

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



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

Presented to the Northern Ireland Assembly pursuant to paragraph 2(2) of schedule 3 to the Environment Act 2021

September 2024

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Foreword

Recent assessments of the condition of Northern Ireland's rivers, lakes and other surface waters show that almost seven in ten are not in good ecological condition, or on a clear trajectory towards it. There has been little change in recent years, despite measures designed to improve matters.

The Northern Ireland Executive has set a working target to bring 70% of water bodies to a 'Good Status'. The Executive's original aim to meet this target by 2021 was missed. In 2022, DAERA proposed to retain the same working target, for achievement by 2027.

We think this remains an ambitious target, notwithstanding some uncertainty in the specific outcomes expected to be realised under it. In particular, while it appears to include the achievement of good ecological conditions for surface waters, such as rivers and lakes, the intentions as regards chemical status are unclear.

As things stand, however, we assess that this target is still likely to be missed by a considerable margin, even with the extension to 2027. Without additional action, applied with pace and ambition, we cannot currently see a basis to be confident that things will improve meaningfully by that date. As it is, for example, the most recent reports (2021) show just 31% of surface water bodies in a good ecological condition.

Improving the water environment is not just a laudable aim in itself. Waters in good condition provide social and recreational value to people and society, underpinned by a powerful connection between people and place. They also support a healthy economy. There are serious consequences if water quality is neglected.

This is vividly illustrated by the case of Lough Neagh, where recurrent algal blooms have restricted both commercial and recreational use and generated passionate community concern. We were therefore pleased to note Minister Muir's statement in July 2024 committing to address the situation in Lough Neagh and confirming the agreement of an Action Plan to do so by the Northern Ireland Executive.¹

At the same time, the need for such a plan reflects the fact that previous plans and actions have failed to apply effective, proactive measures to achieve good water quality and prevent deterioration in and around Lough Neagh. This necessarily requires remedial action to address what Minister Muir has highlighted as very specific and concerning challenges in Lough Neagh. Such an approach also bears the risk that environmental harm is not always remediable, or may be more difficult or expensive to resolve the longer it is left.

There are longer term and equally important considerations. Waters in good condition play their part in managing climate change, for example by building resilience, protecting ecosystems and ensuring there is enough clean water to drink. And water quality matters when it comes to Northern Ireland's ambitions for plants and wildlife. To experience a halt in the decline of its birds, fish, invertebrates and other wildlife, the state of Northern Ireland's waters needs to improve.

¹ DAERA, 'Muir Welcomes Executive Approval for Lough Neagh Report and 37-Point Action Plan' (18 July 2024) <<u>https://www.daera-ni.gov.uk/news/muir-welcomes-executive-approval-lough-neagh-report-and-37-point-action-plan-0</u>> accessed 19 July 2024.

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 targeting and funding of improvement measures, 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 and to do so with urgency. We highlight, in particular, the need for DAERA to complete and implement Northern Ireland's delayed River Basin Management Plan as soon as possible. This is to cover the period 2021-2027 and was consulted upon in draft form in 2021, but has yet to be finalised.

In our view, the plan should set specific environmental objectives for all individual water bodies. The draft plan does not.

To be effective, these objectives need to be accompanied by a specific and tangible programme of measures designed to achieve those outcomes in practice. This is necessary to be confident that those measures will be capable of delivering their corresponding environmental objectives for individual water bodies. It should also ensure that the parties responsible for implementing the measures know what to do and can get on with it, place by place. In contrast, the measures in the draft plan are largely generic, affording little ability to understand or assess what objectives they are expected to achieve, where or with what certainty.

The draft plan also does not set out the scale of funding needed or committed to implement the necessary measures and achieve the intended outcomes. There are clearly significant resource challenges and indications of under-funding compared to what has been proposed and needs to be achieved. We recognise that the situation is difficult and financially daunting. In our view, however, there needs to be a clear relationship between the targets and objectives set, the specific measures to achieve those targets and objectives, and the funding to implement those measures.

Overall, therefore, we see a significant need to strengthen how Northern Ireland's environmental law on water is applied to increase its effectiveness and support wider goals and targets. There are underlying and seemingly endemic issues (a need for more robust delivery and governance arrangements, and additional funding aligned to targets and objectives, for example) that prevent progress here, just as we have highlighted in other areas of environmental protection and improvement.

Yet these endemic issues are not irresolvable. They can be addressed, with the will to do so. They must be addressed to materially improve performance towards objectives and targets and to sustain the health and wealth of Northern Ireland.

We make specific recommendations to DAERA, the Northern Ireland Environment Agency and the Department for Infrastructure. They are designed to increase the prospects of protecting and improving the water environment, including in relation to the objectives for 2027. We also present recommendations to strengthen the legislative framework and its governance and application in the longer-term. These issues are not unique to Northern Ireland. As part of the same project through which we have conducted this assessment, the OEP has also looked at the equivalent regime in England. Our report for England, published separately,² notes several similar concerns, including insufficiently specific and certain measures to achieve objectives.

We are also carrying out a further project looking at biodiversity in Northern Ireland, on which we will report later this year. This will present our assessment of pressures on the freshwater environment as well as terrestrial biodiversity. It will therefore provide additional detail about why Northern Ireland's environment, including its water environment, is in its present state.

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 the Northern Ireland Assembly, Executive and government departments consider ways forward.



Dame Glenys Stacey Chair, Office for Environmental Protection

² Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (2024) <<u>www.theoep.org.uk/report/oep-finds-deeply-concerning-issues-how-laws-place-protect-englands-rivers-lakes-and-coastal#:":text=This%20report%20assesses%20whether%20the,has%20set%20in%20the%20 regulations.</u>> accessed 28 May 2024.

Executive summary and recommendations

Executive summary and recommendations

Introduction and overview

In this report we look at whether plans to improve water bodies will be enough to meet the 'Environmental Objectives' under the Water Framework Directive (WFD) Regulations in Northern Ireland ('the WFD NI Regulations').³ We also look more broadly at the effectiveness of the regulations, their implementation and how they interact with other laws and policies in Northern Ireland.

The WFD NI Regulations require the Department of Agriculture, Environment and Rural Affairs (DAERA) to develop and implement 'River Basin Management Plans' (RBMPs) on a six-year cycle. These plans are critical, as they set out the objectives and measures needed to protect and improve the water environment in Northern Ireland. The latest plan, covering the third cycle of implementation of the regulations (2021-2027), was due by December 2021. However, while DAERA consulted on a draft RBMP in April 2021,⁴ the final plan has not been approved or published at the time of this report.

Having looked at the draft plan and previous plans, our assessment is that Northern Ireland is not on track to meet the Environmental Objectives in the WFD NI Regulations or the targets DAERA has set. We are particularly concerned about the adequacy of measures to achieve the Environmental Objectives with a 2027 deadline. We highlight a need to act with pace, urgency and clarity in relation to these outcomes and others that depend on them.

Under the WFD NI Regulations, RBMPs should contain a full set of water body level Environmental Objectives, including any associated 'exemptions', and a summary of 'Programmes of Measures' to achieve those objectives. However, the draft RBMP does not include water body level Environmental Objectives. Instead, it proposes a more general 'working target' for 70% of all Northern Ireland's water bodies to be at 'Good Status' by 2027 (the '2027 Working Target').

'Good Status' has a specific meaning under the WFD NI Regulations. Groundwater bodies are classified as being at 'Good Status' when they meet criteria specified for both 'Good Quantitative Status' and 'Good Chemical Status'. Surface waters such as rivers or lakes, meanwhile, are at 'Good Status' when they achieve both 'Good Ecological Status' (or 'Good Ecological Potential' if the water body is artificial or heavily modified) and 'Good Chemical Status'.

When considered against these specific definitions, the precise intent and status of the 2027 Working Target are uncertain, for two main reasons. Firstly, as already noted the draft RBMP does not include proposed Environmental Objectives for individual water bodies. Secondly, DAERA's intentions and expectations are unclear as regards achieving 'Good Chemical Status'.

On the face of it, a target to achieve Good Status for 70% of water bodies by 2027 appears to include aiming for Good Chemical Status for all water bodies in that timeframe. However, the presence of certain ubiquitous, persistent, bio-accumulative and toxic chemicals is

³ The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017, Statutory Rule 2017 No. 81.

⁴ DAERA, 'Consultation on the Draft Third Cycle River Basin Management Plan 2021 to 2027' (2021) <<u>www.daera-ni.gov.uk/</u> <u>consultations/consultation-draft-3rd-cycle-river-basin-management-plan-2021-2027</u>> accessed 13 November 2023.

causing all surface water bodies to fail their Good Chemical Status objective. This appears likely to continue for many years. It therefore seems impossible that 70% of surface water bodies in Northern Ireland could achieve Good Chemical Status including in respect of these substances by 2027.

In addition, the draft RBMP does not set out how the 2027 Working Target will be achieved. The measures in place, planned or proposed do not yet appear sufficiently clear and certain to deliver Good Status for most water bodies. The levels of funding required and committed to achieve these outcomes are also unclear. However, there is clear evidence of under-funding affecting the delivery of measures to protect and improve the water environment. Without significant additional action and resources, applied with pace and ambition, the current targets appear likely to be missed by a large margin.

With the restoration of the Executive, we highlight the need for DAERA to complete and apply the overdue RBMP as soon as possible. To comply with the regulations and maximise the chances of success, the final third cycle RBMP should include specific Environmental Objectives for all water bodies, and further practical and specific measures with committed funding to ensure reasonable confidence of achievement.

Most of the issues we identify could be addressed within the existing regime. If applied effectively, we consider that the WFD NI Regulations provide a broadly sound basis to manage and monitor the water environment. We therefore advocate retention of their fundamental, underlying structure and approach, while highlighting 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 NI Regulations

The regulations reflect an outcome-based approach to environmental law in Northern Ireland 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 the Northern Ireland Executive's draft Environment Strategy.⁵ The draft Environment Strategy will form the basis for developing a statutory 'Environmental Improvement Plan' (EIP) for Northern Ireland under the Environment Act 2021.

Implementation of the WFD NI Regulations requires the setting of binding Environmental Objectives for water bodies in 'River Basin Districts' (RBDs). Northern Ireland has three main RBDs, two of which span the border with the Republic of Ireland. For these RBDs, DAERA and its executive agency, the Northern Ireland Environment Agency (NIEA), produce RBMPs. The plans should include the Environmental Objectives that have been set and summarise the Programmes of Measures to meet them. These plans should then cascade through to decision-making and physical action to realise the intended outcomes.

Achieving the Environmental Objectives is also significant for wider Northern Ireland environmental law and policy. They underpin the proposed Strategic Environmental Outcome of 'excellent water quality' in the draft Environment Strategy for Northern Ireland. They are important, too, for other Northern Ireland Executive goals and targets.

⁵ DAERA, 'Draft Environment Strategy for Northern Ireland' (2021) <<u>www.daera-ni.gov.uk/sites/default/files/consultations/daera/</u> <u>Draft%20Environment%20Strategy.PDF</u>> accessed 10 November 2023.

These include the draft Environment Strategy's proposed Strategic Environmental Outcome of 'thriving, resilient and connected nature and wildlife'. The WFD NI Regulations additionally support adaptation to climate change and the implementation of international commitments.

DAERA is not on track to meet the Environmental Objectives

Most of Northern Ireland'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 31% of rivers and other surface water bodies currently meet the WFD NI Regulations' objectives of 'Good Ecological Status' or 'Good Ecological Potential'.⁶ Not only has there been little overall positive change in the status of water bodies in recent years, there has also been some apparent regression.

This has been an area with longstanding challenges, despite the efforts of public authorities and others over many decades to bring about improvements through legislative, policy and practical means. DAERA and others (including Northern Ireland Water, farmers and landowners) will therefore need to do more if a healthy water environment is to be achieved.

However, in the draft RBMP published by DAERA for consultation in 2021, the Environmental Objectives required under the WFD NI Regulations were missing. Instead, the draft RBMP presents an overall 2027 Working Target of achieving 70% of water bodies at Good Status by 2027.

This working target approach is different from, and does not substitute the need for, statutory Environmental Objectives set at the water body level. The available information in the draft RBMP affords little or no scrutiny as to the basis for the 2027 Working Target. Nor does it explain how it will sit alongside water body level Environmental Objectives in the final plan, its relationship with the determination of any exemptions under the regulations, or how measures referred to in the draft plan will achieve the 2027 Working Target.

What can be done to improve progress?

Successful application of the regime requires translating its objectives into tangible and effective plans and measures to manage the effects of human activities on water bodies. Our assessment is that, in addition to completing the current draft plan, this will require more specific, time-bound and certain measures to improve progress towards the regulations' Environmental Objectives and the 2027 Working Target.

