved, the EA has control over some elements of the Programmes of Measures. However, as we note in Chapter 4 there are numerous other bodies and mechanisms for implementing Programmes of Measures, with many aspects sitting outside the EA's functions. This creates a situation where the EA has responsibility for implementing some key parts of the regime, such as preparing RBMPs, yet other major parts are out of its control. The following paragraphs look at issues of governance and accountability in relation to this area of the WFD Regulations.

The Ministerial Guidance acknowledges these numerous delivery bodies and mechanisms, stating that *'given the scale of the actions needed, it is important to mobilise all available tools and potential funding sources'*.³⁵⁴ It also states that the EA *'should work with a range of possible regulators and deliverers when deciding...the necessary measures to be included in the programme of measures and the arrangements for implementing those measures and monitoring their implementation'*.³⁵⁵

According to the guidance, it is the EA's role to assist the Secretary of State with implementing measures that are outside the EA's control. It says: *'For measures in the programmes which will be delivered or regulated by others, the Agency should liaise with those responsible to assist the Secretary of State in ensuring that these measures are made operational.'*³⁵⁶

Mechanisms for monitoring implementation of measures included in Programmes of Measures

The Ministerial Guidance stipulates that, when considering which measures to use, the EA should bear in mind the mechanisms by which they will be delivered.³⁵⁷ In the case of non-regulatory measures, it states that the EA should *'assess and factor into their decision making process whether the arrangements will deliver the required outcomes with sufficient certainty and permanence'*.³⁵⁸

The guidance states that non-regulatory measures could include trade schemes. It gives an example of an agreement between a water company and land managers in a catchment

353 Environment Agency, 'River Basin Planning Process Overview' (n 11) 2.3.

354 Defra, 'River Basin Management Planning Guidance' (n 11) para 14.16.

355 *ibid.*

356 Defra, 'River Basin Management Planning Guidance' (n 11) para 14.27.

357 *ibid* 4.11.

358 *ibid* 4.14.

to adopt additional techniques to reduce nutrient inputs to watercourses that would otherwise have to be achieved by investment in infrastructure.³⁵⁹ It goes on to state that arrangements between a water company and land managers *'would need to be capable of being monitored and subject to contractual arrangements to provide sufficient certainty of outcome'*.³⁶⁰

However, the RBMPs provide no information about delivery mechanisms for non-regulatory measures or how the EA monitors their implementation.

Disputes over measures included in Programmes of Measures

The Ministerial Guidance clarifies that where a body with responsibility for a measure disagrees with the decision taken by the regulator, the disagreement should be resolved *'using the usual dispute resolution arrangements which apply to the relevant regulatory decision'*.³⁶¹ For example, disagreements about a decision by the EA to modify an environmental permit for the purposes of achieving Environmental Objectives can be resolved through the statutory procedure for appealing environmental permit decisions.

In the case of voluntary and good practice measures, however, there is no formal dispute resolution arrangement and the guidance states that including a voluntary measure in a Programme of Measures will not make it into a statutory one.³⁶² Where there is a dispute, the guidance suggests that the EA should *'consider alternative voluntary measures or, if necessary, consider regulatory measures ... to achieve environmental objectives'*.³⁶³ Presumably in such cases, the EA would need to prepare supplementary plans to ensure that the Environmental Objectives are achieved.³⁶⁴

Our view

It is not possible from publicly available information to assess progress towards implementing individual measures in most cases. While there is a requirement to provide a report *'describing progress'* in the implementation of planned measures,³⁶⁵ the summary provided by the EA with the RBMPs lacks detail and does not provide an opportunity for meaningful scrutiny of progress.³⁶⁶

The EA is tasked with liaising with other delivery bodies to agree mechanisms for implementing measures and monitor their delivery. However, alongside the limited information about progress on implementing measures, there also appears to be a lack of publicly available information concerning the mechanisms and monitoring arrangements put in place to ensure Programmes of Measures are applied in practice. Additionally, the EA does not have statutory powers to require or enforce the implementation of measures that it does not regulate. There is, therefore, no single operational delivery body with overall control over the implementation of Programmes of Measures.

359 *ibid* 4.13.

360 *ibid* 4.14.

361 *ibid* 4.13.

362 *ibid* 4.14.

363 *ibid* 4.15.

364 Reg 32, WFD Regulations.

365 Reg 34(4), WFD Regulations.

366 Environment Agency, 'River Basin Management Plans, Updated 2022' (n 15).

These issues could be creating a risk to the implementation of Programmes of Measures. The apparent lack of information about mechanisms for delivering and monitoring measures also means it is not possible for us to establish whether all of the measures in Programmes of Measures, for which bodies other than the EA have responsibility, are sufficiently certain. This is creating barriers to transparency and the scrutiny of measures and their ability to deliver the Environmental Objectives.

5.5.2 Decision-making and WFD assessment

WFD assessment: overview

Case law has established the need for authorities to carry out ‘WFD assessment’ when considering whether to grant an authorisation in circumstances where the grant of such authorisation could compromise or hinder achievement of the Environmental Objectives.³⁶⁷

Case law on ‘WFD assessment’

The purpose of WFD assessment is to help authorities understand the impact of activities on water bodies and whether the activity complies with the relevant RBMP. When granting an authorisation for a project, the authority must ensure the activity: (i) does not cause or contribute to deterioration of the status of a water body; (ii) supports the achievement of the Environmental Objectives; and (iii) does not jeopardise the future achievement of good status for any water body.

If the outcome of WFD assessment is that a project may cause deterioration of the status of a water body or where it jeopardises the attainment of Good Status for a water body by the statutory deadline, the authorities must refuse authorisation for it.³⁶⁸ This is irrespective of any longer-term planning to prevent deterioration in water quality provided for by the Programmes of Measures in the RBMPs.

The only exception to this is where the project is covered by an exemption that permits new modifications or alterations to a water body or new sustainable development activities of overriding public interest.³⁶⁹ A project may be approved in the absence of a qualifying overriding public interest exemption only if there is sufficient certainty that it will not cause deterioration or compromise the achievement of Good Status.

There is ‘deterioration of the status’ of a water body as soon as the status of at least one of the quality elements falls by one class, even if that fall does not result in a fall in the water body’s overall classification.³⁷⁰ However, if the quality element concerned is already in the lowest class, any deterioration of that element constitutes a ‘deterioration of the status’ of a water body.

³⁶⁷ *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* Case C-461/13. This is part of the body of assimilated EU case law (previously known as ‘retained EU case law’) that is used to interpret assimilated law (previously known as ‘retained EU law’) – see the Retained EU Law (Revocation and Reform) Act 2023.

³⁶⁸ *ibid* 51.

³⁶⁹ *ibid* 50. See also Reg 19, WFD Regulations.

³⁷⁰ *ibid* 69, 70.

Where a Less Stringent Objective Exemption has been applied, the assessment of the new activity or project must take into account the need to continue to aim for Good Status. The new activity or project must not jeopardise the achievement of Good Status in the future, irrespective of whether a Less Stringent Objective Exemption has been applied in the RBMP.

Guidance relevant to WFD assessment

As referred to above, the Secretary of State has general responsibility for implementation of the WFD Regulations³⁷¹ and has the power to issue guidance and directions to any public body concerning their implementation.³⁷² However, in the Ministerial Guidance, Defra directs the EA to engage with other public bodies concerning their legal duties under the WFD Regulations. This includes guidance for the EA to *'promote and encourage the inclusion of water quality considerations in public bodies' plans, policies, guidance, appraisal systems and casework decisions'*.³⁷³

At the European level, the EU has a Common Implementation Strategy for implementation of the WFD, which provides non-statutory guidance on key areas of interpretation (see Annex 3). The Ministerial Guidance clarifies that the EA may continue to take aspects of this guidance into account.³⁷⁴

While it has the discretionary power to issue guidance as referred to above, Defra has told us during this project that it does not intend to actively take forward the role previously delivered by the Common Implementation Strategy. We acknowledge that certain elements of the role provided by the strategy, such as the need to establish a common EU approach, are no longer required in domestic application of the WFD Regulations. There is also a clear need for the EA to continue engaging with public authorities concerning their WFD Regulations duties.

However, our view is that, in order to support better implementation of the WFD Regulations at the strategic level, Defra should continue to assess the need to provide further, high-level guidance to the EA and others on key areas of interpretation. This will include an ongoing need to consider whether any updates are required to existing guidance developed under the Common Implementation Strategy, which the EA may continue to take into account.

We therefore highlight a need for Defra to determine its intended approach to providing and updating strategic, high-level guidance on the WFD Regulations now that the UK is no longer part of the Common Implementation Strategy.

WFD assessment: process

There is no prescribed or standardised process for WFD assessment. However, guidance issued by the EA in relation to estuarine and coastal waters in England suggests considering WFD Regulations impacts in a three-stage approach:³⁷⁵

371 Environment Agency, 'River Basin Planning Process Overview' (n 111) para 2.3.

372 Regs 36(1) and 36(5), WFD Regulations.

373 Defra, 'River Basin Management Planning Guidance' (n 11) para 15.1.

374 *ibid* 12.19.

375 Environment Agency, 'Water Framework Directive Assessment: Estuarine and Coastal Waters' (9 October 2023) <www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters> accessed 16 November 2023.

- Stage 1 – ‘WFD screening’ – to determine if there are any activities associated with the proposed project that do not require further consideration.
- Stage 2 – ‘WFD scoping’ – to identify risks of the proposed project’s activities to receptors based on the relevant water bodies and their water quality elements (including information on status, objectives, and the parameters for each water body).
- Stage 3 – ‘WFD impact assessment’ – a detailed assessment of water bodies and their quality elements that are considered likely to be affected by the proposed project, identification of any areas of non-compliance, consideration of mitigation measures, enhancements, and contributions to the RBMP objectives. Where the potential for deterioration of water bodies is identified, and it is not possible to mitigate the impacts to a level where deterioration can be avoided, information to justify an exemption would need to be provided.

The OEP acknowledges that the EA’s guidance referenced above is specifically directed at projects affecting estuarine and coastal waters in England. However, the OEP considers that the principles established in the guidance appear to be broadly sound and applicable to other water bodies.