More specifically, the prospects of success will be increased by addressing a number of issues that currently impede progress, including the following.

Publishing and implementing the final third cycle plan without further delay. The Covid pandemic, followed by the absence of a Northern Ireland Executive, have resulted in the delay to agreement, publication and implementation of the latest RBMP and many other plans and actions for environmental protection and improvement. This includes measures that should support implementation of the WFD NI Regulations, as well as wider initiatives such as the EIP.

⁶ Northern Ireland Environment Agency, 'Northern Ireland Water Framework Directive Statistics Report 2021' (2021) <<u>www.daera-ni.gov.uk/publications/northern-ireland-water-framework-directive-statistics-report-2021</u>> accessed 21 March 2024.

Setting specific Environmental Objectives. While DAERA's 2027 Working Target to bring 70% of water bodies to Good Status by 2027 initially appears ambitious, it is also imprecise and unclear. The current draft RBMP does not set Environmental Objectives for individual water bodies, and it is not clear how the working target will inform or affect the determination of those objectives and any exemptions.

Determining specific measures to achieve Environmental Objectives. Successful application of the regime requires tangible and effective action to secure the Environmental Objectives. However, our assessment is that the draft RBMP contains mostly high-level, generic activity that is not measurable, time-bound, or sufficiently certain or specific. The draft RBMP cannot therefore demonstrate how the 2027 Working Target, or the Environmental Objectives in the WFD NI Regulations, will be achieved. We include examples in the report that illustrate the generic nature of many of the measures, which leave it unclear what will be done, when, where, by whom, and with what expected or intended contribution towards environmental outcomes.

We note in this regard that the draft RBMP appears to accept the limitations of such a 'blanket' approach to specifying action as applied under previous plans, yet in practice it does not address this issue.

Presenting a clear investment analysis and ensuring sufficient investment in measures to achieve Environmental Objectives. There is currently no investment analysis accompanying the draft RBMP. We note that the current lack of specificity in the measures creates a barrier in this respect, underscoring the importance of ensuring that measures are sufficiently tangible. We also recognise that funding availability is a limiting factor, both in terms of allocations from Westminster and across Northern Ireland government departments and agencies. However, an effective plan needs to be supported by a clear understanding of how much funding is needed and the amounts available and committed to achieve the intended outcomes.

Addressing all of the main pressures and drivers. The determination of measures and the allocation of resources to achieve Environmental Objectives also needs to be targeted at addressing all of the main pressures and drivers relevant to those outcomes. Our view is that while pollution is a major pressure as noted in the draft RBMP, our own analysis shows that significant pressures on the water environment extend beyond this. We will be reporting on this in more detail in a separate, upcoming report.

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

Filling gaps in monitoring. There is not currently a monitoring and evaluation framework that considers progress towards the Environmental Objectives and other related 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.

Setting and meeting achievable targets and objectives

Under the WFD NI Regulations, it is DAERA's responsibility to propose Environmental Objectives for individual water bodies and Programmes of Measures to achieve them. Water-body level objectives must reflect the Environmental Objectives contained in the regulations themselves, including statutory timescales. The Environmental Objectives are, however, subject to statutory exemptions, broadly based on reasons relating to proportionate costs, natural conditions and technical feasibility.

This should enable DAERA to set objectives that are achievable within the relevant timescales, when considering the proportionality of costs, the different measures available and the natural time lag for measures to take effect. This should be accompanied by a definite plan to provide reasonable confidence of achievement of the objectives based on the specific measures identified.

DAERA has not yet done this for the third cycle of river basin management planning. As we note above, while the 2027 Working Target appears ambitious, the draft RBMP provides no evidence that this target can be achieved by 2027. Moreover, a working target does not substitute the need to set water-body level Environmental Objectives in the RBMP.

In our view, a better, more transparent approach would be to derive the projected percentage of water bodies that will achieve Good Status by 2027 from the Environmental Objectives set at the water body level, as backed by sufficient, certain measures to achieve them.

Public participation, clarity and transparency

As already noted, the draft RBMP does not contain water body-level Environmental Objectives, including any associated exemptions, while presenting mostly generic information on Programmes of Measures. This also means that, throughout the public consultation process, there has been no meaningful opportunity for the public to participate in proposals for Environmental Objectives including any exemptions, and how the measures are expected to achieve these specific outcomes.

More broadly, there is a recurring theme of lack of clarity and transparency in the draft RBMP and in some aspects of its predecessors. For example, the plans do not set out the reasons for exemptions. Such gaps undermine the ability to scrutinise the plans and what they aim to deliver.

The final RBMP should set out this missing information, including a robust justification of any exemptions and how measures will achieve Environmental Objectives set at the water body level. While not wishing to see any more delay in the completion of the plan, our view is that DAERA also needs to consider how best to engage in further public consultation to fill the earlier gaps, producing a supplementary plan if needed.

Our conclusions

Our overall assessment is that, at a headline level, implementation of the WFD NI Regulations and other measures to protect and improve the water environment have not been successful to date.

Overall, a picture emerges of a regime that involves significant technical analysis and ambitious general targets, yet lacks detail and substance in translating those analyses and targets into specific objectives, measures and delivery plans. This is largely a consequence of how the regime has been applied in practice. It also highlights the need for more robust delivery and governance mechanisms to create accountability and achieve outcomes. In our view, the latest draft RBMP, the measures it contains and the mechanisms for its 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 draft Programme of Measures is not able to meet the 2027 Working Target. A failure to achieve the 2027 Working Target would lead to a consequential failure to achieve the draft Environment Strategy's 'excellent water quality' goal and risks to other related goals including 'thriving, resilient and connected nature and wildlife'.

To maximise environmental improvements and the likelihood of meeting the 2027 Working Target, we highlight a need for DAERA to identify additional, practical and specific measures with committed funding in the final RBMP. The approved plan should set Environmental Objectives at the water body level, including justifying any exemptions, and should ensure that the there is sufficient certainty and clarity in the Programme of Measures to ensure reasonable confidence of achieving them.

Measures should be implemented with certainty and at pace. This needs stronger leadership and ownership by the Northern Ireland Executive in applying the WFD NI Regulations. It also needs to involve all the main players in a more effective way, including DAERA, the Department for Instructure (Dfl), Northern Ireland Water and the Utility Regulator, the farming sector and local councils.

Adequate governance mechanisms are also lacking, exacerbating deficiencies that impede progress. To drive delivery, there should be clarity about who is accountable, and how decisions are made and progress towards Environmental Objectives assured across the Northern Ireland Executive 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 key areas where we currently consider that the approach to implementation may not comply with the requirements of the WFD NI Regulations. These relate to: the delay in finalising the overdue RBMP; the lack of water body level Environmental Objectives in the draft RBMP; the use of the 'working target' approach and how this relates to Environmental Objectives and exemptions; how objectives or the 2027 Working Target will be achieved through the current, largely generic draft Programme of Measures; timeframes to make measures operational; the approach to the justification of exemptions in previous RBMPs; and public participation and consultation on certain aspects of the draft and previous RBMPs. The condition of some water bodies has also declined, in apparent contravention of the regulations.

We consider that these points of possible non-compliance need to be resolved as a matter of urgency, noting that several of them could be addressed in the final third cycle RBMP. To meet the requirements of the regulations, the plan needs to include Environmental Objectives for all water bodies, accompanied by a tangible Programme of Measures to provide reasonable confidence of achieving those objectives in practice. We also consider that a final plan without such content would trigger the requirement in the WFD NI Regulations for additional measures where Environmental Objectives are unlikely to be met (Regulation 22).

Our recommendations

We make 16 recommendations to the Northern Ireland Assembly, Executive and DAERA. They aim to improve the effectiveness of the WFD NI 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 include Recommendations 1 to 4 (on the need for specific Environmental Objectives supported by appropriate measures and funding to achieve them) and 14 to 15 (on governance and legal mechanisms for application of the RBMPs). We also highlight the time sensitivity of Recommendation 12 on the need for action to ensure the effective monitoring and regulation of new and emerging chemical risks. Additionally, Recommendations 6 and 8 (on exemptions and public participation) are important in completing the final third cycle plan. 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 NI Regulations

We make 10 recommendations to address the main implementation issues that we identify. The first four recommendations address the need for urgent action to determine Environmental Objectives for 2027, and to set measures to make progress towards and maximise the likelihood of achieving them. The other six recommendations apply to ongoing application of the regulations more generally.

Recommendation 1: We recommend that DAERA ensure Environmental Objectives are set for each water body in accordance with the requirements of the WFD NI Regulations, including the exemption provisions. This information should be presented in the final third cycle RBMP which should be completed and published as soon as possible given the ongoing breach of the statutory deadline.

Recommendation 2: We recommend that DAERA clarify how 'working targets' will sit alongside the Environmental Objectives in the final third cycle RBMP and ensure that the intended approach does not alter existing legally binding commitments to achieve the Environmental Objectives.

Recommendation 3: We recommend that DAERA develop a Programme of Measures for the final third cycle RBMP that contains the additional measures necessary to achieve the Environmental Objectives set in that plan, including those to be met by 2027. Programmes of Measure should be produced with specific, 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 4: In support of Recommendation 3, we recommend that DAERA and Dfl prepare and publish an economic analysis and assessment of investment requirements for the final third cycle RBMP. This should take account of any new commitments, funding mechanisms and additional measures included in the final Programmes of Measures to achieve the Environmental Objectives, including those to be met by 2027. It should set out the areas, sectors or activities to which funding needs to be directed, the sources of funding, and the levels of funding available and committed to demonstrate the adequacy of the investment to meet the Environmental Objectives in the final plan. It would also be helpful to note any additional funding which might later become available, and the extent to which any further improvements could be achieved through such additions.

Recommendation 5: In relation to the requirement to make measures operational within three years of approval, we recommend that measures in the final third cycle Programme of Measures be time-bound, and implemented accordingly, in alignment with the Environmental Objectives to which they relate 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 DAERA and the NIEA review and clarify their approach to this provision to ensure clear alignment between legal requirements, policies, funding, guidance and operational practice.

Recommendation 6: We recommend that DAERA and the NIEA present and justify all approved exemptions in the final third cycle final plan. To comply with the WFD NI Regulations, these should be presented and justified at the level of individual water bodies and be clear and transparent. We recommend that, for each exemption at the individual water body level, the information should include: (i) the specific element(s) to which it relates (as well as the overall classification); and (ii) at least an outline of the substantive justification.

Recommendation 7: We recommend that DAERA and the NIEA 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. We also suggest that DAERA and the NIEA seek to make the RBMPs (including the final third cycle plan) and supporting documents clearer, and more reader- and user-friendly, including through the provision of a non-technical summary.

Recommendation 8: For the third cycle plan specifically, we recommend that DAERA identify and implement the most appropriate steps to allow for meaningful and informed public participation in relation to proposals for water body level Environmental Objectives, including any proposed exemptions, and additional measures to achieve them. This could involve further consultation or engagement with a view to developing a supplementary plan if appropriate.

Recommendation 9: We recommend that DAERA improve the approach to public consultation on the draft plans for future cycles. This should ensure the material and proposals consulted upon support full, active and informed public consultation including in relation to water body level Environmental Objectives, any proposed exemptions, and measures to achieve those objectives.

Recommendation 10: We recommend that DAERA develop and implement an ambitious, 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 NI Regulations through to wider monitoring and evaluation of water-related goals under the draft Environment Strategy, Living With Water, and water resource and supply resilience plans.

Recommendations on the legal, governance and policy framework

We identify a further 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 11: We recommend that the Northern Ireland Executive retain the fundamental underlying structure and approach of the WFD NI 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 NI 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 12: We recommend that DAERA (working with the UK Technical Advisory Group as appropriate) determine how to approach the monitoring and regulation of new and emerging chemicals. In particular, we highlight the need for effective processes to replace the former EU 'Watch List' mechanism and for setting environmental quality standards. This should ensure the WFD NI Regulations can provide a continuing framework for addressing new and emerging threats.

Recommendation 13: We recommend that DAERA and Dfl (working with other government departments, agencies and public bodies as needed): i) clarify how the objectives, goals, targets and measures contained in the draft RBMP, the draft Environment Strategy and the key water management plans outlined at Table 5.1 of this report relate and contribute to each other for both surface water and groundwater, including chemical status; (ii) review the coherence of the RBMPs 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, to ensure that their alignment and sequencing serve to optimise outcomes.

Recommendation 14: We recommend that DAERA assess current levels of understanding of and compliance with the general duty on public authorities, including relevant government departments, to have regard to the RBMPs (Regulation 30). The assessment should prioritise public authorities with functions that are key to delivering the Environmental Objectives.

Recommendation 15: We recommend that DAERA (or Dfl where relevant) 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 14 above. We also recommend that DAERA (or Dfl where relevant) engage with public authorities concerning implementation of the guidance, prioritising those with functions that are key to delivering the Environmental Objectives. DAERA and Dfl should also adopt and apply a standardised process for WFD assessment in relation to their own decision-making and ensure effective coordination between themselves and other government departments.

Recommendation 16: We recommend that, in relation to the provisions of the WFD NI Regulations, DAERA consider: (i) strengthening the wording of the 'have regard to' duty for RBMPs; (ii) introducing a freestanding duty on all public authorities to consult with DAERA (including the NIEA) 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. DAERA should also provide more detailed information in its report describing progress on 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. Northern Ireland, 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 Northern Ireland under the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017.⁷ We refer to these regulations in this report as 'the WFD NI Regulations'.

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

- What do the WFD NI 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 NI 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 England.⁸ We have produced separate reports for each jurisdiction to be laid before Parliament and the Northern Ireland Assembly. Both reports will be published on the OEP website.

The legislation is similar, though not identical, in the two jurisdictions. Our reports therefore address a number of common issues. These include a lack of sufficiently clear, certain and targeted measures to achieve objectives under the regulations.

⁷ Statutory Rule 2017 No. 81.

⁸ Office for Environmental Protection (n 2).

1.2 The need and opportunity for action

There are two main reasons why we have chosen to look at implementation of the WFD NI 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 offers the potential for increased coherence with the wider suite of laws and policies within which the regulations operate.

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 the Northern Ireland Assembly and Executive, relevant government departments, 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 NI Regulations

This section briefly introduces the WFD NI Regulations. Chapter 2 provides more detail on the regulations, including explaining various terms (in quotation marks) that have 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 NI 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 in Northern Ireland by the Department of Agriculture, Environment and Rural Affairs (DAERA). In practice, the Northern Ireland Environment Agency (NIEA, which is an executive agency of DAERA) leads this work.

DAERA published its latest draft RBMP for consultation in March 2021.⁹ The draft RBMP¹⁰ covers the three RBDs for which DAERA is the lead authority. This is the third cycle of river basin management planning for Northern Ireland.

RBMPs should contain objectives for all water bodies and a summary of the measures to meet them.¹¹ All public bodies must have regard to the RBMPs when exercising functions that could affect the water environment.¹² The RBMPs and the measures they contain are therefore the main vehicle for achieving the regime's objectives and other outcomes that depend on them.

⁹ DAERA, 'Consultation on the Draft Third Cycle River Basin Management Plan 2021 to 2027' (n 4).

¹⁰ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (2021) <<u>www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%20</u> <u>3rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027_0.PDF</u>> accessed 6 June 2024.

¹¹ Reg 25, WFD NI Regulations.

¹² Reg 30, WFD NI Regulations.

Environmental Objectives

The WFD NI Regulations reflect an ambitious, outcome-based approach to Northern Ireland's 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 the Northern Ireland Executive's draft Environment Strategy,¹³ which is intended to provide the basis for an Environmental Improvement Plan (EIP) for Northern Ireland (see Section 1.2.4).

To this end, the WFD NI 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:

- 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' under the WFD NI 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.

Different types of water bodies have different types of objectives		Type of Water body			
		Surface water			
		Artificial or heavily modified surface water bodies	All other surface water bodies (not artificial or heavily modified)	Groundwater	
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			

¹³ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5).

Dates to meet Environmental Objectives

The WFD NI Regulations set a deadline to meet the Environmental Objectives of 22 December 2021. They allow for possible extensions to 22 December 2027¹⁴ or later dates if certain statutory tests are met.

The draft Northern Ireland RBMP proposes 'to maintain 70% of all water bodies at 'good or better' status by 2027 as a working target' (the '2027 Working Target').¹⁵ This suggests a target of achieving overall Good Status (see Table 1.1 above for what this comprises for different water body types) for 70% of all water bodies.

Our interpretation is that the 2027 Working Target does not, in practice, include Good Chemical Status in surface water bodies because of 'ubiquitous, persistent, bio-accumulative and toxic' (uPBT) chemicals. These are now found throughout the environment and will take many years to break down. However, the draft RBMP does not explicitly address this and provides no deadline for achieving Good Chemical Status in surface water bodies. It does state: '*It is widely recognised that given their persistence the levels* [of uPBTs] *present in the aquatic environment will likely remain in breach of EQS* [Environmental Quality Standard] *values for some years to come*.'¹⁶ We discuss the 2027 Working Target further in Chapter 4.

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 quantitative status of groundwater. These are the most imminent in practice and apply to most water bodies. The 2027 Working Target is also important to the Northern Ireland Executive's proposed policy goal of 'excellent water quality' in its draft Environment Strategy (see Section 1.2.4 below).

We also provide some commentary on the chemical status objectives, but 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 in Northern Ireland and England concerning bathing waters, and protected sites more generally.

1.2.2 Progress and pressures

Chapter 3 discusses the state of and pressures on the water environment in Northern Ireland. The draft RBMP states that the key pressure on Northern Ireland's water environment is nutrient pollution, from both diffuse agricultural sources and wastewater.¹⁷ In addition to pollution, our own analysis shows that habitat loss and morphological alterations are also important.

The framework underpinning the WFD NI 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 there have been some exceptions.¹⁸ There

¹⁴ Or 22 December 2033 or 22 December 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

¹⁵ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 12.

¹⁶ ibid 41.

¹⁷ ibid 13.

¹⁸ For example, there has been a statistically significant increase in soluble reactive phosphorus concentrations in rivers between 2012-2022. See Section 3.2.1.

have also been improvements. For example, the draft RBMP reports that over the period of the first plans, 2009 to 2015, the proportion of water bodies achieving Good Status increased from 28% to 37%.¹⁹ Another source reports that the number of substantiated water pollution incidents reported in Northern Ireland fell by 42% from 2012 to 2022.²⁰

Overall though, 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 been visibly poor and the cause of considerable public and ecological concern. The prominent algal blooms in Lough Neagh (likely due to excessive nutrient pollution from diffuse agricultural sources and wastewater over an extended period) are a prime example.

More generally, water pollution and other problems remain widespread, as we discuss in Chapter 3. While the WFD NI Regulations provide a framework to address these issues, there is still a long way to go to meet the Environmental Objectives.

Groundwater bodies appear to fare better than surface water, but still need improvement. The draft RBMP reports an improvement from 49 groundwater bodies at Good Status and 26 at Poor Status in 2015 (75 in total), to 63 groundwater bodies at Good Status and 12 at Poor Status in 2020.²¹ Further, the draft RBMP indicates that these apparent improvements are mainly due to changes in monitoring rather than genuine improvements in water quality.²²

The draft RBMP comments on and acknowledges these ongoing challenges. It states:²³

'Since the last River Basin Management Plans (RBMPs) were published, our water quality has not shown the improvements that were set out in 2015. In fact, our rivers and lakes are clearly showing deteriorations, whilst our coastal & transitional water bodies remain unchanged (in latest 2018 assessment). Although the groundwater classification results show an improvement in status this is mostly due to changes in monitoring data collection or changes in monitoring stations within the groundwater bodies.'

Lack of funding has been a barrier to progress. For example, the 'Long-Term Water Strategy for Northern Ireland'²⁴ (discussed further in Chapter 5) identifies significant investment requirements while also acknowledging that reductions in funding for key stakeholders, including government and Northern Ireland Water (NI Water), may have an impact on their ability to deliver some objectives of the strategy, '*at least in the short-term*'.²⁵

1.2.3 Looking forward

In Chapter 4, we look ahead to consider the likelihood of meeting the Environmental Objectives in accordance with the WFD NI Regulations. In particular, we are concerned

¹⁹ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 16–17.

²⁰ Erick Burgueño Salas, 'Water Pollution Sources in Northern Ireland 2022' (Statista, 11 October 2023) <<u>www.statista.com/</u> statistics/1395182/source-water-pollution-northern-ireland/> accessed 16 December 2023.

²¹ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 38.

²² ibid 10.

²³ ibid.

²⁴ Department for Regional Development, 'Sustainable Water A Long-Term Water Strategy for Northern Ireland (2015 – 2040)' <<u>www.infrastructure-ni.gov.uk/sites/default/files/publications/drd/sustainable-water-a-long-term-water-strategy-for-northernireland-2015-2040.PDF</u>> accessed 28 May 2024.

²⁵ ibid 1.9.

about the 2027 Working Target and the likelihood of 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 Working Target is unlikely to be met for many water bodies. It appears more likely to be missed by a large margin. A key reason for this is that the future funding for the implementation of the WFD NI Regulations is unclear and appears inadequate. While Northern Ireland has considerable budgetary pressures, the delivery of statutory objectives under the WFD NI Regulations needs to be given a sufficient level of priority and resourcing to ensure the law is complied with.

We also note in Chapter 4 that much of the information that is legally required in the RBMP is missing from the draft plan. This includes the Environmental Objectives that should be set for each water body (including any exemptions) and a Programme of Measures that can achieve them. As explained above, the draft plan adopts the 2027 Working Target but there is no information about how the 70% figure central to that target has been determined, or how water body level working targets and Environmental Objectives in the final plan will relate to each other in practice.

1.2.4 Development of the Environmental Improvement Plan

Under the Environment Act 2021, DAERA is required to develop an EIP. The due date for the plan, July 2023, was missed due to the absence of a serving Northern Ireland Executive at the time. However, DAERA has consulted on a draft Environment Strategy for Northern Ireland, which is intended to provide the basis for development of the EIP.²⁶

The draft document contains six 'Strategic Environmental Outcomes' (SEOs) for the Environment Strategy. These are not legally binding targets but are instead outcomes through which the Northern Ireland Executive intends to deliver its environmental commitments within the Programme for Government. Each SEO is underpinned by a set of 'proposals' relating to a specific environmental issue relevant to that SEO.

These proposals include the current position of the environmental issue, actions to improve the environment, targets relating to the actions and a vision or intended outcome, which will in turn contribute to the achievement of that SEO. SEO 1 is '*excellent air, water, land* & neighbourhood quality'. The second proposal underpinning this SEO relates to 'Water Resources: Quality & Quantity'. The actions and targets in this proposal include the 2027 Working Target and measures from the draft RBMP.

We further discuss how the WFD NI Regulations underpin delivery of the draft Environment Strategy in Chapter 5. As set out in this report, our analysis suggests that significant further action will be needed to achieve these outcomes.

Protecting and restoring nature and biodiversity

Progress towards Environmental Objectives under the WFD NI Regulations will be central to the delivery of wider nature targets and commitments. Protecting and improving the water environment is also critical to supporting other environmental outcomes, including those relating to nature and biodiversity.

²⁶ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5).

The draft Environment Strategy²⁷ makes reference to the Kunming-Montreal Global Biodiversity Framework (GBF),²⁸ which at the time of the consultation on the strategy was being negotiated at UK level under the Convention on Biological Diversity. Northern Ireland has an important role to play in contributing to the UK achieving all 2030 targets and all four 2050 goals under that framework.

Targets 2 and 3 of the GBF are the so-called '30 by 30' biodiversity commitments.²⁹ Target 2 is to ensure at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration by 2030.³⁰ Target 3 is to effectively protect and manage at least 30 per cent of terrestrial and inland water areas, and marine and coastal areas, by 2030.³¹ We discuss wider GBF targets in Chapter 2.

The draft Environment Strategy states that the GBF will direct the development of a new 'Biodiversity Strategy 2030' by 2022.³² This is identified as the key action to enable achievement of GBF targets. It is stated that the strategy will include accompanying targets and actions for conserving, protecting and enhancing biological diversity. There is also an action to develop and implement new legislation to support the delivery of 30 by 30 and other targets.

To date, the Biodiversity Strategy 2030 has not yet been developed. However, it is anticipated that the targets and goals in the Biodiversity Strategy 2030 (once finalised) will translate the GBF biodiversity commitments into regionally appropriate targets. It is also anticipated that the final Environment Strategy will incorporate and build on the GBF targets, including signalling the ways in which the different elements of the Environment Strategy will contribute to achieving them.

1.2.5 The potential for reform and the need for additional action

It is critical that any reforms do not result in lowering current levels of protection or lessening ambition. The Northern Ireland Executive has powers to modify, replace or revoke the WFD NI Regulations under the Retained EU Law (Revocation and Reform) Act 2023.³³ We recommend a limited review of certain aspects of the WFD NI Regulations (set out in Chapter 5). However, we acknowledge that significant divergence from EU law in this area may not be politically appealing. We also do not consider significant divergence from EU law to be necessary in this case, since we judge the fundamental underlying principles of the WFD NI Regulations to be broadly sound.

Any such reform, were it to be undertaken, 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 some possible improvements to optimise delivery.