General duties

The need for WFD assessment is underpinned by the general duties on the EA and Defra to secure compliance with the WFD and its ‘daughter directives’ when exercising their ‘relevant functions,’ and on other public bodies as well as the EA and Defra to ‘have regard to’ the relevant RBMP when exercising functions that may affect an RBD.³⁷⁶

Duty to ‘secure compliance’

The ‘relevant functions’ referred to in the WFD Regulations include the duties (the things that Defra and the EA ‘must do’) and powers (the things they ‘could do’) that Defra and the EA use to manage and protect the water environment.³⁷⁷ They include:

- Determining and issuing environmental permits
- Determining and issuing licences (for example, abstraction and impoundment)
- Undertaking flood risk management activities
- Undertaking relevant enforcement activity (for example, pollution control)
- Functions under the WFD Regulations themselves (for example, submitting proposals for or approving Environmental Objectives).

The duty to secure compliance with the requirements of the WFD requires the EA and Defra to carry out WFD assessment when deciding whether to carry out or authorise a water management activity. Further, it is the OEP’s view that the duty also requires the EA and Defra to exercise otherwise discretionary water management powers to prevent deterioration of the status of water bodies, support the achievement of the Environmental Objectives and ensure that the future achievement of Good Status for all water bodies is not jeopardised.

³⁷⁶ Regs 3(1) and 33, WFD Regulations.

³⁷⁷ Reg 2, WFD Regulations states that ‘relevant functions’ means functions under the WFD Regulations and, so far as material, the enactments listed in Parts 1 and 2 of Schedule 2 to the WFD Regulations.

‘Have regard to’ duty

The duty to ‘have regard to’ the relevant RBMP includes taking account of and considering the Environmental Objectives in the RBMP when exercising any functions that may affect an RBD and the effects of those functions on the Environmental Objectives. In other words, the duty requires public authorities to carry out WFD assessment when carrying out or authorising an activity that could affect an RBD.

Public bodies include, amongst others: Defra and its ministers; other government departments and their ministers; the EA; water companies; local authorities, planning authorities and highways authorities; Natural England; and the Marine Management Organisation.

The duty also covers other activities that could affect an RBD, for example the provision of advice when the EA is consulted on a development consent order, planning application or marine licence. In these cases, the EA would need to support the relevant authority’s WFD assessment by considering and providing advice on whether the proposed scheme, project or activity may cause a deterioration of the status of a water body or jeopardise the attainment of Good Status.

EA duties

The OEP requested information from the EA about how it discharges its duties under the WFD Regulations. The EA responded by confirming that it has a central ‘position document’ that sets out its interpretation of the ‘secure compliance’ and ‘have regard to’ duties on the EA. According to the EA, the position document helps to ensure the EA’s procedures and approaches are consistent with its latest understanding of the requirements of the WFD Regulations and enables the provision of relevant and consistent guidance and advice to EA staff and others.

The EA told us that the position document presents the high-level position and overview of requirements under these duties and what it means for the EA’s role as an environmental regulator, operator and adviser. It said that these requirements are then incorporated into more specific functional and technical guidance, for example environmental permitting and licensing guidance. They are also reflected in decision documents relating to permitting and licensing decisions. The requirements are also covered in general and functional-specific training materials.

The OEP has assessed the position document as being generally consistent with the law on WFD assessment.

We have separately discussed with the EA our interpretation that the ‘secure compliance’ duty requires it to exercise otherwise discretionary powers in order to meet statutory requirements. The EA has not expressed a specific view on this issue, but our current understanding is that its operational practice continues to treat these powers as discretionary. However, the EA has also told us during this project that it recognises that the need to meet the ‘secure compliance’ duty *‘may mean that its discretion as to whether to exercise certain powers is constrained in certain circumstances’*.

The scrutiny of individual permitting or other regulatory decisions and advice provided by the EA that engages their general duties was beyond the scope of this project. Chapter 4 considers how the EA has discharged its duties when exercising functions under the WFD Regulations such as preparing proposals for Environmental Objectives and Programmes of Measures to achieve them.

Defra duties

The OEP also requested information from Defra about how it discharges its duties under the WFD Regulations. In contrast with the EA, Defra does not have either a high-level position document or more specific WFD assessment guidance or processes in place. This is despite the fact that some of the laws to which the WFD Regulations refer as triggering the general duty³⁷⁸ allocate significant responsibilities to the Secretary of State, including relevant policy-making functions.

Defra has advised the OEP that the WFD Regulations are considered in the normal course of providing information and analyses to ministers for decision, including on regulatory matters. Defra officials referred, for example, to information about compliance with WFD Regulations being provided in the form of ministerial submissions and impact assessments. However, it appears from the publicly available information we have considered that there is no separate WFD assessment document and only some published documents relating to relevant decisions contain an explicit summary of WFD assessment findings.

This does not necessarily mean that Defra has not carried out adequate WFD assessment. However, it creates barriers to transparency, making it difficult to subject relevant Defra decisions to scrutiny in terms of their compliance with WFD Regulations requirements. There is also a risk of non-compliant decision-making.

Defra assurance of the RBMPs

As explained above, the Secretary of State's general duty to secure compliance with the WFD and its 'daughter directives' also applies to functions under the WFD Regulations. This means that, when carrying out functions such as approving Environmental Objectives, Programmes of Measures and the RBMPs, the Secretary of State must carry out WFD assessment. In other words, the Secretary of State must ensure that these elements will prevent the deterioration of water body status, support the achievement of the Environmental Objectives set for water bodies and not jeopardise their future attainment of Good Status.

In respect of the third cycle RBMPs, the EA has confirmed that the Secretary of State approved the plans, the Environmental Objectives and the summary Programmes of Measures they contain without modifications. The ministerial submission that was provided to the Secretary of State when the RBMPs were submitted for approval is not publicly available and we have not seen it. However, the Judge in the recent *Pickering* case³⁷⁹ did have access to the ministerial submission and quoted from the document as follows (with emphasis added by the OEP in **bold**):³⁸⁰

378 Sch. 2, WFD Regulations.

379 *Pickering Fishery Association v Secretary of State for Environment, Food and Rural Affairs* [2023] EWHC 2918 (Admin).

380 *ibid.*

*'11. These RBMPs comprise the final planning cycle envisaged under the Water Framework Directive in which the deadline for achieving good ecological status can be extended (i.e. to the end of 2027). **They set out the latest evidence on the state of the water environment together with the programmes of measures which show how we aim to achieve good ecological status by the end of 2027. They will note that (as is widely known) we have only low confidence that this target can be met by the deadline.'***

[...]

15. Given the reference to these mitigating measures, we recommend approval of the RBMPs as they are the best product that EA can produce at this stage; both aiming to remain compliant with the underlying legislation and recognising the gap in progress towards 2027.'

The Judge emphasised the acknowledgment in the submission that there is only low confidence that the 2027 target to achieve Good Ecological Status can be met by the deadline. Defra told us that when making decisions, it provides information about compliance with the WFD Regulations in ministerial submissions. However, in the absence of a prescribed format or process to follow for WFD assessment that is made publicly available or summarised when making decisions, it is difficult to scrutinise Defra's decision-making.

On the available evidence, and as we discuss in more detail in Chapter 4, it is difficult to understand the basis on which the RBMPs were approved if the then Secretary of State was not able to satisfy herself that the Programmes of Measures will support the achievement of the Environmental Objectives by the statutory deadlines.

Decision-making by other public bodies

Many public bodies beyond the EA or Defra also exercise functions that may affect RBDs. They are therefore subject to the duty to 'have regard to' the relevant RBMP. This means that those bodies must carry out WFD assessment when carrying out or authorising activities that could affect an RBD.

Public bodies must also have regard to the relevant RBMP when carrying out other functions that may affect RBDs, such as providing advice. Advice must be consistent with the need to prevent deterioration, achieve the Environmental Objectives and avoid jeopardising the achievement of good status in the future.

A public body would generally need to have 'cogent reasons' for departing from a 'have regard to' duty.³⁸¹ In addition, where the public body concerned is the sole or principal body responsible for determining a relevant authorisation, the scope for departure from the duty is considerably narrowed.³⁸² It is the OEP's view that, unless there are exceptional circumstances, it would likely be difficult to justify a decision that departs from the RBMP.

381 See for example *R v Ashworth Hospital Authority ex p Munjaz* [2005] UKHL 58.

382 *Harris & Anor v The Environment Agency* [2022] EWHC 2264 (Admin), paras. 86, 87.

Water companies

Water companies are important public bodies as regards RBMPs and achieving the Environmental Objectives. For example, they carry out wastewater treatment and discharge activities and are responsible for various plans that could affect water bodies (see Section 5.4.1 above).

The EA has told us that there is a well-established approach to providing guidance on WFD Regulations requirements to water companies through the water industry periodic price review process that sets customer bills and water company service targets every five years. The Ministerial Guidance refers to this and requires the EA to '*work closely with the water companies and Ofwat*'.³⁸³

For example, there is substantial guidance known as 'WISER' (Water Industry Strategic Environment Requirements) available for water companies from Defra, the EA, Natural England and Ofwat on the statutory and non-statutory expectations for the current price review period and beyond.³⁸⁴ The guidance clarifies WFD Regulations requirements and what actions water companies must take to achieve compliance. WISER informs the water industry national environment programme (WINEP), which is the programme of work that water companies must do to fulfil those obligations.

The EA has also contributed to guidance developed by UK Water Industry Research (UKWIR) on WFD assessment for WRMPs and drought plans.³⁸⁵ UKWIR is a research platform for UK water companies.³⁸⁶ The EA, Natural Resources Wales and Ofwat have also published guidance on water resources planning that refers to the 'have regard to' duty when preparing WRMPs.³⁸⁷

While there is clearly a route through which the EA is able to provide substantial advice to water companies concerning their WFD Regulations' obligations, as discussed in Chapter 3 pollution from wastewater treatment remains a key pressure on many water bodies .

Meanwhile, our assessment in Chapter 4 is that Programmes of Measures in the RBMPs intended to meet the Environmental Objectives fall short of what is needed in reality. While Programmes of Measures in the RBMPs include many water company actions, additional actions are needed. This should have been clear since 2015 when the 2027 Environmental Objectives and associated investment needs were identified in the second cycle RBMPs.

It is not clear whether the failure to include the additional water company measures needed to fully tackle pollution from wastewater stems from a lack of clear advice and guidance provided by the EA, difficulty in agreeing measures with water companies or mechanisms to make them certain, the role that Ofwat provides in approving water company plans, other reasons, or a combination of these factors.

383 Defra, 'River Basin Management Planning Guidance' (n 11) para 15.21.

384 Defra and others, 'Water Industry Strategic Environmental Requirements (WISER): Technical Document' <www.gov.uk/government/publications/developing-the-environmental-resilience-and-flood-risk-actions-for-the-price-review-2024/water-industry-strategic-environmental-requirements-wiser-technical-document> accessed 16 January 2024.

385 UK Water Industry Research, 'Environmental Assessment Guidance for Water Resource Management Plans and Drought Plans' <<https://ukwir.org/environmental-assessments-for-water-resources-planning>> accessed 23 January 2024.

386 UK Water Industry Research, 'My UKWIR' <<https://ukwir.org/my-ukwir-homepage>> accessed 23 January 2024.

387 Environment Agency, Natural Resources Wales, and Office for Water Services, 'Water Resources Planning Guideline' <www.gov.uk/government/publications/water-resources-planning-guideline/water-resources-planning-guideline> accessed 23 January 2024.

There is also the separate issue of the EA's role in encouraging the implementation of water company measures once they have been included in Programmes of Measures. We discuss in further detail the mechanisms for delivering measures and monitoring their implementation in Section 5.5.1 above.

Local planning authorities

Local planning authorities are also important public bodies as regards RBMPs and achieving the Environmental Objectives. They are responsible for adopting local plans and making planning decisions that could affect water bodies. Where this is the case, they must ensure that the plan or project prevents the deterioration of water bodies, supports achievement of the Environmental Objectives and does not jeopardise the achievement in the future of Good Status for any water body.

The Ministerial Guidance requires the EA to *'liaise with local authorities and provide them with the necessary information to enable effective consideration and reflection of RBMPs within local plans'*.³⁸⁸ However, beyond outlining the broad outputs that are expected, the guidance does not stipulate the nature or extent of such engagement, which is at the EA's discretion.³⁸⁹ The EA highlighted to us that the RBMPs are accompanied by a guide to accessing information in the plans which provides signposts for specific groups, including local planning authorities.³⁹⁰ The guidance includes a reminder of the 'have regard to' duty on public bodies including local authorities, although it does not explain what this means in practice.³⁹¹

Regarding individual planning decisions, the Ministerial Guidance refers to the National Planning Policy framework, which *'advises that the planning system should prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution or land instability'*.³⁹² The EA also told us that its area teams liaise with local planning authorities on spatial planning and providing responses to planning applications as a statutory consultee.

However, there is no free-standing duty to consult the EA where WFD assessment is required due to possible impacts on an RBD and the EA is not a statutory consultee in all planning applications determined by local planning authorities. Rather, the duty to consult arises only in specified circumstances, such as where there is a flood risk³⁹³ or for more major development proposals that require Environmental Impact Assessment. The EA is also a 'specific consultation body' for the preparation of development plan documents,³⁹⁴ including local plans and a statutory consultee for Strategic Environmental Assessments required for strategic plans.³⁹⁵

388 Defra, 'River Basin Management Planning Guidance' (n 11) para 15.15.

389 *ibid* 15.4.

390 Environment Agency, 'Accessing Information in the River Basin Management Plans, Updated 2022' <www.gov.uk/guidance/accessing-information-in-the-river-basin-management-plans-updated-2022> accessed 16 January 2024.

391 *ibid*.

392 Defra, 'River Basin Management Planning Guidance' (n 11) para 15.16.

393 Arts.18, 19 and 20 and Schedule 4 to the Town and Country Planning (Development Management Procedure) (England) Order 2015.

394 See for example Regs 2 & 18, Town and Country Planning (Local Planning) (England) Regulations 2012.

395 Reg 4 & 13, Environmental Assessment of Plans and Programmes Regulations 2004.

In addition, the EA has provided advice for developers on circumstances where it would like to be consulted early in the planning process.³⁹⁶ In most situations, getting pre-application advice is optional, but the guidance explains that this will help developers ensure they have considered all environmental risks.

The guidance states that developers can get advice from the EA if their development includes water bodies identified in RBMPs, land affected by contamination, or intensive pig, poultry or dairy units. These are all situations where, depending on the scale and effects of the development, there will not necessarily be a statutory duty for the planning authority to consult with the EA.

The EA has told us that it also provides an ‘External Consultation Checklist’ to local planning authorities outlining the same information. The guidance and checklist therefore include some elements where the EA is not a statutory consultee. The EA has told us that the purpose of these documents is to encourage consultation in the situations outlined as *‘the most effective way to use our planning role to help discharge other environmental responsibilities/duties and offer our expertise’*.

The EA has also told us that, where it is consulted, it provides advice on all relevant matters within its remit. According to the EA, this includes providing advice that *‘is proportionate to the environmental / flood risk and / or opportunities associated with each proposal’*. The EA has said that this includes providing appropriate advice where the development proposal could affect an RBD, thus engaging its ‘have regard to’ duty.

Assessing the extent to which all local planning authorities have in place internal guidance and processes concerning WFD assessment was beyond the scope of this project. Similarly, scrutiny of individual planning decisions that engage local planning authorities’ general duty to have regard to the RBMPs was beyond the scope of this project.

However, there is some evidence to suggest a risk of inconsistency concerning interpretation of what the ‘have regard to’ duty requires in practice. For example, the National Planning Policy Framework, to which local authorities must have regard when making planning decisions, does not clearly articulate the legal requirement for WFD assessment when adopting policies and making decisions that may affect RBDs.³⁹⁷ In addition, there is a lack of guidance for local planning authorities on what the ‘have regard to’ duty means in practice, including guidance on a standardised process for WFD assessment.

The EA has acknowledged in the information it provided to us that engagement with local authorities on river basin management planning is an area that could be improved. It said that it is planning targeted engagement with this sector to support implementation of the RBMPs and the next review and update of the plans in 2027.

We suggest that Government incorporate an assessment of compliance in this area into its review on implementation of the WFD Regulations.

396 Natural England, Environment Agency, Department for Environment, Food & Rural Affairs, ‘Developers: Get Environmental Advice on Your Planning Proposals’ <www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals> accessed 27 February 2024.

397 Department for Levelling Up, Housing and Communities, ‘National Planning Policy Framework’ para 180(e) <www.gov.uk/government/publications/national-planning-policy-framework--2> accessed 16 January 2024.

Nationally significant infrastructure projects (NSIPs)

The Planning Inspectorate has issued an advice note intended to inform applicants, consultees, the public and others about WFD Regulations requirements and NSIPs.³⁹⁸ NSIPs require Development Consent rather than planning permission and are decided by the Secretary of State with responsibility for the relevant policy area.

The note clearly articulates the ‘have regard to’ duty on the Secretary of State when determining a Development Consent application and supports the preparation and submission by applicants of separate WFD assessment reports where the duty is engaged, to inform the Secretary of State.

The EA is also a statutory consultee on all NSIP applications and must therefore ‘have regard to’ the relevant RBMP when providing advice on applications where the duty is engaged.³⁹⁹ The note advises applicants to seek the views of the EA early in the pre-application process and to continue this engagement throughout the application process.

Government also produces national policy statements and Examining Authorities must make their recommendations to the Secretary of State in accordance with these statements.⁴⁰⁰

Assessing the extent to which individual NSIP determinations comply with the available guidance on WFD assessment was beyond the scope of this project. However, we suggest that Government incorporate an assessment of compliance in this area into its review on implementation of the WFD Regulations.

Relationship with land management and transitional and coastal waters

We have not considered levels of implementation for other authorities with functions that may affect RBDs, such as plan-making authorities in other sectors where outcomes are relevant to achieving the Environmental Objectives. This was beyond the scope of this Project.

However, we note the need for coherence of other policy areas and sectoral plans with water policy, to ensure integration with and support achievement of the Environmental Objectives. For example, the objectives and outcomes of Local Nature Recovery Strategies will be closely linked with the Environmental Objectives. It will be essential to ensure they are aligned with the RBMPs to optimise outcomes.

As referred to above, Government commits in the Plan for Water to a ‘more streamlined’ policy and legal framework. Specifically, it states that it will *‘align water and flood planning with Local Nature Recovery Strategies and the future Land Use Framework to make sure we are taking actions – especially nature-based solutions – where they will have the biggest impact.’*⁴⁰¹

398 Planning Inspectorate, ‘Advice Note Eighteen: The Water Framework Directive’ <<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-18/>> accessed 20 December 2023.

399 Section 42(1)(a), Planning Act 2008 and Reg 3 and Schedule 1, the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

400 S.104, Planning Act 2008.

401 Defra, ‘Plan for Water’ (n 4) 24.

Our view

The general duties contained in the WFD Regulations underpin the need for WFD assessment as clarified by case law. The need for public authorities to perform WFD assessment when carrying out or authorising activities that may affect water bodies is a key governance mechanism supporting the implementation of the RBMPs and the future attainment of Good Status for all water bodies. When coupled with the additional duties on Defra and the EA, this should mean public authorities consistently exercise their functions in a way that supports the achievement of the Environmental Objectives.

In practice, the OEP has identified the following barriers to implementation of these duties and the corresponding need for WFD assessment:

- The ‘have regard to’ duty and corresponding requirement for WFD assessment may not be fully understood or applied by public bodies that are important for implementing the RBMPs and achieving the Environmental Objectives, such as local authorities. This creates a risk of non-compliant decision-making.
- WFD Regulations requirements appear to be well understood by the EA. However, the absence of a free-standing statutory obligation to consult the EA means that may not be consulted in all cases where the need for WFD assessment applies. This increases the risk of non-compliant decision-making.
- The absence of a prescribed approach for WFD assessment adds a level of uncertainty and variation in the actual or perceived levels of robustness between assessments. This further increases the risk of non-compliant or inconsistent decision-making while also creating barriers to the scrutiny of decision-making and ensuring accountability.

Some of the above barriers are being partially mitigated through: (i) engagement by the EA with public authorities concerning their WFD Regulations’ obligations, in particular water companies; (ii) engagement with the EA as a statutory consultee concerning certain planning applications and plans; and (iii) the provision of guidance by the EA and others concerning WFD Regulations’ obligations.

The lack of clear process and statutory mechanisms for some of these interventions makes it difficult to assess their effectiveness. The Ministerial Guidance puts on a statutory footing the need for the EA to promote and encourage awareness of WFD Regulations’ impacts among other public bodies. It also outlines broad routes for such engagement and specifies what it sees as the main outputs of engagement. The precise extent of and processes for engagement are at the EA’s discretion and it is not known what processes the EA has in place internally for determining this.