²⁷ ibid 17.

²⁸ Convention on Biological Diversity, 'Kunming-Montreal Global Biodiversity Framework' (19 December 2022) <<u>www.cbd.int/gbf</u>> accessed 6 June 2024.

²⁹ See also: Prime Minister's Office and Defra, 'PM Commits to Protect 30% of UK Land in Boost for Biodiversity' (28 September 2020) <<u>www.gov.uk/government/news/pm-commits-to-protect-30-of-uk-land-in-boost-for-biodiversity</u>> accessed 23 November 2023.

³⁰ Convention on Biological Diversity (n 28). See: <u>www.cbd.int/gbf/targets/2</u>.

³¹ ibid. See: <u>https://www.cbd.int/gbf/targets/3</u>.

³² DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5) 46.

³³ $\,$ Ss. 14-16, Retained EU Law (Revocation and Reform) Act 2023. $\,$

Compliance with the WFD NI 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 NI Regulations. We make recommendations to address these issues.

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 current draft RBMP and previous RBMPs.

Secondly, we have interacted with the main public authorities involved in implementing the WFD NI Regulations. This involved meetings with and consideration of information from DAERA, the NIEA and Dfl.

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');³⁴
- 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');³⁵ 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').³⁶

³⁴ WSP, 'Review of the Third River Basin Management Plans in England and Northern Ireland' (2023) 853371.

³⁵ WSP, 'Comparative Approaches to River Basin Management Plans' (2023) 22062023.

³⁶ Atkins and WCA, 'Water Quality Stocktake' (2023) CRO050-02.

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

We have sought to ensure that our findings and recommendations 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 DAERA, Dfl and the Northern Ireland Executive may therefore wish to consider further.

The report is primarily a legal and practical assessment of the WFD NI 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 NI Regulations and how they are implemented. It outlines the origin of the WFD NI 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 NI Regulations operate.

Chapter 3 looks at past trends in, the current state of and emerging pressures on the water environment. We also consider in this chapter how progress in protecting and improving the water environment in Northern Ireland 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 achieve the WFD NI Regulations' Environmental Objectives and other outcomes that depend on them. These chapters also consider whether these issues can be addressed through changes in practical application or reflect limitations in the underlying law or policy.

Chapter 4 assesses the effectiveness of implementation of the WFD NI Regulations. It looks at issues such as the setting of objectives, the adequacy of measures to achieve those objectives and the determination and justification of exemptions. We explain in Chapter 4 why 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 to implementation may not comply with the requirements of the regulations.

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



Chapter 2. The WFD NI Regulations and River Basin Management Plans

Chapter 2. The WFD NI Regulations and River Basin Management Plans

This chapter presents the background to the WFD NI 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 NI 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 refer to the legislation.

2.1 Background to the WFD NI Regulations

2.1.1 Origin of the WFD NI Regulations

The WFD NI Regulations were developed to 'transpose' (to write into domestic law, in order to give effect to) the EU Water Framework Directive (WFD).³⁷ 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 Northern Ireland through the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003.³⁸ The 2017 WFD NI Regulations replaced the 2003 regulations from May 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 NI Regulations

The WFD NI Regulations continue to apply in Northern Ireland. Following the UK's exit from the EU, they acquired the status of 'retained EU law' under the European Union (Withdrawal) Act 2018.³⁹ The Retained EU Law (Revocation and Reform) Act 2023 then renamed 'retained EU law' as 'assimilated law'.⁴⁰

This renaming does not change the legal effect of the WFD NI Regulations. It does, however, mean that, until 23 June 2026, DAERA has the power under the Retained EU Law Act to modify, revoke or replace the WFD NI Regulations through new legislation with minimal scrutiny by the Northern Ireland Assembly.⁴¹

³⁷ 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.

³⁸ Statutory Rule 2003 No. 544.

³⁹ Ss. 2-4, European Union (Withdrawal) Act 2018.

⁴⁰ S. 5, Retained EU Law (Revocation and Reform) Act 2023.

⁴¹ Ss. 14-16, Retained EU Law (Revocation and Reform) Act 2023.

2.1.3 Ongoing relevance of the Water Framework Directive

The WFD NI Regulations place a general duty on DAERA (including the NIEA) and Dfl 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 NI 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,⁴² the provisions of the WFD and its daughter directives continue to be relevant to the interpretation of the WFD NI Regulations.

2.1.4 Other international and national commitments

Among other drivers, the WFD was developed to give effect to certain international obligations.⁴³ These include the Convention on the Protection and Use of Transboundary Watercourses and International Lakes⁴⁴ and the Convention for the Protection of the Marine Environment of the North-East Atlantic,⁴⁵ 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 (Section 1.2.4), two further targets are particularly relevant.

Target 7 is, by 2030, to reduce pollution risks and the negative impact of pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects. This target considers nutrients, pesticides and other hazardous chemicals. This includes reducing excess nutrients lost to the environment by at least half.⁴⁶

Target 4 is an important overarching target for the RBMPs and the EIP more broadly. It is to ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species.⁴⁷

While DAERA has powers to modify, revoke or replace the WFD NI Regulations as noted in Section 2.1.2 above, 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 coherence with the SEOs and EIP proposals in the draft Environment Strategy, or their equivalent once the strategy has been finalised.

⁴² Sch. 5, WFD NI Regulations.

 $^{43 \}quad \text{This is reflected in the preamble to the WFD. See for example recitals 21 and 35.}$

^{44 &#}x27;Convention on the Protection and Use of Transboundary Watercourses and International Lakes' <<u>https://unece.org/environment-policy/water/about-the-convention/introduction</u>> accessed 23 November 2023.

^{45 &#}x27;Convention for the Protection of the Marine Environment of the North-East Atlantic' (1992) <<u>www.ospar.org/convention</u>> accessed 23 November 2023.

⁴⁶ Convention on Biological Diversity (n 28). See: <u>www.cbd.int/gbf/targets/7</u>.

⁴⁷ ibid. See: <u>www.cbd.int/gbf/targets/4</u>.
2.2 Provisions of the WFD NI Regulations

2.2.1 Overall framework

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

Key provisions of the WFD NI 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 use⁴⁸
- (ii) establishing and keeping under review monitoring programmes to ensure the state of the water environment is known⁴⁹
- (iii) using evidence gathered through monitoring to classify water body status⁵⁰
- (iv) using evidence from assessments and monitoring to set Environmental Objectives and establish Programmes of Measures to achieve them⁵¹
- (v) carrying out six-yearly reviews of the assessments, Environmental Objectives and Programmes of Measures⁵²
- (vi) public participation requirements to encourage active involvement of all interested parties.⁵³

Most of this information must be recorded in the RBMPs. In this way, the WFD NI 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

DAERA has overall accountability for ensuring the WFD NI Regulations are implemented, and objectives met. As an executive agency of DAERA, the NIEA is legally part of the department and therefore the WFD NI Regulations do not refer to the agency separately. However, in practice, the NIEA (as part of the DAERA legal entity) carries out many key delivery functions under the WFD NI Regulations including proposing objectives and Programmes of Measures, and reviewing and preparing proposals for updated RBMPs.

The WFD NI Regulations also place duties and responsibilities on Dfl, including to prepare economic analyses and water pricing policies. As referred to above, the WFD NI Regulations

 $^{48 \}quad \text{Regs 5 and 7, WFD NI Regulations.}$

⁴⁹ Reg 11, WFD NI Regulations.

⁵⁰ Reg 6, WFD NI Regulations.

⁵¹ Reg 12, WFD NI Regulations.

⁵² Regs 5, 7 and 12(3), WFD NI Regulations.

⁵³ Regs 12(2)(b) and 27, WFD NI Regulations.

additionally impose a general duty on both DAERA and Dfl to carry out certain functions relevant to water status 'so as to secure compliance with the requirements of' the WFD and its 'daughter directives'.⁵⁴ Examples of functions that are relevant would be decisions made by DAERA (in practice the NIEA) on whether to grant, vary or revoke environmental permits or water abstraction and impoundment licences.

DAERA must also exercise its relevant functions in relation to each RBD to best secure that the requirements of the WFD and its 'daughter directives' for achieving Environmental Objectives, in particular Programmes of Measures, are coordinated for the whole of that RBD.⁵⁵ This includes consulting the relevant competent authority in the Republic of Ireland to ensure coordination of the Programme of Measures for the whole of each international RBD. As referred to in Section 2.3.1, Northern Ireland has one RBD wholly within Northern Ireland and two international RBDs⁵⁶ where Northern Ireland leads on drafting the relevant RBMP.

More broadly, all 'public bodies' including DAERA (which includes the NIEA) and DfI (which includes DfI Roads, DfI Planning and DfI Rivers) must 'have regard' to the relevant RBMP in exercising their functions so far as affecting the RBD concerned.⁵⁷ This applies to any public body as defined in the WFD NI Regulations. These will include, for example, government departments, local councils, NI Water and the Utility Regulator of Northern Ireland (UREGNI).

DAERA may issue guidance to any public body on the implementation of the WFD. Public bodies must have regard to any such guidance.⁵⁸ DAERA has not issued any such statutory guidance to date.

2.2.3 Water body classification

DAERA (in practice the NIEA) must classify water bodies in accordance with an approach set out in the WFD.⁵⁹ 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.

⁵⁴ Reg 3(1), WFD NI Regulations. This is an example of where the WFD NI Regulations make direct reference to the WFD (i.e. the directive).

⁵⁵ Reg 3(4), WFD NI Regulations. This is another example of where the WFD NI Regulations make direct reference to the WFD (i.e. the directive).

⁵⁶ These are RBDs that lie partly in Northern Ireland and partly in the Republic of Ireland.

⁵⁷ Reg 30, WFD NI Regulations.

⁵⁸ Reg 33, WFD NI Regulations.

⁵⁹ Reg 6, WFD NI Regulations. This is another example of where the WFD NI Regulations make direct reference to the WFD (i.e. the directive).





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).⁶¹

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 discuss how this works in real cases in Chapter 3 (see Section 3.2.3) and discuss its merits in Chapter 4 (Section 4.7).

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.

Chemical status for a surface water body 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.

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 NI Regulations

The 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).⁶²

⁶¹ In Figure 2.1, '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.

⁶² Reg 13, WFD NI 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. Subject to the scope for exemptions as outlined below, the Good Status Objective should have been met by 22 December 2021 (or by 22 December 2027 for Good Chemical Status in relation to certain 'priority substances' in surface water).

As we outline in Chapter 1 (Section 1.2.1), the regulations allow for possible extensions to achieve the Environmental Objectives by 22 December 2027,⁶³ or later dates if certain statutory tests are met. The OEP interprets the obligation to achieve the Environmental Objectives by 22 December 2027⁶⁴ 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,⁶⁵ Special Protection Areas,⁶⁶ drinking water protected areas⁶⁷ and shellfish waters.⁶⁸ 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 NI Regulations plus any additional standards required by any assimilated law under which the area is protected. Under the WFD NI 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. DAERA (in practice the NIEA) is responsible for proposing Environmental Objectives at the water body level, which are approved by the Northern Ireland Executive.

⁶³ 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 (or 22 December 2033 or 22 December 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations). As the WFD NI Regulations were adopted in 2017 (replacing the earlier regulations from 2003), they reflect the extended 2021 compliance date rather than the original 2015 date.

⁶⁴ Or 22 December 2033 or 22 December 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

⁶⁵ Special Areas of Conservation (known as 'SACs) are high quality conservation sites protected under the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995, Statutory Rule 1995 No. 380.

⁶⁶ Special Protection Areas (known as 'SPAs') are protected areas for birds under the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995.

⁶⁷ Designated under Reg 8, WFD NI Regulations.

⁶⁸ Designated under Reg 9, WFD NI Regulations.

Proposing 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 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.

2.2.6 Exemptions for extended deadlines and less stringent objectives

The requirement to achieve the Environmental Objectives in the WFD NI Regulations is subject to possible 'exemptions'.

Under the '**Extended Deadline Exemption**'⁶⁹ the date specified in the regulations to reach the Environmental Objectives, 22 December 2021,⁷⁰ may be extended. The latest permissible date is 22 December 2027.⁷¹ 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).⁷²

Where the Extended Deadline Exemption is applied, the 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'⁷³ 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 NI Regulations. This could mean, for example, aiming for a condition that is less than Good Ecological Status for a surface water body in respect of particular

⁶⁹ Reg 16, WFD NI Regulations.

⁷⁰ 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 NI Regulations only reflected the provision to meet the extended 2021 deadline, rather than the 2015 date which had already passed.

⁷¹ Or 22 December 2033 or 22 December 2039 for certain priority substances in relation to Good Chemical Status for surface water.