For example, evidence from the EA and elsewhere indicates that further engagement is needed with actors such as local authorities. Consultation with the EA concerning potential effects on water bodies in RBMPs for proposed development and plans is not on a statutory footing in all cases, increasing the risk of non-compliant or inconsistent decision-making. The EA has stated that some further activity is planned to support implementation of RBMPs in that sector. However, the details of these interventions, or whether further activity is planned to support implementation of the RBMPs in other key sectors, are not known.

Meanwhile, Defra’s own processes for WFD assessment have not been formalised. The lack of a prescribed approach for WFD assessment within Defra and other organisations means it is difficult to understand the legal basis for certain decisions. For example, it is

not possible based on publicly available information to fully understand or interrogate the rationale for Defra's decision to approve the RBMPs.

There is also a need for Defra to decide how to assess the need for, provide and update strategic, high-level guidance concerning implementation of the WFD Regulations. This should include addressing the need to update guidance previously produced at the EU level now that the UK is no longer part of the Common Implementation Strategy for the WFD.

Overall, it is the OEP's view that the WFD Regulations are lacking certain clear governance arrangements to drive delivery on the ground and ensure accountability and transparent decision-making. We believe that issuing guidance on a standardised process for WFD assessment and engagement with public authorities in key sectors is essential. We also consider that better implementation to drive delivery on the ground and more transparent decision-making could be further supported by the following points. We suggest that Defra consider these further as part of its own review of implementation of the WFD Regulations:

- The introduction of a clearly worded, explicit duty on public authorities to undertake WFD assessment when exercising a function that could affect an RBD. At the moment, the requirement for WFD assessment clearly exists as confirmed by case law, but this is not evident on the face of the legislation.
- A corresponding statutory duty on public authorities to consult with the EA where WFD assessment identifies risks to water bodies.
- Increased transparency concerning: (i) mechanisms to ensure and monitor the implementation of all measures in the approved Programmes of Measures; and (ii) reporting on progress towards implementing the approved Programmes of Measures.

Recommendation 13: We recommend that, in reviewing implementation of the WFD Regulations, Defra assess current levels of understanding of and compliance with the general duty on public authorities to have regard to the RBMPs (Regulation 33). The assessment should prioritise public authorities with functions that are key to delivering the Environmental Objectives.

Recommendation 14: We recommend that Defra and the EA issue guidance to all public authorities with functions that may affect RBDs on a standardised process for WFD assessment. This should take account of any relevant evidence and information gathered through the implementation of Recommendation 13 above. We also recommend that the EA engage with public authorities concerning implementation of the guidance, prioritising those with functions that are key to delivering the Environmental Objectives. Defra should also itself adopt and apply a standardised process for WFD assessment in relation to its own decision-making.

Recommendation 15: We recommend that, in reviewing implementation of the WFD Regulations, Defra consider: (i) strengthening the wording of the 'have regard to' duty for RBMPs; (ii) introducing a free-standing duty on all public authorities to consult with the EA when WFD assessment identifies risks to water bodies; and (iii) increasing transparency concerning mechanisms to ensure and monitor the implementation of all measures in the approved Programmes of Measures. The EA should also provide more detailed information in its report describing progress in the implementation of each planned Programme of Measures, to support scrutiny and transparency concerning their delivery.

Annex 1. Glossary



Annex 1. Glossary

Defined terms

We use a number of defined terms which have a specific meaning in this report. We list these below.

Some of these terms reflect or are based on expressions that have a particular meaning in law. In those cases, we set out in the explanations below how the terminology that we use in this report relates to any such relevant definition or provision. We have sought to summarise or simplify some expressions in the interests of making the report more easily readable. Anyone who wishes to consider the exact legal definitions should therefore refer to the legislation. The RBMP analysis report produced as part of this project also includes a table of wider legislation relevant to the implementation of the WFD Regulations.

Artificial or heavily modified water body (AHMWB)	<p>This is a specific type of surface water body designated as such under Regulation 15 of the WFD Regulations. It covers, for example, canals, reservoirs, ports, largely embanked rivers etc., where the changes to the characteristics of the water body that would be necessary for achieving the ‘Environmental Objective’ of ‘Good Ecological Status’ would have significant adverse effects on the wider environment or activities such as navigation and drinking water supply. The objective for these AHMWBs is therefore defined instead as ‘Good Ecological Potential’.</p> <p>Some documents make a distinction between ‘artificial water bodies’ (AWBs) such as canals and reservoirs, and ‘heavily modified water bodies’ (HMWBs) such as embanked rivers. We use the combined abbreviation ‘AHMWB’ in this report to refer to all artificial and heavily modified water bodies.</p>
Classification and status	<p>Regulation 6 of the WFD Regulations is concerned with the ‘classification’ of water bodies. It refers to the requirement to classify the ‘status’ of water bodies, in broad terms based on their physical, biological and chemical conditions, using a classification system specified in the WFD. Classification is necessary for understanding the state of the water environment and setting Environmental Objectives for the protection and, where necessary, restoration of water bodies.</p>
Coastal water	<p>In broad terms this means territorial sea waters up to one nautical mile from the coast. It is defined more precisely in Schedule 1 to the WFD Regulations.</p>
The comparative analysis	<p>This refers to a comparison of river basin management approaches and outcomes in England and Northern Ireland with those in other UK administrations, other European countries and selected jurisdictions in other parts of the world, undertaken by the consultants WSP for the OEP as part of this project. This is published on the OEP’s website alongside this report, as part of the supporting evidence.</p>

<p>Daughter directives</p>	<p>This refers to two EU directives which are related to and support the WFD. These are:</p> <p>Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration (the Groundwater Directive), and</p> <p>Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy (the Environmental Quality Standards Directive).</p>
<p>Driver-pressure-state-impact-response (DPSIR)</p>	<p>This is a widely used analytical framework for assessing and determining the appropriate course of action to understand and address environmental or other problems, which underpins the approach of the WFD Regulations.⁴⁰² According to this framework, there is a chain of causal links starting with ‘driving forces’ (economic sectors, human activities and physical factors such as climate and geology), through ‘pressures’ (e.g., emissions, waste, abstractions) to ‘states’ (physical, chemical, biological, ecological and quantitative status of water) and ‘impacts’ (for example species decline, eutrophication and loss of amenity), eventually leading to political ‘responses’ (such as prioritisation, target setting, wastewater treatment, product controls, etc).</p>
<p>Environment Act targets</p>	<p>This refers to the statutory targets set under Sections 1-3 of the Environment Act 2021, the delivery of which will depend on part on measures reflected in the RBMPs and progress in achieving their Environmental Objectives. Some of these targets relate specifically to water and others to different environmental issues.</p>
<p>Environmental Improvement Plan (EIP) and EIP23</p>	<p>This refers to the plan required to be prepared by Government to protect and improve the environment under the Environment Act 2021. Government published its updated EIP in January 2023 and this is commonly referred to as ‘EIP23’</p>
<p>Environmental Objectives</p>	<p>The ‘Environmental Objectives’ are specified in Regulation 13 of the WFD Regulations. For both surface water and groundwater, the Environmental Objectives include preventing the deterioration of the status of each body of water (the ‘No Deterioration Objective’) and aiming to achieve ‘good status’ (the ‘Good Status Objective’) under the classification system.</p> <p>These objectives must be met unless an ‘exemption’ is applied in relation to an individual ‘water body’. For any particular water body, therefore, its specific Environmental Objectives will either be the same as the those in the WFD Regulations (where there is no exemption), or different (where an exemption has been approved).</p> <p>In this report we use the expression ‘Environmental Objectives’ to refer to both the objectives in the WFD Regulations, or those specified for individual water bodies, or both, as the context requires.</p>

402 See for example: European Commission, ‘Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance Document No. 3, Analysis of Pressures and Impacts’ (n 238).

Environmental Quality Standards Directive	Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy. This is one of the WFD's so-called 'daughter directives'.
Exemption	<p>This refers to an exemption from the requirement to set Environmental Objectives in accordance with Regulation 13 of the WFD Regulations, which may be determined and justified for an individual water body and set out in the relevant RBMP. The WFD Regulations provide for 'Extended Deadline Exemptions' (Regulation 16) and 'Less Stringent Objective Exemptions' (Regulation 17).</p> <p>Regulations 18 and 19 also provide for exemptions from the requirement to achieve the Environmental Objectives set under Regulation 12 in certain circumstances.</p>
Extended Deadline Exemption	An 'Extended Deadline Exemption' may be determined under Regulation 16 of the WFD Regulations. Subject to certain conditions, it allows for the date to achieve the Environmental Objectives to be extended. This is subject to a long-stop date of 2027 (or later in relation to certain priority substances), except in cases where the Environmental Objectives cannot be achieved due to 'natural conditions'.
Good Chemical Status	Schedule 1 to the WFD Regulations contains separate definitions for 'good surface water chemical status' and 'good groundwater chemical status'. In broad terms, they denote the chemical status of a body of surface water or groundwater where no concentrations of pollutants exceed the legal standards established for those substances. For convenience, we use the combined term 'Good Chemical Status' in this report.
Good Ecological Potential	This expression only applies to surface water bodies that are AHMWBs. As defined in Schedule 1 to the WFD Regulations, it refers to the status of an AHMWB classified as such in accordance with the relevant provisions of the WFD.
Good Ecological Status	As defined in Schedule 1 to the WFD Regulations, 'ecological status' is an expression of the quality of the structure and functioning of aquatic ecosystems associated with surface waters, classified in accordance with the relevant provisions of the WFD. With the exception of AHMWBs (see 'Good Ecological Potential' above), surface water bodies are classified into one of five classes of ecological status, from 'high' to 'bad'.
Good Groundwater Status	As defined in Schedule 1 to the WFD Regulations, this means the status of a body of groundwater when both its chemical and quantitative status are at least 'good'.
Good Quantitative Status	As defined in Schedule 1 to the WFD Regulations, 'quantitative status' is an expression of the degree to which a body of groundwater is affected by direct and indirect abstractions. Groundwater bodies are classed as either 'good' or 'poor' quantitative status based on groundwater abstraction pressures. Other factors are also considered such as saline intrusion.

Good Status Objective	<p>This is an overall target objective for all water bodies under Regulation 13 the WFD Regulations. It is achieved when a water body achieves a combination of ‘Good Chemical Status’ plus ‘Good Ecological Potential’ for AHMWBs, ‘Good Ecological Status’ for other surface water bodies or ‘Good Quantitative Status’ for groundwater bodies.</p> <p>Additional ‘Protected Areas Objectives’ apply for water bodies that are also designated as certain protected areas and those must also be met in order for the water body to achieve overall ‘Good Status’. Subject to conditions, the Good Status Objective is subject to the scope for ‘exemptions’ in determining the specific ‘Environmental Objectives’ that apply to individual water bodies. In certain circumstances, exemptions to the requirement to aim for Good Status also apply.</p>
Groundwater	As defined in Schedule 1 to the WFD Regulations, this means all water that is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
Groundwater body	As defined in Schedule 1 to the WFD Regulations, this means a distinct volume of groundwater within an aquifer or aquifers.
Groundwater Directive	Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration. This is one of the WFD’s so-called ‘daughter directives’.
Less Stringent Objective Exemption	A ‘Less Stringent Objective Exemption’ may be determined under Regulation 17 of the WFD Regulations. Subject to certain conditions, it allows for the setting of a less stringent ‘Environmental Objective’ for a water body than ‘Good Status’.
Ministerial Guidance	Guidance issued in September 2021 by the Secretary of State to the EA concerning river basin management planning.
No Deterioration Objective	This refers to the ‘Environmental Objective’ in Regulation 13 of the WFD Regulations to prevent deterioration of the status of each water body.
One-out, all-out	This is the expression commonly used (though not contained in the WFD Regulations) to describe the principle whereby the overall ecological classification of a surface water body is dictated by the lowest status achieved by one or more of its various constituent elements. Similarly, the principle provides that for the overall classification of any water body to be ‘good’, both its chemical and its ecological (for surface water) or quantitative (for groundwater) statuses must be at least ‘good’.
Plan for Water	This refers to Defra’s <i>‘Plan for Water: our integrated plan for delivering clean and plentiful water’</i> published in April 2023.
Prioritisation and Early Warning System (PEWS)	This is an Environment Agency monitoring and horizon-scanning programme that considers risks posed by emerging contaminants to water, biota, soils, and sediments.

Priority substances and priority hazardous substances	<p>‘Priority substances’ are certain pollutants of EU-wide concern, identified in the WFD, for which environmental quality standards have been set under the Environmental Quality Standards Directive.</p> <p>‘Priority hazardous substances’ are a sub-set of the listed priority substances, representing those pollutants of the greatest concern, for which emissions are to be phased out.</p> <p>The priority (hazardous) substances and their environmental quality standards are to be taken into account in assessing the chemical status of surface waters.</p>
Priority Substances Directive	Directive 2013/39/EC of the European Parliament and of the Council amending Directives 2000/60/EC [the WFD] and 2008/105/EC [the Environmental Quality Standards Directive] as regards priority substances in the field of water policy.
Programmes of Measures	This refers to the Programmes of Measures designed to achieve the ‘Environmental Objectives’ in implementing the WFD Regulations. The Programmes of Measures are determined under Regulations 12 and 20 of the WFD Regulations. A summary of the Programmes of Measures is included in the River Basin Management Plans.
Protected Area Objectives	These are additional Environmental Objectives under Regulation 13 of the WFD Regulations for certain ‘protected areas’, such as drinking water protected areas and bathing waters. The objective for such areas is to achieve compliance with any standards required by any law under which the area or body is protected.
Public body	As defined in Regulation 2 of the WFD Regulations, this includes a wide range of ‘persons’ (i.e. people or organisations) that carry out public functions such as local authorities, planning authorities and highways authorities, as well as statutory undertakers, but excludes ministers.
Relevant functions	The ‘relevant functions’ for the purposes of the WFD Regulations are those set out in a list of legislation in Schedule 2 to the WFD Regulations. The WFD Regulations require the Secretary of State and the Environment Agency to exercise their relevant functions in a manner which secures compliance with the requirements of the WFD and its so-called ‘daughter directives’ (Regulation 3(1)).
Retained EU law and assimilated law	In broad terms, domestic law that implemented EU measures (such as the WFD Regulations), and directly applicable EU law, acquired the status of ‘retained EU law’ under the European Union (Withdrawal) Act 2018. This later became ‘assimilated law’ under the Retained EU Law (Revocation and Reform) Act 2023. This means that it can be modified, replaced or revoked through regulations that may be made under the Retained EU Law Act until 23 June 2026.
River basin	In broad terms, the catchments of large rivers are called river basins. As defined in Schedule 1 to the WFD Regulations, a ‘river basin’ is the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta.

River Basin District (RBD)	As defined in Regulation 2 of the WFD Regulations, this is an area which constitutes the main unit for the management of ‘river basins’. It is made up of a river basin or neighbouring river basins, together with associated groundwater, transitional waters and coastal waters. RBDs are identified on maps published by the Environment Agency under Regulation 4(1) of the WFD Regulations.
River Basin Management Plan (RBMP) First, second and third cycle RBMPs	These are plans developed under Part 6 of the WFD Regulations to protect and improve the water environment in RBDs. Under the WFD Regulations, RBMPs are prepared on a cyclical basis every six years, with three cycles to date. We therefore also refer in this report to the ‘first cycle RBMPs’ (2009), ‘the second cycle RBMPs’ (2015) and the ‘third cycle RBMPs’ (due in 2021 and published in England in 2022).
The RBMP analysis	This refers to a review of the RBMPs in England and Northern Ireland undertaken by the consultants WSP for the OEP as part of this project. This is published on the OEP’s website alongside this report, as part of the supporting evidence.
Secretary of State	The Secretary of State for Environment, Food and Rural Affairs. The Secretary of State is supported by the Department for Environment, Food and Rural Affairs (Defra). While we refer in this report to the Secretary of State and Defra somewhat interchangeably, in broad terms we refer to specific legal responsibilities, functions and decisions of the Secretary of State, and to wider oversight, supporting and enabling functions and activities of Defra.
Specific substances	Water quality analysis for assessing whether ecological status is ‘good’ is arranged into two sets of tests: general water quality tests (physico-chemical quality); and a further test which considers substances known as ‘specific pollutants’. These are substances identified as having a harmful effect on biological quality. The distinction between ‘priority (hazardous) substances’ (applicable to assessing chemical status - see ‘Good Chemical Status’) and ‘specific pollutants’ (part of assessing ecological status) lies in how they have been identified. The former are set out at EU level (see ‘daughter directives’). The latter originally were set by individual EU Member States.
Surface water	As defined in Schedule 1 to the WFD Regulations, this means inland waters (except groundwater), transitional waters and coastal waters (except in respect of chemical status for which it also includes territorial waters, i.e. those up to 12 nautical miles from the coast).
Surface water body	As defined in Schedule 1 to the WFD Regulations this means a discrete and significant element of surface water such as a lake, a reservoir, a stream, river or canal, part of a stream, river or canal, a transitional water or a stretch of coastal water. In this context, what may be thought of in everyday terms as a single, continuous water body (e.g. a river along its whole length) may be treated as multiple water bodies for the purposes of the WFD Regulations (each comprising a different stretch of that river).

Transitional waters	As defined in Schedule 1 to the WFD Regulations, this means bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters, but which are substantially influenced by freshwater flow.
Ubiquitous, persistent, bio-accumulative and toxic (uPBT)	This refers to a group of certain harmful chemicals released by human activity, which are now found throughout the environment and will take many years to break down through natural processes. There are currently no known means of removing these chemicals once they have been released into the environment.
Watch List	This refers to the list of new and emerging substances of concern, which was originally compiled by the EU to improve available information on these substances. The EA's monitoring programme must cover pollution of surface water by substances on the watch list.
Water body	Regulation 2 and Schedule 1 to the WFD Regulations define the separate terms 'body of groundwater' and 'body of surface water'. As a simplification, we generally refer to 'groundwater body' and 'surface water body' in this report. We also use the more general expression 'water body' to mean one or the other, or both, as the context requires.
Water Framework Directive (WFD)	Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy.
WFD assessment	This is the general term frequently used to refer to the process of considering RBMPs and the Environmental Objectives they contain when making decisions on various matters that could affect a River Basin District. Case law has established the need for authorities to carry out WFD assessment when making such decisions, including whether to grant authorisations for activities that could affect a River Basin District. The need for WFD assessment is also underpinned by the general duties on public bodies in the WFD Regulations.
WFD Regulations	The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (Statutory Instrument 2017 No. 407).
The water quality stocktake	This refers to the water quality stocktake research commissioned by the OEP as part of this project from Atkins consultants, which has identified emerging substances of concern in England and Northern Ireland and critical knowledge gaps. This is published on the OEP's website alongside this report, as part of the supporting evidence.

List of Abbreviations

AHMWB	Artificial or heavily modified water body
AMP	Asset Management Period
Defra	Department for Environment, Food and Rural Affairs
DPSIR	Driver-pressure-state-impact-response
DWPP	Diffuse Water Pollution Plan
EAC	Environmental Audit Committee (House of Commons)
EA	Environment Agency
EU	European Union
EIP	Environmental Improvement Plan
FRMP	Flood Risk Management Plan
NGO	Non-governmental organisation
NSIPs	Nationally Significant Infrastructure Projects
OEP	Office for Environmental Protection
Ofwat	The Water Services Regulation Authority
PEWS	Prioritisation and Early Warning System
RBD	River Basin District
RBMP	River Basin Management Plan
UCB	Upper Costa Beck
(u)PBT	(ubiquitous,) persistent, bio-accumulative and toxic
WRMP	Water Resources Management Plan
WFD	Water Framework Directive
WINEP	Water Industry National Environment Programme
WISE	Water Information System for Europe
WISER	Water Industry Strategic Environment Requirements
25 YEP	25 Year Environment Plan

The background of the page is a repeating pattern of stylized, light gray leaves. Each leaf is pointed and has a central vein, arranged in vertical columns that create a sense of growth and movement.

Annex 2. Stakeholder engagement and expert review

Annex 2. Stakeholder engagement and expert review

This annex outlines the approach that the project has taken to stakeholder engagement and expert review. We gratefully acknowledge the support and input of the many people and organisations who have contributed to this work.