⁷² Document endorsed by EU Water Directors, 'Natural Conditions in Relation to WFD Exemptions' (2017) <<u>https://circabc.europa.eu/sd/a/49b021b3-5d8e-4b4d-946d-4754d1ae0573/NaturalConditionsinrelationtoWFDexemptions.pdf</u>> accessed 16 November 2023.

⁷³ Reg 17, WFD NI Regulations.

elements. Where this exemption is applied, each subsequent six-yearly review must include consideration of whether a less stringent objective should continue to be set.⁷⁴

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 discuss the practical application of exemptions 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 NI 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.

Instances where failure to meet Environmental Objectives is not a breach

Firstly, the WFD NI Regulations allow for a temporary deterioration in the status of a water body in certain circumstances. ⁷⁵ 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,⁷⁶ and
- A failure to prevent deterioration of surface water from 'high' to 'good' status which results from new sustainable development activities.⁷⁷

2.2.8 Programmes of Measures in River Basin Management Plans

The WFD NI Regulations require DAERA (in practice the NIEA) to prepare proposals for a 'Programme of Measures' to achieve the Environmental Objectives. DAERA (in practice the NIEA) must review and update the Environmental Objectives and Programmes of Measures every six years. Any new or revised measures must be made operational within three years of being updated.⁷⁸

⁷⁴ Reg 17(7), WFD NI Regulations.

⁷⁵ Reg 18, WFD NI Regulations.

⁷⁶ Reg 19(1), WFD NI Regulations.

⁷⁷ Reg 19(2), WFD NI Regulations.

⁷⁸ Reg 12, WFD NI Regulations.

Each RBMP must include a summary of the Programme of Measures, including the ways in which the Environmental Objectives are to be achieved.⁷⁹ The WFD NI Regulations also set out various requirements concerning public participation and consultation including in respect of proposals for Environmental Objectives and Programmes of Measures.⁸⁰

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. DAERA (in practice the NIEA) must also investigate the causes of any possible failure to achieve Environmental Objectives and, as appropriate, examine and review any relevant permits and authorisations.⁸¹

The WFD NI Regulations also empower DAERA to prepare 'supplementary plans' for the purposes of supplementing the RBMPs.⁸² 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 regulations 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 NI Regulations only apply up to 2027, with no plans or objectives thereafter. However, this is not the case. The WFD NI Regulations will have ongoing application unless and until they are changed. They will require updated RBMPs every six years,⁸³ with continuing obligations to prevent deterioration, review exemptions and update measures to achieve objectives.

2.3 Implementation of the WFD NI Regulations

2.3.1 River Basin Districts and water bodies

Northern Ireland has three main RBDs. These are the 'North Western', 'Neagh Bann' and 'North Eastern' RBDs. The North Eastern RBD is entirely in Northern Ireland. The other two RBDs span the border with the Republic of Ireland.⁸⁴ These three RBDs contain 496 surface water bodies (450 river water bodies, 21 lake water bodies and 25 transitional and coastal water bodies) and 75 groundwater bodies in Northern Ireland. A small part of the Shannon RBD lies within Northern Ireland, but this RBMP is prepared by the Irish government.

⁷⁹ Reg 25(1)(b), WFD NI Regulations and Annex VII, para. A.7. WFD.

⁸⁰ Reg 12(2), WFD NI Regulations.

⁸¹ Reg 22, WFD NI Regulations.

⁸² Reg 29, WFD NI Regulations.

⁸³ Reg 28(4), WFD NI Regulations.

⁸⁴ FWR Information Centre, 'River Basin Districts' <<u>https://fwrinformationcentre.co.uk/html/river-basin-districts1.html</u>> accessed 13 November 2023.

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 NI 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 NI Regulations by December 2021. This was delayed due to the Covid pandemic and the absence of the Northern Ireland Executive.

In contrast with earlier cycles of implementation, where there was one RBMP for each RBD, DAERA is now moving to the production of a single RBMP covering all three RBDs. DAERA consulted on a draft RBMP in March 2021.⁸⁵ The final RBMP required under the WFD NI Regulations is still outstanding at the time of this report.

2.3.3 Contents of the draft third cycle River Basin Management Plan

The draft third cycle RBMP was published for consultation as a single PDF document.⁸⁶ After a general introduction, it includes the following sections:

- a. summary statistics on the status of water bodies
- b. information on changes and updates since the second cycle RBMPs
- c. individual water body classification results and maps for each RBD
- d. information concerning protected areas
- e. information on pressures based on the 'source-pathway-receptor' model
- f. general proposals (not water body specific) for objectives and 'working targets' in the third cycle RBMP
- g. information on delivery of the second cycle Programmes of Measures and ongoing implementation
- h. a draft 2021-2027 Programme of Measures for the third cycle RBMP.

DAERA published a number of technical supporting documents, which it describes as 'underpinning' the draft plan.⁸⁷ DAERA also provided a link to the NIEA's 'Catchment Data Map Viewer' on the consultation page.⁸⁸ This is an online source of searchable maps and

⁸⁵ DAERA, 'Consultation on the Draft Third Cycle River Basin Management Plan 2021 to 2027' (n 4).

⁸⁶ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10).

⁸⁷ DAERA, 'Supporting Documents for the Draft 3rd Cycle River Basin Management Plan' (31 March 2021) <<u>www.daera-ni.gov.uk/</u> publications/supporting-documents-draft-3rd-cycle-river-basin-management-plan> accessed 13 November 2023.

⁸⁸ DAERA, 'NIEA Catchment Data Map Viewer' <<u>https://gis.daera-ni.gov.uk/arcgis/apps/webappviewer/index.</u> <u>html?id=16fddc459bd04d64b9e8f084f3a8e14a</u>> accessed 1 February 2024.

information covering water bodies and their statuses and objectives in Northern Ireland. DAERA has also described the map viewer as 'underpinning' the draft plan.

The draft RBMP does not include proposals for Environmental Objectives or set out information about exemptions. DAERA has told us in this project that: '*The final RBMP will provide environmental objectives and any exemptions applied at water body level.* As this information will be part of the supporting documents and map viewers supporting the final plan it could not be published prior to the final plan obtaining Executive approval.'

However, the WFD NI Regulations require consultation on the proposed Environmental Objectives and Programme of Measures, as we discuss in Chapter 4. The Northern Ireland Executive was operational in April 2021 when the draft plan was consulted upon and therefore it is not clear to us why the Environmental Objectives or exemptions were not included in the draft plan or supporting documents at this time.

2.3.4 Economic and cost analyses

Under the WFD NI Regulations, proposals for Environmental Objectives and Programmes of Measures must take into account the analyses carried out to characterise the RBD and an economic analysis of water use.⁸⁹ DAERA is responsible for carrying out the economic analysis of water use in RBDs. As with other provisions of the WFD NI Regulations, this must be reviewed and, where appropriate, updated every six years. The most recent review was due in December 2019.⁹⁰

Additionally, DAERA and Dfl 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.⁹¹ The economic analysis must be made accessible to the public through publication on DAERA's official website and at its principal offices.⁹²

The draft third cycle RBMP includes a section on 'economic assessment'.⁹³ This is primarily concerned with setting out the existing funding and charging mechanisms that operate in Northern Ireland in relation to the water environment. However, it is unclear if this is intended to be one and the same as the 'economic analysis' required to be produced by DAERA under the WFD NI Regulations.⁹⁴

The draft plan states that 'the Economic Assessment Report (Article 5) will be updated for the final RBMP'.⁹⁵ In the context of this project, DAERA has told the OEP that it has prepared and intends to publish its 'Economic Analysis of Water Use' as well as an 'Economic Analysis of the Programme of Measures' as supporting documents with the final third cycle RBMP. We discuss this further in Chapter 4 (Section 4.3.2).

92 Reg 31(2), WFD NI Regulations.

⁸⁹ Reg 12(2), WFD NI Regulations.

⁹⁰ Reg 7, WFD NI Regulations.

⁹¹ Reg 23, WFD NI Regulations.

⁹³ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) s 1.6.

⁹⁴ Reg 7, WFD NI Regulations.

⁹⁵ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 27. The reference to Article 5 relates to Article 5 of the WFD.

2.3.5 The Pickering Judgment

In undertaking this project, we have also looked at relevant case law concerning the WFD NI Regulations. 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 for the Environment, Food and Rural Affairs determined in the High Court in England.⁹⁶ We refer to this where appropriate in Chapter 4. The case focused on the Programme of Measures to achieve the Environmental Objectives for a particular surface water body in North Yorkshire, England, the Upper Costa Beck (UCB).

Northern Ireland courts are not bound by English judgments. However, given the similarities between the legal regimes in England and Northern Ireland, this case is likely to be viewed as persuasive.

The decision under challenge was the Secretary of State's approval of the Humber RBMP in England, 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.

The issues that *Pickering* raises are equally applicable in Northern Ireland. As we discuss in Chapter 4, the case highlights the need for DAERA (and the NIEA) to consider what Programmes of Measures are needed to achieve the Environmental Objectives at the water body level.

2.4 The wider legislative and policy framework

The WFD NI 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.

We further explore the implementation of the WFD NI Regulations within the wider legal and policy landscape in Chapter 5 of this report.

2.4.1 Relevant functions

The WFD NI Regulations require DAERA and Dfl 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 NI Regulations, as well as those in other legal instruments listed in Schedule 2 of the WFD NI Regulations.⁹⁷

Schedule 2 of the WFD NI 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.

⁹⁶ Pickering Fishery Association v Secretary of State for Environment, Food and Rural Affairs [2023] EWHC 2918 (Admin).

⁹⁷ Reg 3 and Sch. 2, WFD NI Regulations.

2.4.2 Other regimes concerning water

The RBMPs produced under the WFD NI 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 NI Regulations with the regulation of the water and sewerage industries. In relation to this topic, both NI Water and UREGNI have the status of 'public bodies' under the WFD NI Regulations (see Section 2.2.2 above). However, the WFD NI Regulations do not refer to them expressly, other than in identifying them among certain other bodies with whom DAERA must consult in developing the RBMPs.⁹⁸ As such, the WFD NI Regulations do not list specific responsibilities or functions applying to UREGNI or NI Water, beyond the general duty of all public bodies to have regard to the RBMPs where relevant.

NI Water is a publicly funded, regulated utility. Every six years, UREGNI carries out a regulatory process known as 'Price Control'. This determines the levels of commercial bills, capital investment and company performance during the control period. During this process, NI Water submits a business plan to UREGNI. This includes actions needed to meet obligations under the WFD NI Regulations. DAERA and Dfl provide advice on this during the Price Control process. NI Water also produces statutory Water Resource and Supply Resilience Plans.⁹⁹

Separately, Dfl has produced a water policy paper, 'Sustainable Water – A Long-Term Water Strategy for Northern Ireland', which was endorsed by the Northern Ireland Executive and published in March 2016.¹⁰⁰ This water policy paper is intended to deliver a more joined-up approach for the whole of the water sector. Dfl also leads on producing other plans including Strategic Drainage Infrastructure Plans and Flood Risk Management Plans.

We discuss the interaction between these different plans and their contributions to achieving the WFD NI Regulations' Environmental Objectives in Chapter 5.

2.5 Other reviews

In contrast with activity in England, where there have been prominent reviews of water pollution in Parliament,¹⁰¹ equivalent activity in Northern Ireland has been limited in recent years. The Northern Ireland Assembly did, however, commission a review of river pollution in Northern Ireland which was published in 2016.¹⁰² While the publication is somewhat dated, the issues it raised remain noteworthy and relevant.

In particular, the report noted that effective pollution management (pollution prevention, monitoring, response and enforcement) is underpinned by effective implementation of the WFD. It also highlighted a need to investigate further approaches to addressing the ongoing problem of diffuse source pollution, particularly rural diffuse pollution.

⁹⁸ Reg 27(6), WFD NI Regulations.

⁹⁹ NI Water, 'Water Resource and Supply Resilience Plan' <<u>www.niwater.com/sitefiles/resources/pdf/2020/wrm/waterresourcesupply</u> resilienceplan-mainreport.pdf> accessed 24 April 2024.

¹⁰⁰ Department for Regional Development (n 24). Note that the document was published by the former Department for Regional Development which was replaced by DfI in May 2016.

¹⁰¹ Water Quality in Rivers, Environmental Audit Committee 13 January 2022 <u>https://publications.parliament.uk/pa/cm5802/cmselect/</u> <u>cmenvaud/74/report.html</u>

¹⁰² Suzie Cave and Des McKibbin, 'River Pollution in Northern Ireland: An Overview of Causes and Monitoring Systems, with Examples of Preventative Measures' (Northern Ireland Assembly Research and Information Service 2016) Research Paper 20/16 <<u>www.niassembly.gov.uk/globalassets/documents/raise/publications/2016/environment/2016.pdf</u>>.