Project stakeholder group

In carrying out this project, the OEP established a stakeholder group to engage with parties interested in the WFD Regulations and the state of the water environment. Participants were drawn from public authorities, industry bodies, environmental NGOs and professional bodies across England and Northern Ireland.

The group held four online meetings in 2022 and 2023. To ensure manageability, the group was necessarily of limited size. However, the group members were able (and encouraged) to exchange views with, and to collate and put forward information from, their wider communities of interest. Group attendees were as follows:

- Association of Directors of Environment, Economy, Planning & Transport
- Blueprint for Water
- Canal and Rivers Trust
- Centre for Environment, Fisheries and Aquaculture Science
- Consumer Council for Water
- Council for Nature Conservation (Northern Ireland)
- Department of Agriculture, Environment and Rural Affairs (Northern Ireland)
- Department for Environment, Food and Rural Affairs
- Department for Infrastructure (Northern Ireland)
- Environment Agency
- Greener UK coalition
- National Farmers Union
- Natural England
- Northern Ireland Environment Agency
- Northern Ireland Environment Link
- Northern Ireland Water
- Ofwat
- Royal Society for the Protection of Birds
- Ulster Farmers Union
- Ulster Wildlife
- Utility Regulator Northern Ireland
- Water UK
- Wildlife Trusts

This was not intended to be a decision-making or steering body. Nor was the OEP looking to agree on all issues with all stakeholders. There is a diversity of opinions in many areas concerned with the WFD Regulations and related matters. As such, the findings and recommendations presented in this report are those of the OEP and do not necessarily reflect the views of the stakeholders.

Rather, the group was convened with terms of reference as a forum for updating, discussion and information-sharing. It also enabled the OEP to gather views, information and evidence from stakeholders in the project.

Workshops

In addition, the OEP held two face-to-face workshops, one in Belfast (2 March 2023) and one in London (13 March 2023), focusing on implementation of the relevant regulations in Northern Ireland and England respectively. Both were well attended, with a wider audience than in the stakeholder group noted above. The workshops served to expand the broad views of stakeholders on aspects of the WFD Regulations, RBMPs, their implementation and a range of wider matters.

The speakers in Belfast were:

- Neil Emmott (OEP)
- Silke Hartmann (NIEA)
- Ashleigh Dawson (WSP)
- Catherine Wilson and Ed Stutt (Atkins and WCA)
- Donna Acheson (DAERA)

The speakers in London were:

- Neil Emmott (OEP)
- Helen Venn (OEP)
- Liz Buchannan (WSP)
- Vera Jones and Ed Stutt (Atkins and WCA)
- Richard Bramley (National Farmers Union)
- Lucinda Gilfoyle (Water UK)
- Ali Morse (Blueprint for Water)
- Professor Penny Johnes (University of Bristol)

The following paragraphs present a brief summary of stakeholder views from the London workshop. Discussions were in groups and focused on two main topics.

Workshop Topic 1: The WFD Regulations – should they be retained, modified, or replaced? How, why?

Most participants thought that the regulations should be retained but modified. Many identified a need for improvements in relation to the implementation of the WFD Regulations rather than seeing specific problems with the current legal regime. For example, some called for a clearer approach to regulation and enforcement by the Environment Agency with sufficient staff on the ground.

Cross cutting themes of discussion included the following points.

- Address the **gaps within the current regime** such as the regulation of chemicals and what some participants saw as a need for better coverage of small water bodies.
- Improved **transparency on decision making and improved communication** to the public on progress, positive outcomes and challenges. For example, participants suggested there is a lack of transparency concerning how actions in the RBMPs get generated. It was suggested that there needs to be more public awareness-raising of the real issues, so there is buy-in from the public. There was concern about lack of visibility around some of the problems.
- A need for **improved coherence and a more integrated approach** with other frameworks, regimes and statutory targets (such as Environment Act targets), other environmental policies and principles (such as on biodiversity), AMP price reviews and water resource use regimes such as abstraction.
- There was also a call to **improve partnership working for delivery**.

Workshop Topic 2: How the WFD Regulations are implemented in practice – what works well, what could be improved?

The group discussions included the following points.

- **Local level data and information about actions should be made available and communicated.** Some participants suggested that data should be available not just at catchment scale but at more local or even individual business level. For example, it was suggested that individual farmers may be better incentivised to take improvement actions, and better informed on how to approach them, by local data collection demonstrating the impact of activities on local watercourses.
- **Clear understanding of investment requirements for the WFD Regulations.** Participants suggested there should be a system or framework to outline more clearly what the objectives are and to understand where money should be invested. In addition, some participants thought that the balance of investment needs to be better understood, for example between water companies and individual farmers.
- **Improvements in monitoring.** Participants generally thought that there needs to be more monitoring to see whether RBMPs work. Some suggested that monitoring should be streamlined and utilise techniques such as artificial intelligence and remote sensing. Others highlighted the need to focus on monitoring what is important, in the right place, at the right frequency. There was some suggestion that current monitoring is too focused on identifying and reacting to incidents, which attract media and public attention, while not being the main source of poor water conditions.
- **Improvements in the implementation of RBMPs.** Several participants suggested that RBMPs need to contain more information about actions at a local level. It was also suggested that implementation would be improved by providing for greater involvement of stakeholders in RBMP delivery and catchment partnerships. Most stakeholders broadly agreed that catchment partnerships can be valuable and have been shown to be effective in some areas. However, they also noted that these partnerships need proper funding to ensure that they can make a difference.
- Some attendees said they find it difficult to understand **the connection between the content of the plans and how measures are implemented in practice**. Others saw current delivery mechanisms as unclear, or at worst absent. The wider suite of

water-related plans, policies and regulatory deadlines were thought to be out of sync and to have been developed within silos.

- **Nature-based solutions** were highlighted in most groups as a valuable mechanism to improve implementation. There was concern that some solutions being pushed on to water companies are running counter to the development of nature-based solutions which might be more effective in the long run. However, some participants observed that some nature-based solutions could create barriers for farmers' involvement if they changed the tax status of agricultural land. It was also suggested that hydro-morphology could be improved if there is better regulatory integration, for example using nature-based solutions through better integration with flood policy.
- There were mixed views on the **one-out, all-out rule**. Some thought it drives holistic action, while others called for better indicators and better means of communicating progress. It was suggested that, in its current form, the good ecological status test can mask parameters and disincentivise efforts.
- The drive to **remove barriers to fish migration and manage hydro-morphology** was highlighted as a specific positive feature of the WFD Regulations.

Expert review

Prior to their completion, we sent draft copies of our report to external experts for independent review. These were drawn from the OEP's College of Experts on the basis of their subject matter expertise and availability to undertake the review. The contributing experts were:

- Howard Brett
- Liz Buchanan
- Professor Margherita Pieraccini
- Professor Nigel Watson

All reviewers returned comments which we have considered in finalising the report. The report remains the work and presents the conclusions of the OEP. It does not necessarily reflect the views of the reviewers.



Annex 3. The Water Framework Directive

Annex 3. The Water Framework Directive

This annex provides a brief summary of the background to and provisions of the WFD, which have been written about extensively elsewhere (see for example^{403 404 405 406 407 408 409 410}).

Background

EU laws to improve water standards were first introduced in the mid-1970s.⁴¹¹ Early measures tackled various individual issues concerned with pollution control and water quality in separate legal instruments.

By the 1990s, there was a considerable body of EU water legislation in place. However, it has been described⁴¹² as having been fragmented in its objectives, reflective of a piecemeal response to water problems, and increasingly outdated in the light of technical and scientific developments that made higher standards achievable. The same source explains that:

‘Historically, Directives on water [...] tended to be drafted in one of two ways: they were either concerned with limiting the discharge of particular substances into waters, or [...] with establishing environmental quality standards (objectives) for particular stretches of water, according to the uses to which that water is put [...]. The Water Framework Directive accepts that both approaches are necessary.’

The WFD therefore sought to establish a single framework for the protection and improvement of inland and coastal water, replacing previous, piecemeal legislation. It consolidated existing European water law, repealing seven earlier directives. It was, and remains, the most substantial piece of EU water legislation to date.⁴¹³

Purpose

The WFD establishes a framework to protect and enhance the environment by integrating the management of different types of water bodies. These include rivers, lakes, streams, wetlands, groundwaters, transitional waters and coastal waters. It aims, amongst other things to prevent further deterioration of surface water bodies and to protect, enhance and restore all such water bodies with the aim of achieving ‘Good Status.’ Further overriding aims include: enhancing the status of aquatic ecosystems, as well as terrestrial ecosystems

403 European Commission, ‘Water Framework Directive’ (n 175).

404 Nathalie Hervé-Fournereau, ‘Beyond the 2019 Fitness Check of the Water Framework Directive: Designing the Future of European Water Law’ in Marjan Peeters and Mariolina Eliantonio (eds), *Research Handbook on EU Environmental Law* (Edward Elgar Publishing 2020) ch 18 <<https://china.elgaronline.com/view/edcoll/9781788970662/9781788970662.xml>> accessed 15 November 2023.

405 William Howarth, Simon Jackson and AS Wisdom, *Wisdom’s Law of Watercourses* (Sixth edition, Sweet & Maxwell 2011) ch 15.

406 Nigel Haigh, *EU Environmental Policy: Its Journey to Centre Stage* (Routledge 2016) ch 5.

407 Justine Thornton and Silas Beckwith, *Environmental Law* (2nd ed, Thomson Sweet & Maxwell 2004) ch 8.

408 Elizabeth Fisher, Bettina Lange and Eloise Scotford, *Environmental Law: Text, Cases, and Materials* (Second edition, Oxford University Press 2019) ch 15.

409 Charles Sabel and Jonathan Zeitlin, ‘Experimentalist Governance’ in David Levi-Faur (ed), *Oxford Handbook of Governance* (Oxford University Press 2012) ch 12.

410 Maria Lee, ‘Law and Governance of Water Protection Policy’ in Joanne Scott (ed), *Environmental Protection: European Law and Governance* (Oxford University Press 2009) ch 2.

411 European Commission, *Introduction to the EU Water Framework Directive* <https://ec.europa.eu/environment/water/water-framework/info/intro_en.htm> accessed 28 November 2022.

412 Thornton and Beckwith (n 422) 207–209.

413 European Commission, *Introduction to the EU Water Framework Directive* <https://ec.europa.eu/environment/water/water-framework/info/intro_en.htm> accessed 28 November 2022

and wetlands that directly depend on them; promoting sustainable water use; progressively reducing or phasing out discharges of certain ‘priority substances’; and contributing to mitigating the effects of floods and droughts.⁴¹⁴

River Basin Districts (RBDs)

The WFD introduced a new requirement in EU law to manage water at the level of RBDs.⁴¹⁵ These are made up of one or more neighbouring river basins (or catchments), together with their associated groundwaters and coastal waters. The WFD therefore reflected a shift in EU water law towards working on the basis of natural geographical and hydrological units, rather than purely administrative or political boundaries. This includes making provision for cooperation with authorities in other jurisdictions for transboundary river basins.

The UK, then among other EU Member States, supported the WFD proposal. Continental Member States reportedly⁴¹⁶ referred to it as ‘the British Directive’ as it adopted river basins as the appropriate unit for water management, since the UK had already been managing waters at a similar level for some decades.

Analyses and monitoring of River Basin Districts

Under the WFD, the authorities of each Member State must identify RBDs lying within their national territory.⁴¹⁷ They must then carry out a number of analyses to determine the ‘characteristics’ of each RBD. These include analysing the location, boundaries, type and condition of each water body in the RBD, reviewing the impacts of human activity on the status of water bodies and identifying pressures, and an economic analysis of water use.⁴¹⁸ Additionally, the WFD requires Member States to establish programmes to monitor the status of water bodies in RBDs.⁴¹⁹

Environmental Objectives and Programmes of Measures

The WFD sets out a number of ‘Environmental Objectives’ for water bodies. These include a duty on Member States to implement measures necessary to prevent any further deterioration, as well as objectives to protect, enhance and restore all water bodies. The WFD specifies the aim of achieving ‘Good Status’ by December 2015, subject to certain possible ‘exemptions’.⁴²⁰

The WFD also creates a requirement to establish ‘Programmes of Measures’, taking into account the results of the analyses, to achieve the objectives specified for water bodies in each RBD.⁴²¹

414 Art 1, WFD.

415 Art 3, WFD.

416 William Howarth, ‘Water Quality and Land Use Regulation under the Water Framework Directive’ (2006) 23 Pace Environmental Law Review 351, 20.

417 Art 3(1), WFD.

418 Art 5, WFD.

419 Art 8, WFD.

420 Art 4, WFD.

421 Art 11, WFD.

River Basin Management Plans (RBMPs)

The authorities of Member States must draw up a plan for each RBD. The development and implementation of RBMPs is the key vehicle for achieving the WFD's objectives.

The RBMPs are to include the Environmental Objectives established for the water bodies in the RBD and a summary of the Programme of Measures to achieve them by the relevant deadlines.⁴²²

The WFD specifies a six-year cycle of assessment, planning, implementation, monitoring and review. Authorities in the Member States should have published the first cycle of RBMPs by December 2009 and then reviewed and updated them by 2015 and every six years thereafter.⁴²³ The WFD also requires public participation in relation to its implementation, in particular regarding the production of RBMPs.⁴²⁴

Daughter directives

The WFD is supported by and cross-refers to two so-called 'daughter directives'. These are EU laws on water quality standards for groundwater and surface water.

The Groundwater Directive⁴²⁵ protects against pollution and deterioration by establishing water quality standards. Groundwater bodies must meet these standards to achieve the Environmental Objective of 'Good Chemical Status'. The directive also introduced measures to prevent inputs of hazardous substances and limit inputs of non-hazardous pollutants to groundwater.

The Environmental Quality Standards Directive⁴²⁶ establishes environmental quality standards for surface water pollutants of EU-wide concern (known as 'priority substances') identified under the WFD. This includes setting environmental quality standards for a subset of substances of greatest concern (known as 'priority hazardous substances'), for which emissions are to be phased out. Surface water bodies must meet these standards to achieve 'Good Chemical Status'.

At the EU level, these lists of substances and standards are reviewed and, where necessary, updated every six years. This involves amending the WFD and its daughter directives, for example to add new substances and environmental quality standards. Following the UK's exit from the EU, any further such amendments to the WFD and its daughter directives would not apply to England. The current lists of substances and standards are therefore maintained in domestic law unchanged unless amended by Government.

422 Art 13, WFD.

423 Art 13, WFD.

424 Art 14, WFD.

425 Directive 2006/118/EC 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.

426 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 226/1.

Watch List

A further EU measure, the 2013 Priority Substances Directive,⁴²⁷ amended the WFD to create a new ‘Watch List’ mechanism to improve available information on new and emerging substances of concern.⁴²⁸ EU Member States have to monitor substances on the list at least annually and report the results to the European Commission.⁴²⁹ The Commission updates the list every two years.⁴³⁰ After its establishment in 2015, the list was updated in 2018, 2020 and most recently 2022.^{431 432 433}

Common Implementation Strategy

Finally, the EU has developed a ‘Common Implementation Strategy’ to support the implementation of the WFD.⁴³⁴ This comprises a series of working groups supported by Member States and other technical activities. It addresses issues of guidance, interpretation and best practice in applying the WFD.

Work under the Common Implementation Strategy has addressed issues of pan-European interest and concern. For instance, although the WFD itself does not expressly reference the challenges relating to climate change, these have been considered through the Common Implementation Strategy. This has noted that climate change is expected to worsen the impacts of already existing stresses on water.⁴³⁵

In this context, the WFD can be seen as an important tool to address these challenges through its focus on achieving Environmental Objectives and its planning cycles through which the challenges of climate change can be taken into account.

The UK no longer participates in the activities under this strategy following EU exit. However, the guidance previously produced under the strategy continues to be relevant to implementation of the WFD Regulations.

427 Directive 2013/39/EC of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy [2013] OJ L 226/1.

428 Art 2, Priority Substances Directive.

429 Art 2, Priority Substances Directive.

430 Art 2, Priority Substances Directive.

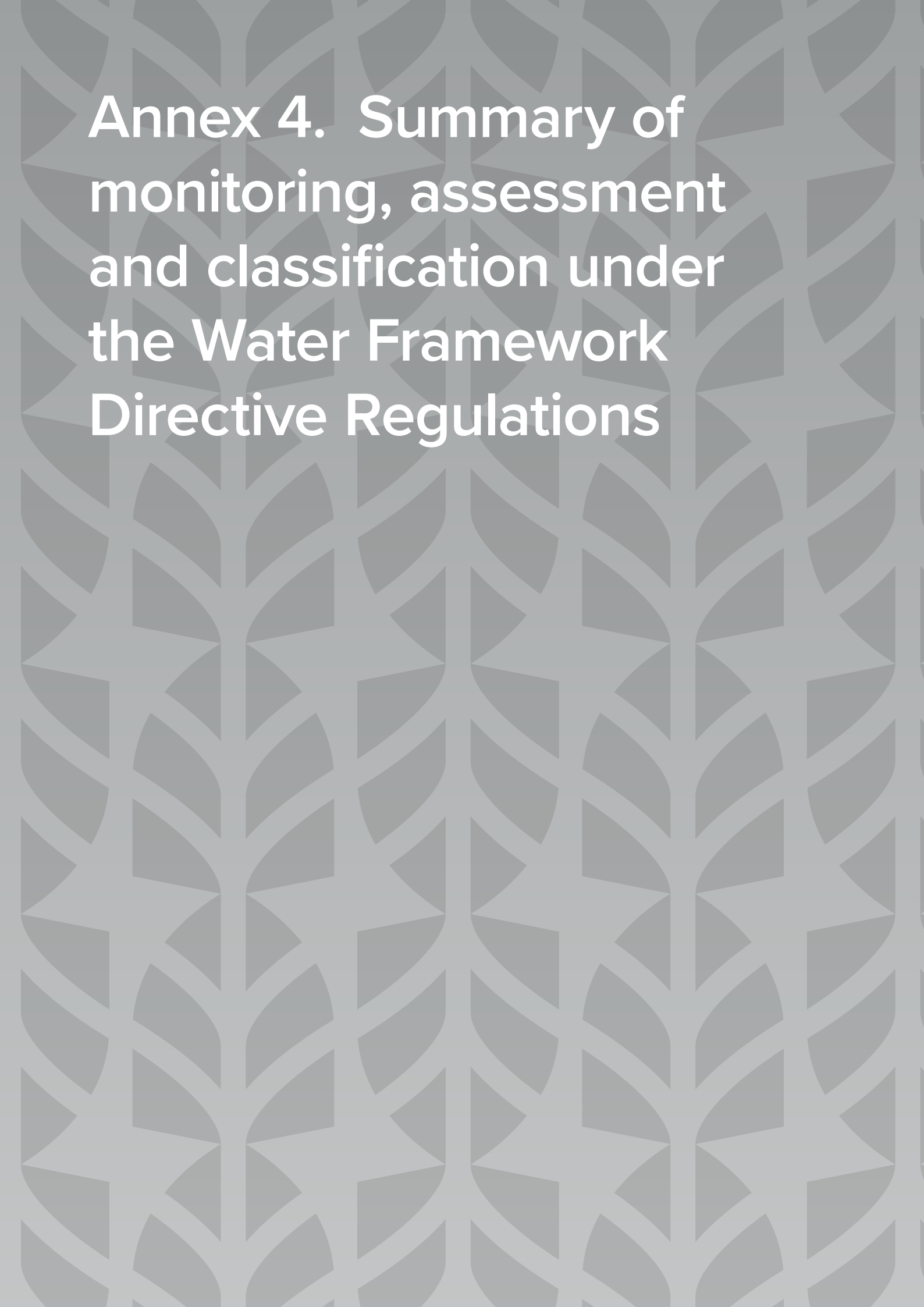
431 European Commission, *Surface water*, <https://environment.ec.europa.eu/topics/water/surface-water_en> accessed 28 November 2022.

432 Commission Implementing Decision (EU) 2022/1307 of 22 July 2022 establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC of the European Parliament and of the Council [2022] OJ L 197/117.

433 Commission Implementing Decision (EU) 2020/1161 of 4 August 2020 establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC of the European Parliament and of the Council [2020] OJ L 257/33.

434 European Commission, *River and Lakes: Typology, Reference Conditions and Classification Systems* (OPOCE 2003).

435 EU Water Directors, ‘Common Implementation Strategy EU Water Law Work Programme 2022-2024’ (23 November 2021) <www.minzp.sk/files/sekcia-vod/spolocna-implementacna-strategia-2022-2024_eng.pdf>.