Separately, the Northern Ireland Audit office published a report in March 2024 detailing water quality in Northern Ireland's rivers and lakes.¹⁰³ The report examined the work carried out by DAERA and the NIEA, focussing on three main points: meeting regulatory requirements, managing the impacts of agricultural practices and the oversight of NI Water.¹⁰⁴

The report presented four recommendations, including addressing the long-term prevalence of pollution from agricultural practices and considering ways in which the effectiveness of the NIEA's regulatory, inspection and preventative work can be enhanced in relation to NI Water.

104 ibid 15.

¹⁰³ Northern Ireland Audit Office, 'Water Quality in Northern Ireland's Lakes and Rivers' (2024) <<u>www.niauditoffice.gov.uk/</u> publications/water-quality-northern-irelands-lakes-and-rivers> accessed 6 June 2024.

Chapter 3. The water environment in Northern Ireland

Chapter 3. The water environment in Northern Ireland

3.1 Introduction

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

The chapter considers assessment procedures and evidence from the draft RBMP, as well as wider national and international evidence sources. It compares progress made in Northern Ireland on achieving outcomes under the WFD NI 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 the Northern Ireland Executive, DAERA and the NIEA, as well as other public authorities, 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 WFD NI Regulations 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 NI 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 NI Regulations are not being achieved.
- The draft RBMP highlights nutrient pollution as the major pressure constraining water bodies from reaching their objectives.
- Our own analysis, however, shows that whilst nutrient pollution is important, other pressures, including habitat loss and morphological alterations are also significant.

3.2.1 The changing state of the water environment

There have been improvements in Northern Ireland's water quality in recent decades, particularly since the enactment in 1972 of legislation¹⁰⁵ to regulate discharges to Northern Ireland's water bodies. Historic improvements have also been driven by the implementation of regulations between 1996 and 2007 made to transpose the EU Nitrates Directive¹⁰⁶ and the EU Urban Waste Water Treatment Directive,¹⁰⁷ which pre-date implementation of the EU WFD. Measures required by the Nitrates Directive and the Urban Waste Water Treatment Directive and the Urban Waste Water Treatment Directive and the Urban Waste Water Treatment Directive are now integrated with the Programmes of Measures required under the WFD NI Regulations.

However, improvements have slowed or largely stalled since the first cycle (2009-2015) RBMPs. The draft third cycle RBMP acknowledges this situation and the deterioration in the condition of some water bodies. It also states that it is highly unlikely that Northern Ireland will achieve Good Status in all water bodies by 2027.¹⁰⁸

In addition, while there have been some improvements in water quality, as shown in the available data not all elements are displaying improving or stable trends. This is illustrated in Figure 3.1 below which shows levels of a major polluter, phosphorus, in Northern Ireland rivers over two decades since 2004. Levels almost halved in the first decade, only to increase by 2022 to levels not observed since 2006, before then dropping some way back again.

¹⁰⁵ The Water (Northern Ireland) Order 1999, Statutory Rule 1999 No. 662, which repealed and replaced the Water Act (Northern Ireland) 1972.

¹⁰⁶ Currently the Nitrates Action Programme Regulations (Northern Ireland) 2019, Statutory Rule 2019 No. 81. The Directive was originally transposed into Northern Ireland legislation by the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 1996, Statutory Rule 1996 No. 217 and the Action Programme for Nitrate Vulnerable Zones Regulations (Northern Ireland) 1999, Statutory Rule 1999 No. 156

¹⁰⁷ The Urban Waste Water Treatment Regulations (Northern Ireland) 2007, Statutory Rule 2007 No. 187.

¹⁰⁸ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 96.





3.2.2 The results of water body classifications

The WFD NI 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.

The most current public classifications of water bodies¹¹⁰ indicate that there has been little overall improvement since 2015. Some 37% of all water bodies were at 'good or better' status in 2015 compared to 38% in the latest assessments (excluding chemical status, as the figures for 2015 and 2020 are not comparable due to the inclusion of uPBTs in 2020).

These results are far from achieving either the Environmental Objectives in the WFD NI Regulations or the 2027 Working Target proposed in the draft RBMP, even allowing for exemptions (see Section 4.2). They are also not yet close to meeting the excellent water quality policy goal in the draft Environmental Strategy.

The picture varies for different types of water bodies. From the latest available figures, 31% of surface water bodies met the Good Ecological Status or Potential objectives in 2021 while the remaining 69% did not. No surface water bodies met the Good Chemical Status objective following the introduction of requirements to monitor for and assess levels of

¹⁰⁹ Northern Ireland Environment Agency and Northern Ireland Statistics and Research Agency, 'Northern Ireland Environmental Statistics Report' (2024) 29 <<u>www.daera-ni.gov.uk/sites/default/files/publications/daera/NI%20Environmental%20Statistics%20</u> <u>Report%202024_0.pdf</u>> accessed 13 June 2024.

¹¹⁰ Northern Ireland Environment Agency, 'Northern Ireland Water Framework Directive Statistics Report 2021' (n 6).

uPBTs. Groundwater bodies fare better, with 71% at Good Chemical Status and 95% at Good Quantitative Status in 2021.¹¹¹

Not only has there been little overall improvement in the status of water bodies, there has also been some regression. For example, between the second and draft third cycle RBMPs, while the overall classification of 37 river water bodies improved, 52 reportedly deteriorated.¹¹² As a result, the 31% of surface water bodies meeting the objective of Good Ecological Status or Potential in 2021 represented a 1% fall from the corresponding figure of 32% in 2015. This is despite the WFD NI Regulations' 'No Deterioration Objective' described in Chapter 2.

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

Other studies also provide evidence in support of the challenges in the water environment. For example, Atlantic salmon populations have shown a sharp decline.¹¹³ Salmon are often viewed as a keystone aquatic species. Their 'recruitment' levels (the survival of young, small fish to older, larger salmon), disease, water quality, barriers to migration and the impact of invasive species have been highlighted as particular problems, alongside wider life cycle pressures and climate change, all affecting survival including prey availability and increased predation.

3.2.3 Looking beyond the headline figures

The figures and findings outlined above suggest that the implementation of the WFD NI 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. This is because the headline figures alone do not show the complete picture of the state of the water environment.

If only the headline figures are used, the 'one-out, all-out' principle (described in Section 2.2.3) 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 of the individual input tests as well as the overall results. For example, from the 2015 data which showed that 37% of water bodies were then at Good Status,¹¹⁴ a further 19% (85 out of 450) of Northern Ireland's river water bodies were failing to achieve Good Status based on only one element not meeting the applicable standard.¹¹⁵

This 'one-out, all-out' principle is additionally affected by the combination of chemical and ecological status as highlighted by examples in the box below.

¹¹¹ ibid.

¹¹² Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 31.

¹¹³ North Atlantic Salmon Conservation Organisation, 'The State of Wild North Atlantic Salmon' <<u>https://nasco.int/atlantic-salmon/</u> state-of-salmon/> accessed 6 June 2024.

¹¹⁴ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 75.

¹¹⁵ ibid 109.

Examples of water body classifications extracted from the 2020 data in the NIEA Catchment Data Map Viewer

Lower Lough Erne at Kesh, Co. Fermanagh, is classified with an overall status of 'Poor', and while the ecological status is also Poor (which dictates the overall classification) the chemical status is 'Moderate'.

In addition, Castle Hume Lough, also in Co. Fermanagh, is classified with an overall status of 'Moderate'. Its ecological status is Moderate while its chemical status is 'High'.

These are examples of the effect of the 'one-out, all-out' rule (excluding the consideration of uPBTs) affecting the overall classification.

In addition, with regard to chemical status, all surface water bodies are currently classified as failing to achieve Good Chemical Status. This is a large change in classification compared with 2015 when 52% were at Good Chemical Status. This change is mostly because of the presence of uPBTs. It reflects the fact that new analyses for uPBTs were included for the 2018 chemical classifications, as well as new standards, improved techniques and methods. If uPBT assessments were excluded from the 2018 results, 5% of surface water bodies would fail the Good Chemical Status test and 91% would pass, with no data available for 4%.¹¹⁶

The NIEA presents three versions of chemical status in its statistics: excluding both uPBT substances and cypermethrin (an insecticide); excluding uPBT substances but including cypermethrin; and including uPBT substances and cypermethrin.¹¹⁷ Whilst some stakeholders in this project have expressed reservations about presenting three values, the data show clearly that uPBTs are ubiquitous and currently result in a blanket failure to reach Good Chemical Status in surface water bodies. We agree that there is value in seeing the data with uPBTs excluded, as then other chemical failures become more separately visible. This can support opportunities to address those issues caused by chemicals other than uPBTs and cypermethrin, which may be more rectifiable over a shorter time frame.

3.2.4 Major pressures on the water environment

Despite the mixed picture on progress in improving the water environment, it is clear that there are still major pressures to tackle. The draft third cycle RBMP indicates that nutrients are the main pressure on the water environment, coming primarily from agricultural activities and sewage-related problems.¹¹⁸ Specifically, it states that: *'Nutrient pressures, either in the form of soluble reactive phosphorus, dissolved inorganic nitrogen or nitrate are the biggest reason why water bodies have not achieved good status.*^{'119}

¹¹⁶ Northern Ireland Environment Agency, 'Northern Ireland Water Framework Directive Statistics Report 2021' (n 6) 12.

¹¹⁷ ibid 6.

¹¹⁸ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) ch 6.

¹¹⁹ ibid 90–91.

Drivers and pressures affecting biodiversity

The OEP is carrying out a separate project looking at the pressures affecting biodiversity in Northern Ireland. DAERA maintains lists of priority species¹²⁰ and habitats¹²¹ which form the basis for legislative and policy actions in this area. Our analysis is centred on terrestrial and freshwater biodiversity. It has identified pressures on 478 priority species and 34 priority habitats using publicly available evidence.

A full description of the methodology, analysis and findings will be published in a separate OEP report. However, the analysis suggests that the top three categories of pressures (based on the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) pressure categories) affecting freshwater priority species in Northern Ireland are 'Land-use change', 'Pollution', and 'Natural resource use and exploitation'.

In our analysis, each of the five IPBES pressures has been dis-aggregated into sub-pressures which we have defined. The analysis suggests that multiple forms of habitat loss, hydro-morphological changes and land drainage are important Land-use change pressures. Recreation, tourism and sporting activities create a key pressure within the Natural resource use and exploitation category. Agriculture is also a notable pressure in the Land-use change and Pollution categories.

In summary, therefore, while pollution is a major pressure as noted in the draft RBMP, our own analysis shows that significant pressures on the water environment extend beyond this.

Separate evidence suggests that the pressures arising specifically from water pollution incidents also come mainly from agriculture and rural land, domestic discharges, industrial discharges and wastewater. This is highlighted in Figure 3.2. Note this figure only shows reported pollution incidents rather than wider pollution discharges or non-pollutant based pressures. Nevertheless, it is illustrative of the main acute sources of pollution pressures on the water environment. The main pressures overall are chronic in nature and stem from agriculture and wastewater treatment nutrient inputs.

¹²⁰ DAERA, 'Northern Ireland Priority Species' <<u>www.daera-ni.gov.uk/articles/northern-ireland-priority-species</u>> accessed 6 June 2024.

¹²¹ DAERA, 'Northern Ireland Priority Habitat Guides' <<u>www.daera-ni.gov.uk/articles/northern-ireland-priority-habitat-guides</u>> accessed 6 June 2024.



Figure 3.2. Sources of water pollution incidents 2005 to 2023 (Source: DAERA, 2023)¹²²

3.3 How Northern Ireland compares with other jurisdictions and nations

Many of the problems faced in Northern Ireland and the UK are not unique. A recent pan-European study¹²³ 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 Northern Ireland and England with those in other UK administrations, other European countries and selected jurisdictions in other parts of the world.¹²⁴

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

Key facts:

- In the UK, Northern Ireland has the second lowest proportion of surface water bodies at Good Ecological Status or better (31%). England has by far the lowest proportion (16%), while Wales (46%) and Scotland (54%) do better.
- Northern Ireland has the same proportion of groundwater bodies at Good Quantitative Status as Scotland (95%), while all groundwater bodies in Wales (100%) are at Good Quantitative Status. England has the lowest percentage (73%).
- Differences in pressures and physical factors will have an impact on these results.

¹²² Northern Ireland Environment Agency and Northern Ireland Statistics and Research Agency (n 121).

¹²³ Peter Haase and others, 'The Recovery of European Freshwater Biodiversity Has Come to a Halt' (2023) 620 Nature 582.124 WSP (n 35).