The background of the page features a repeating pattern of stylized, light gray leaves. Each leaf is elongated and pointed at the tip, with a central vein and smaller veins branching out. The leaves are arranged in vertical columns, creating a textured, organic backdrop.

Annex 4. Summary of monitoring, assessment and classification under the Water Framework Directive Regulations

Annex 4. Summary of monitoring, assessment and classification under the Water Framework Directive Regulations

Monitoring requirements

From the monitoring programmes, the status of water bodies is arrived at through classification using a wide range of tests across rivers, lakes, estuaries, coastal waters and groundwaters. Figure A4.1 illustrates the elements considered for ecological status and chemical status. Ecological potential applies a slightly different classification system.

In England, 4,658 surface waterbodies and 271 groundwater bodies are assessed.⁴³⁶ Each water body requires a large number of tests to assess its status or potential. The Plan for Water outlines that a total of 126 elements must be assessed when classifying surface water and groundwater bodies.

In relation to surface water, the monitoring programmes required under the WFD Regulations must cover ecological status or potential and chemical status. This includes the volume and level or rate of flow, to the extent relevant to these status assessments. In relation to groundwater, the monitoring programme must cover chemical and quantitative status.

Figure A4.1. Summary of elements assessed for surface water and Groundwater status classification

Surface water status		Groundwater status	
Ecological status		Chemical status	
Biological quality Fish Invertebrates Macrophytes Phytobenthos	Physico-chemical quality Acidity Ammonia Biological Oxygen Demand Dissolved Oxygen Phosphate Temperature pH	Hazardous substances	Chemical and quantitative tests Saline intrusion Dependent surface water body status Groundwater dependent terrestrial ecosystems
Specific pollutants 22 specific pollutant elements		Priority hazardous substances	
Hydro-morphological supporting elements Hydrological regime changes		Presence of invasive species	Other pollutants

436 Environment Agency, 'Summary Data for England' (n 96).

Protected areas must also be monitored. These include drinking water and shellfish water protected areas designated under the WFD Regulations. They also cover areas protected under other legislation.

Assessing the ecological status or potential of surface water bodies

The classification of water bodies' ecological status is based on a range of criteria for rivers, lakes, transitional waters and coastal waters. These fall under the main headings of biological elements (plants and animals); chemical and physico-chemical water quality elements (for example, oxygen and nutrient levels); hydro-morphological elements (for example, water flows and levels and the continuity of rivers for fish migration); and the presence or absence of invasive, non-native species.

As set out in Figure 2.1 (in Chapter 2), these main elements, and the sub-elements within them, are placed into various classes. The number and type of classes differs based on the main element assessed. For example, biological elements are placed in one of up to five classes ranging from 'high' (unaffected or virtually unaffected by human activity) to 'bad' (i.e. severely damaged). Chemical status is assessed as 'good' or 'fail'.

The hydro-morphological elements and a check of invasive, non-native species are used to determine 'high status' only. Hydro-morphology is divided into 'high' or 'good' only.

Water quality analysis for assessing whether ecological status is 'good' is arranged into two sets of tests: general water quality tests (physico-chemical quality); and a further test which considers substances known as 'specific pollutants'. These pollutants are substances discharged into the water environment that are identified as having a harmful effect on biological quality.

For surface water bodies identified as AHMWBs, the classification is slightly different and is based on ecological 'potential' rather than 'status'. This recognises that the nature of those water bodies means they cannot necessarily be expected to offer or achieve the same ecological conditions as other surface water bodies.

AHMWBs require a mitigation measure assessment. These assessments set out whether plans and interventions are in place to support the ecological potential of the water body. Testing for AHMWB ecological potential incorporates biological quality, physico-chemical quality and specific pollutants. Biological quality elements are restricted to those which are less sensitive to the physical modifications. For example for river water bodies, phytoplankton would be one element monitored. Fish, macrophytes and invertebrates would not be used for classification purpose. However, these other elements could still be monitored for operational purposes.

Assessing the chemical status of surface water bodies

The chemical status assessment of surface waters applies two chemical tests. One is for 'priority substances' and the other is for 'priority hazardous substances'. These chemicals represent pollutants which pose a significant risk to the aquatic environment. The distinction between 'specific pollutants' (part of assessing ecological status) and 'priority

(hazardous) substances' lies in how they have been identified. The former were set originally by individual EU Member States. The latter, in contrast, have been set out at EU level as outlined in Annex 3.

Assessing groundwater status

Groundwater status is assessed through two overarching components: groundwater chemical and groundwater quantitative tests. The groundwater chemical status assessment considers the overall quality of the groundwater body in relation to the presence of polluting substances identified in the EU Groundwater Directive (see Annex 3). The quantitative status assessment considers the impact that abstraction has on the level of the groundwater and whether dependent ecosystems (such as groundwater fed wetlands) have enough water. Trends assessments are used to determine the trajectories of groundwater status.

The one out, all-out principle

The 'one-out, all-out' principle affects the classification status of a water body as outlined in Chapter 2. This applies to both the ecological classification of surface water bodies and the overall classification of all water bodies.

The background of the page features a repeating pattern of stylized, light gray leaves. Each leaf is pointed at the tip and has a central vein. The leaves are arranged in vertical columns, with each column containing a series of leaves that overlap slightly. The overall effect is a textured, organic background.

Annex 5. Challenges in relation to some specific sources of pollution and other pressures

Annex 5. Challenges in relation to some specific sources of pollution and other pressures

Nutrient Management Plans

We consider that this is an important area for Government to address to support the implementation of the WFD Regulations.

The EAC has emphasised that *'pollution across river catchments must be progressively reduced from all sources in the catchment until it does not exceed the capacity of the land and the rivers to handle the nutrients'*. The EAC recommended that DEFRA direct the EA and Natural England to calculate nutrient budgets for each English river catchment.⁴³⁷

Separately, the House of Lords Built Environment Committee recently reported on the impact of environmental regulations on development.⁴³⁸ The committee expressed concern that the Government's Plan for Water:

...proposed as the solution to nutrient pollution, is not yet able to deliver genuine change. The Government has shied away from taking the necessary decisions and risks failing to improve the situation in line with international commitments, and the Government must prioritise implementing the Integrated Plan for Water and publish the information sought by its arm's-length bodies, including setting out the balance of priorities between farming and other sectors in addressing nutrient pollution.'

Highway drainage

As described in Chapter 3, run-off from roads and towns is responsible for some 18% of the pollution of England's water bodies. This is a significant problem that needs to be addressed to meet environmental objectives.

The EAC reported on this issue in 2022, noting:⁴³⁹

'There are estimated to be in the region of 1 million outfalls in England discharging run-off from roads and highways. Unlike sewage works' discharges, highway outfalls have not typically been deemed to require a permit in the Environment Agency's interpretation of the Environment Permitting Regulations. Furthermore, they are not routinely monitored. Responsibility for these is split between local authorities and National Highways (formerly Highways England) which has responsibility for the Strategic Roads Network of motorways and major A-roads. Local authorities are responsible for urban road drainage but have no specific obligation for water quality, according to the Government. National Highways, as a highways authority, is similarly exempt from the need for a permit to discharge its run-off.'

437 House of Commons Environmental Audit Committee (n 140) para 372.

438 House of Lords Built Environment Committee, 'The Impact of Environmental Regulations on Development' (2023) 2nd Report of Session 2022-23, HL Paper 254 paras 82–83 <<https://publications.parliament.uk/pa/ld5803/ldselect/ldbuiltenv/254/25402.htm>> accessed 16 November 2023.

439 House of Commons Environmental Audit Committee (n 140) para 276.

The EAC expressed its disappointment about the apparent lack of regulatory oversight of the risks of water pollution from road run-off. It recommended that the EA require discharge permits for all outfalls on roads with annual average daily traffic above 15,000 vehicles.⁴⁴⁰

In its recently published 2030 Water Quality Plan,⁴⁴¹ meanwhile, National Highways recognised that road run-off can pollute water. The plan identified 1,236 outfalls and soakaways as having a potential high risk of pollution. Of these, it stated that 145 have a verified high risk of pollution and require mitigation. The remaining 1,091 were unverified and identified as having a ‘potential’ high risk of pollution.

Road run-off into watercourses is not covered under the requirements for environmental permits in England.⁴⁴² However, if the run-off causes pollution, the EA can serve notice on the highway authority requiring that they apply for a permit. The permit application must then be completed by the highway authority, including a risk assessment and the design of a treatment scheme to mitigate that risk.

Given its impact on the state of England’s waters, additional action to address road run-off would support the WFD Regulations’ objectives.

Climate change and nature-based solutions

In the context of climate change, it is essential to achieve sustainable water management, ensuring quality and access in sufficient quantity. The River Action charity is one of many who have expressed concern regarding climate change.⁴⁴³ The charity has highlighted that:

‘Extreme climate change-related weather conditions are worsening the situation, with more intense storms increasing sewage overflows and agricultural run-off and drier, hotter summers leading to an increase of life-smothering algal blooms. We are seeing water availability decrease.’

In a written submission to the OEP in this project, the Wildlife Trusts highlighted that:

‘It is unclear to what extent targets set under the current framework are based upon the environment’s needs today, or those of the future. Given the long timeframes associated with meeting many of these targets, they should be future proofed by ensuring that they take account of predicted environmental change. For example, flow targets should factor in that environmental water availability will in many cases be lower at key periods under a changing climate, and abstraction permissions should be based on this reduced availability.’

Nature-based solutions have a critical role to play in helping mitigate climate change impacts, slowing down further warming and supporting biodiversity. While there are some examples in the Programmes of Measures for the RBMPs in England, these appear limited. In this context, we agree with Government’s view in the Plan for Water, and that of many other stakeholders, that an increase in the use of nature-based solutions will be desirable in delivering multiple benefits.

440 ibid 290.

441 National Highways, ‘2030 Water Quality Plan’ (August 2023) <<https://nationalhighways.co.uk/media/wmsjjud/national-highways-water-quality-plan-2030-published-aug-23.pdf>> accessed 16 November 2023.

442 This comes from the Environmental Permitting (England and Wales) Regulations 2010.

443 River Action, ‘Charter for Rivers’ (2023) <<https://riveractionuk.com/charter-for-rivers/>> accessed 16 November 2023.