- 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 EU countries with broadly similar river systems, physical geography and pressures from agriculture, urbanisation and industrialisation. It exceeds that of nine EU member states.
- The UK figures combine those in England, Northern Ireland, Scotland and Wales. However, the figure for Northern Ireland is very similar to the UK average. It exceeds that reported for eight EU member states in 2015 and is similar to the outcomes reported for Sweden, Poland and Denmark.

3.3.1 Comparison across UK jurisdictions

We have compared the status of water bodies in Northern Ireland, England, Wales and Scotland from the third cycle RBMPs.¹²⁵

Figure 3.3 shows the most recently reported ecological status of surface water bodies for each administration. Northern Ireland, England and Wales 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 as 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).

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

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, Northern Ireland's overall population density is significantly lower than England's, similar to that in Wales and higher than the figure in Scotland. Population density will affect 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.¹²⁶

In this context, Northern Ireland is not necessarily doing things worse or better 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 in Northern

¹²⁵ ibid.

¹²⁶ ibid 93–134.

Ireland is considerably worse than in Scotland or Wales, though better than in England. The quantitative status of Northern Ireland's groundwater bodies is relatively better than in England, being at or close to the high levels of Good Quantitative Status seen in Scotland and Wales.

With regard to chemical status, Northern Ireland, like Scotland, has reported an increase in the number of groundwater bodies achieving Good Chemical Status. The Northern Ireland figure stood at 51 of 75 groundwater bodies (68%) achieving Good Chemical Status in 2015. This had increased to 53 (71%) in 2021.¹²⁷ This improvement in Northern Ireland groundwater may be partially the result of changes in monitoring data collection or changes in monitoring stations within the groundwater bodies.¹²⁸

Wales and England have both reported a decrease in groundwater bodies achieving Good Chemical Status since 2015. However, each administration has applied a slightly different approach to chemical classification as set out in the comparative analysis report¹²⁹ making direct comparisons difficult.



Figure 3.3. Ecological classifications in all surface water bodies (percentages) in 2019 (Source: WSP, 2023)¹³⁰

- 129 WSP (n 34).
- 130 WSP (n 35).

¹²⁷ Northern Ireland Environment Agency, 'Northern Ireland Water Framework Directive Statistics Report 2021' (n 6) 38.

¹²⁸ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 10.

3.3.2 Comparison with EU member states

The comparative analysis also compared 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 this element of the research. This means that the analysis primarily utilised information from the second cycle RBMPs to understand the position in EU member states. While some further plans may since have been published, around half of the EU member states still had not completed or fully reported their third cycle plans by October 2023 when this analysis was undertaken.¹³¹

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.¹³²

Figure 3.4. Percentage of water bodies at Good (or high) Ecological Status or Potential across European countries in second cycle RBMPs, compared against third cycle classifications in the UK



Figure 3.4 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 3.4) and the proportion of land covered by agriculture and urban areas (the percentage figures at the top of Figure 3.4) are also presented. These provide an indicative scale of pressures in each nation.

132 WSP (n 35).

¹³¹ European Commission, 'Water Framework Directive' (11 December 2023) <<u>https://environment.ec.europa.eu/topics/water/water-</u> <u>framework-directive_en</u>> accessed 17 December 2023.

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 figure will include differences in the state of surface water bodies in the different administrations. It will be heavily affected by the more favourable status of surface water bodies in Scotland and Wales and the less favourable status of surface water bodies in England.

Northern Ireland's figure of 31% of surface water bodies at Good (or better) Ecological Status or Potential is very similar to that reported for the UK as a whole and exceeds that reported for eight EU member states in 2015. It is similar to the outcomes in Sweden, Poland and Denmark.

Northern Ireland, in comparison to Ireland, has fewer surface water bodies achieving Good Ecological Status. However, Ireland has a larger proportion of its population living in rural areas, with 99% of Ireland covered by predominantly rural and intermediate regions, more than double that of the EU member state average.¹³³

While river water quality in Ireland compares favourably to that in other EU member states, Ireland has reported that it continues to see a trend in the loss of highest quality river sites and an increase in the number of poor quality sites. The water quality at half of the monitored river water bodies in Ireland reportedly is categorised as being at 'good' or 'high' ecological status. The remaining half are at less than good status. Almost one fifth (18.5%) of monitored river water bodies are in poor or bad status and are severely polluted. There has also been a 1% decline in the ecological health of monitored river water bodies since 2013-2018.¹³⁴

133 ibid 11.

¹³⁴ Environmental Protection Agency, 'National Rivers Monitoring Programme' <<u>www.epa.ie/our-services/monitoring--assessment/</u> <u>freshwater--marine/rivers/</u>> accessed 6 June 2024.

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 NI 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 the Northern Ireland Executive and DAERA (including the NIEA), these substances may increase threats to public health and the wider natural environment.

The aim of the water quality stocktake in this project¹³⁵ 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.

Factsheets prepared for these pollutants are published alongside the report on the OEP's website. Table 3.1 presents each pollutant considered and its classification by pollution type.

Table 3.1. Shortlist of pollutants and categories selected as 'emerging pollutants' or with 'significant new insights' (Source: Atkins and WCA, 2023)¹³⁶

Category or pollutant name	Pollutant type	
Azolo compoundo	Pesticide/fungicide	
Azole compounds	Personal care products	
Alkylphenols	Industrial chemicals	
Antibiotics*	Pharmaceutical	
Antibiotics	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.

136 ibid.

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

Table 3.2. Emerging pollutants for which risk assessments were undertaken showing the	
risk rating for Northern Ireland (Source: Atkins and WCA, 2023) ¹³⁷	

Pollutant	Description	Risk rating
1,4-dioxane	Industrial chemical potentially carcinogenic to humans, with potential persistent and bio-accumulative properties.	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 regularly detected 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'.	Low risk
Fipronil	Veterinary medicine (insecticide), classified as very toxic and widely detected.	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

The risk ratings for Northern Ireland and England were the same other than for diclofenac. For Northern Ireland a 'low' risk level was assigned for this substance, in contrast to a 'high' risk level in England. This indicates a high risk of ecological impact. Concern over the potential impact of diclofenac is supported by its previous inclusion on the WFD 'Watch List' (a list of emerging substances of concern for which DAERA, and in practice the NIEA, must carry out monitoring; see Annex 3). There is also the potential for interaction with other related pharmaceuticals discharged in wastewater treatment effluents.

The EU has proposed an Environmental Quality Standard for diclofenac. The 'high' risk level in England is based on widespread pollution and the high proportion of measurements in English rivers exceeding this proposed quality standard. The risk level is assessed to be much lower for Northern Ireland ('low' risk), where all measured concentrations in surface water except one have been lower than the Environmental Quality Standard. Developing a clearer understanding of the discrepancy in risk levels between England and Northern Ireland would need to include considering the differences in the use of this medicine or how sampling programmes have been conducted.¹³⁸

More broadly, the water quality stocktake observed that, as many of the substances assessed are emerging ones, not all of them are well monitored or subject to full control under the WFD NI Regulations or by other means.

The assessment identified two substances as presenting a very high risk to the aquatic environment in Northern Ireland as well as the wider UK. These are 1,4-dioxane (an industrial solvent), and fipronil (an insecticide used in pet treatments).

Fipronil is on the WFD 'Watch List'.

Fipronil (Source: Atkins and WCA, 2023)¹³⁹

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 a moderate risk to the environment and human health. Galaxolide (a fragrance used in household products) and bisphenol A (used in plastics and polymers) were judged to pose high risks.

Acting to address environmental harm that has already happened is challenging. This is illustrated by the Good Chemical Status objective under the WFD NI Regulations. This is not expected to be met for some time because of the widespread presence of uPBT substances as discussed in Chapter 4 (Section 4.2).

Our assessment is that, without further action by the Northern Ireland Executive and DAERA (including the NIEA) 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.

In Chapter 5 (Section 5.2.2), we consider further the EU 'Watch List' of substances of emerging concern, and DAERA's new powers under the Environment Act 2021 to update the list of priority substances and derive environmental quality standards.

138 ibid 30.

¹³⁹ Atkins and WCA (n 36).

Chapter 4. Effectiveness of implementation of the WFD NI Regulations

Chapter 4. Effectiveness of implementation of the WFD NI Regulations

4.1 Introduction and approach

We have broken down our assessment of the implementation of the WFD NI Regulations in this chapter into six main areas (Sections 4.2 to 4.7). In each one, we address specific questions or issues relating to a particular theme. We summarise our key findings at the start of each section.

Section 4.2 concerns the development of Environmental Objectives for water bodies in Northern Ireland. We look at:

- what DAERA's 'working target' approach in the draft third cycle RBMP aims to achieve
- the relationship between 'working targets' and Environmental Objectives under the WFD NI Regulations
- how chemical status objectives relate to the 'working target' approach
- how the 'working target' approach relates to exemptions applied under the WFD NI Regulations.

Section 4.3 looks at the development and delivery of Programmes and Measures. It considers:

- the content and adequacy of the Programmes of Measures in the second cycle and draft third cycle RBMPs
- economic analysis and investment underpinning the draft third cycle RBMP
- the requirement to make measures operational within three years of their approval.

Section 4.4 looks in more detail at points concerned with exemptions under the regulations. It considers:

- the use of exemptions in the second cycle and draft third cycle RBMPs
- how exemptions have been determined in Northern Ireland
- where and how exemptions are presented and justified
- the review of exemptions
- public participation and scrutiny in the exemption process.

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

- how the RBMPs and accompanying information are presented
- public participation and consultation
- local engagement and partnerships
- the production of plans by statutory deadlines.

Section 4.6 looks at issues that extend beyond Northern Ireland's borders. It covers:

• monitoring, classification and reporting on the island of Ireland

- coordination of Programmes of Measures
- wider cross-border issues.

Section 4.7 concerns monitoring and reporting. It discusses:

- why monitoring is important
- the approach taken by the NIEA to monitoring the water environment
- the merits of the 'one-out, all-out' principle in the classification of water bodies.

4.2 Environmental Objectives and 'Working Targets'

We focus our analysis in this section principally on the Environmental Objectives that should be met by 2027 under the WFD NI Regulations. These are the most imminent, apply to most water bodies and underpin achievement of aspects of Northern Ireland's draft Environment Strategy¹⁴⁰ and Sustainable Water – A Long-Term Strategy for Water in Northern Ireland.¹⁴¹ We summarise in the box below the key findings from the analysis that follows.

Key findings:

- The draft third cycle RBMP includes an overall working target for 70% of water bodies to be at 'good or better status' by 2027 (the '2027 Working Target'). It does not include Environmental Objectives for individual water bodies.
- The draft RBMP also states that 'working targets' will be set for individual water bodies, which will 'sit alongside' the Environmental Objectives under the regulations.
- The stated purpose of this 'working target' approach is to 'aid the prioritisation of water bodies for action' during the third cycle.
- However, it is not clear how the intended 'working target' approach complies with the requirement to propose Environmental Objectives and measures to achieve them in accordance with the WFD NI Regulations.
- It is also unclear whether the 2027 Working Target is intended to include Good Chemical Status.
- Additionally, we question how it relates to the provisions in the regulations for the determination of exemptions.
- Based on the available information, our current view is that this approach to setting a 'working target' to sit alongside Environmental Objectives, including determining exemptions where justified, may not comply with the requirements of the WFD NI Regulations.
- Similarly, we consider that the failure to include proposed Environmental Objectives for individual water bodies in the draft RBMP may not comply with the public participation requirements of the regulations.

¹⁴⁰ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5).

¹⁴¹ Department for Regional Development (n 24).

What does the draft RBMP aim to achieve by 2027?

The WFD NI Regulations set Environmental Objectives to achieve Good Status for all water bodies by 2027, subject to the scope for exemptions. As explained in Chapter 2 (Section 2.2.4), 'Good Status' means achieving Good Ecological Status or Potential for surface water bodies, Good Quantitative Status for groundwater bodies, and Good Chemical Status for all water bodies.

Through the draft RBMP,¹⁴² DAERA is proposing to realise what appears to be a significant improvement in the condition of water bodies. It does so by setting a 'working target' for 70% of water bodies to be at 'good or better status' by 2027. However, the pathway to how the 2027 Working Target will be achieved is not set out. It is also unclear what relationship 'working targets' will have with Environmental Objectives under the WFD NI Regulations (including in relation to chemical status) or how the 70% 'working target' figure was arrived at.

Environmental Objectives

The WFD NI regulations require the setting of legally binding Environmental Objectives for individual water bodies. There is no requirement or provision in the regulations for 'working targets'.

However, the draft RBMP does not include proposed Environmental Objectives for any individual water bodies. Environmental Objectives for 2027 for some water bodies have since been specified in draft form, but they are not available for most water bodies. These are visible in the NIEA Catchment Data Map Viewer¹⁴³ as outlined in the box below.

Status of water body level Environmental Objectives for 2027 in the NIEA Catchment Data Map Viewer (as of April 2024)

- There are no 2027 Environmental Objectives for any of Northern Ireland's **450 river water bodies**. Rivers form nearly 80% (450 out of 571) of Northern Ireland's water bodies.
- For 75 groundwater bodies, there are both quantitative and chemical objectives in the map viewer for 2027. These are not identified as 'draft' and include separate objectives for bedrock and superficial groundwater. The NIEA has confirmed that these were set in 2015, reflecting the Environmental Objectives in the WFD NI Regulations, with all therefore listed as 'good'. As such, we understand they are subject to review and may be updated in the final plan.
- For **25** coastal and transitional water bodies (referred to as 'marine' in the map viewer), there are 'draft objectives for 2027'. There is no separate presentation of the constituent ecological and chemical objectives within these draft objectives.

¹⁴² Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10).

¹⁴³ DAERA, 'NIEA Catchment Data Map Viewer' (n 88).

 There are also proposed Environmental Objectives for 21 lake water bodies. While these cover constituent ecological and chemical objectives separately, the NIEA has confirmed to us that the draft chemical objectives for these water bodies do not take account of the tests for uPBT substances or cypermethrin (an insecticide). We therefore understand that the objectives will need to be updated to address this issue in the final plan.

The NIEA has also told us that the draft objectives for coastal, transitional and lake water bodies were added into the map viewer between April and July 2021, which was during the period of consultation on the draft RBMP. Updated objectives for these water bodies may be included in the final plan.

The 'working target' approach

DAERA's 'working target'

The draft RBMP includes the 2027 Working Target of achieving '70% of all water bodies at 'good or better' status by 2027'.

If delivered, this would represent a considerable improvement on the current state of water bodies in Northern Ireland. For example, as set out in Chapter 3 (Section 3.2.2), the most recently reported figures showed 31% of surface water bodies at Good Ecological Status or Potential, with none at Good Chemical Status due to uPBTs.

DAERA's approach indicates that working targets of 'moderate' or less by 2027 will be set for certain other water bodies (see Figure 4.1 below).

The draft RBMP states that the 'working target' is intended to sit alongside Environmental Objectives and aid the delivery of significant improvements in the status of water bodies. The draft Environment Strategy for Northern Ireland¹⁴⁴ similarly has a 2027 target of achieving '70% of water bodies at Good Status'. This highlights the reliance of this aspect of the draft Environment Strategy on successful implementation of the WFD NI Regulations.

This 'working target' approach is not a new feature in the draft third cycle RBMP. It was initially included in DAERA's second cycle (2015) RBMPs. The draft third cycle RBMP explains the 'working target' approach as follows.¹⁴⁵

144 DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5) 24.

¹⁴⁵ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 95–96.

Explanation of the 'working target' approach – extracts from the draft RBMP (with emphasis in bold added by the OEP)

'Although improvements in water body status have been made over the last two [RBMP] cycles, this progress has unfortunately been offset by deterioration in other water bodies. From the resulting stagnation in the overall percentage of water body status at 'good or better status' it is highly unlikely that Northern Ireland will achieve good status in all water bodies (100% status objective) by 2027.

In addition to the objectives, working targets have been set for each water body for 2027. These 'working targets' will sit alongside the objective of 'good status' set out by the regulations. The working targets aid the prioritisation of water bodies for action during the 3rd cycle as well as the identification of the most appropriate measures to address key pressures. This will support focussing resources in the right location.

In 2015 our objective was to have 70% of all our water bodies at good status in 2021. We are committed to this aim and propose to continue with this goal, to have 70% of our water bodies at 'good or better status' and use this as our working target for 2027.'

Setting working targets for water bodies

As noted in the text reproduced above, the draft RBMP states that 'working targets have been set for each water body for 2027'. It also says that: 'The working targets for each water body can be viewed in NIEA Catchment Data Map Viewer.'¹⁴⁶

However, water body level working targets are not included in the draft RBMP. Nor did the map viewer contain 'working targets' at individual water body level when the draft RBMP was consulted upon. As of April 2024, it still did not do so, although as noted above it does include proposed Environmental Objectives for 2027 for a minority of water bodies.

DAERA has not explained and there is no publicly available information or evidence we have seen that sets out how the overall 70% 'working target' figure was arrived at. The proposed approach in the draft RBMP to setting 'working targets' for individual water bodies is reproduced in Figure 4.1.

146 ibid 96.

Figure 4.1. Flow diagram showing how working targets for 2027 will be set (Source: DAERA, 2021)¹⁴⁷



147 Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 97.
Position of the 'working target' in relation to Environmental Objectives

As set out in the draft RBMP, the proposal is that the 'working target' that is to be set for each water body will '*sit alongside*' the objective of Good Status under the WFD NI Regulations. However, the draft RBMP does not explain how this will operate, or what it will mean in terms of the relationship between the 'working target' and the Environmental Objective (subject to exemptions) for any particular water body. It is therefore unclear how the approach will comply with the requirement to set Environmental Objectives (subject to exemptions) in accordance with the WFD NI Regulations.

Position of the 'working target' in relation to chemical status

On the face of it, a target to achieve Good Status for 70% of water bodies by 2027 appears to include aiming for Good Chemical Status for all water bodies in that timeframe. However, as noted in Chapter 3 (Section 3.2.3), the persistence of uPBTs in surface water bodies is causing all surface water bodies to fail their Good Chemical Status objective.

It is our understanding that there is no current practical means of removing these substances from the water environment and that they will take many years to break down naturally. It therefore seems impossible that 70% of surface water bodies in Northern Ireland could achieve Good Chemical Status including in respect of these substances by 2027. This problem is reflected in general terms in the draft RBMP, which states that: '*It is widely recognised that given their* [uPBTs'] *persistence the levels present in the aquatic environment will likely remain in breach of EQS* [Environment Quality Standard] *values for some years to come*.'¹⁴⁸

In England, the RBMPs address this issue by including Extended Deadline Exemptions which will not see full compliance with the Good Chemical Status Objective for surface waters until 2063. This reflects a modelling prediction by the Environment Agency of how long it will take for levels of uPBTs to dissipate through natural processes.¹⁴⁹ We have not assessed the accuracy of this prediction or the modelling that underpins it but, as noted above, understand that there is currently no practical intervention that can remove these pollutants from the environment.

Based on the publicly available information, therefore, our working conclusion is that the 2027 Working Target in the draft RBMP does not include aiming for Good Chemical Status for 70% of surface water bodies, although there could be an aim to meet the standards for non-uPBT chemicals in surface water bodies. However, DAERA has not confirmed either of these points.

Our current interpretation is that the 2027 Working Target is aiming for 70% of all water bodies to reach one of the following outcomes, as applicable:

• For surface water bodies, either Good Ecological Status or Potential by 2027, but not Good Chemical Status due to the presence of uPBTs, or

148 ibid 41.

¹⁴⁹ Defra, 'Coverage on Water Targets and River Basin Management Plans' <<u>https://deframedia.blog.gov.uk/2022/12/24/coverage-on-water-targets-and-river-basin-management-plans/</u>> accessed 21 December 2023.

• For groundwater bodies, Good Status by 2027, including both Good Quantitative Status and Good Chemical Status.

Position of the 'working target' in relation to exemptions

For any water bodies where the Environmental Objectives are not aiming for Good Status by 2027,¹⁵⁰ the RBMP will need to contain a robust justification supporting the further exemption. However, it is not clear from the draft RBMP how the 'working target' approach will comply with this requirement.

For example, the flow diagram in Figure 4.1 suggests that a water body could be set an individual 'working target' for 2027 of 'moderate' status if, for example, it deteriorated from moderate in 2015 to poor in 2021, or conversely improved from poor in 2015 to moderate in 2021. However, no information is provided about whether an exemption will be set out and justified in the final RBMP in these circumstances as the WFD NI Regulations require.

In contrast, the WFD NI Regulations require the Environmental Objectives for water bodies to aim for Good Status by 2027,¹⁵¹ except where exemptions are justified. Such exemptions can only be justified where certain statutory criteria set out in the regulations are met, as we note in Chapter 2 (Section 2.2.6). It is not clear whether or how this is provided for in the intended use of the 'working target' approach.

Our view

The final third cycle RBMP will need to include clear and specific Environmental Objectives for each water body. If absent, this may constitute a failure to comply with the requirements of the WFD NI Regulations. The final cycle RBMP will also need to set out and justify any exemptions. Again, failure to do so may constitute a failure to comply with the regulations.

It would seem unobjectionable in principle to have a 'working target' approach as a tool to support the prioritisation and sequencing of actions on particular water bodies. This is so long as the 'working target' is no more than that and does not replace the status that must be aimed for and the outcomes that must be achieved under the WFD NI Regulations.

To the extent that DAERA continues to rely on its working target approach alongside substantive and binding Environmental Objectives in the final third cycle RBMP or beyond, therefore, we consider it important that DAERA is clear and transparent about what the working target covers, and what it does not.

However, the draft RBMP does not clarify how 'working targets' will 'sit alongside' Environmental Objectives, rather than altering or replacing them. Nor is it clear what they actually mean, or how they relate to the specific provisions for the determination of Environmental Objectives including exemptions under the WFD NI Regulations.

Based on the available information, therefore, and subject to the determination of the final Environmental Objectives, we consider that the 'working target' approach may not comply with the requirements of the WFD NI Regulations.

¹⁵⁰ Or 2033 or 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

¹⁵¹ Or 2033 or 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

This also has implications in relation to the adequacy of public consultation and public participation in developing the RBMP. In particular, there may be a failure to comply with the requirements of the WFD NI Regulations for DAERA to provide for public consultation on proposed Environmental Objectives and Programmes of Measures.¹⁵²

Recommendation 1: We recommend that DAERA ensure Environmental Objectives are set for each water body in accordance with the requirements of the WFD NI Regulations, including the exemption provisions. This information should be presented in the final third cycle RBMP which should be completed and published as soon as possible given the ongoing breach of the statutory deadline.

Recommendation 2: We recommend that DAERA clarify how 'working targets' will sit alongside the Environmental Objectives in the final third cycle RBMP and ensure that the intended approach does not alter existing legally binding commitments to achieve the Environmental Objectives.

4.3 Programmes of Measures

This section considers the Programmes of Measures in Northern Ireland's RBMPs. Our key findings in this section, which are based on the analysis that follows, are as set out below.

Key findings:

- Programmes of measures in the second and draft third cycle RBMPs are largely generic. Many of the measures are uncertain or are not clear and time-bound.
- Measures specific to individual RBDs, or especially individual catchments or water bodies, are particularly limited or, in some cases, entirely absent. This makes it difficult to assess their adequacy and impact.
- This is further exacerbated in the draft third cycle RBMP by the omission of proposed Environmental Objectives, given that Programmes of Measures are intended to be designed to achieve such objectives at the level of individual water bodies.
- There is also no clear link between the draft Programme of Measures in the draft third cycle RBMP and 2027 Working Target.
- Our view is that if the current approach is continued to the final published plan, it may not comply with the WFD NI Regulations. It prevents any meaningful analysis of how Programmes of Measures are expected to achieve Environmental Objectives at the water body level.
- It is also our view that the NIEA and DAERA's approach to implementation may not comply with the requirement in the WFD NI Regulations to make measures operational within three years of approval.

152 Reg 12(2)(b), WFD NI Regulations.

4.3.1 Content and adequacy of the Programmes of Measures

Chapter 2 outlines the requirement for Programmes of Measures to achieve Environmental Objectives.

The second cycle RBMPs, although published separately for each RBD, all contained similar, generic Programmes of Measures.¹⁵³ These were grouped under broad headings such as agriculture, sewage and industry, and forestry. The measures were not expressly related to specific water bodies. In addition, many of the measures were to consider doing something, or to undertake an assessment with a view to deciding whether to do something later.

The draft third cycle RBMP for Northern Ireland acknowledges the limitations of the previous approach relying on generic measures. In particular, the ministerial foreword to the draft plan includes the following statement.¹⁵⁴

'We recognise that the blanket approach to measures in the last cycle may not be the most effective in certain situations and we need to do things differently. Our strong evidence will allow us to move towards having "the right measure, in the right place".'

In addition, the draft third cycle plan includes a draft Programme of Measures for the period 2021-2027.¹⁵⁵ The measures are grouped by the following key sectors: agriculture; urban development; drinking water, chemicals and pesticides; abstraction, fisheries and morphology; non-native invasive species, forestry, waste and contaminated land; and other (which includes measures relating to research, education and protected areas).

Despite the stated intention in the foreword to have the 'right measure, in the right place', however, the majority of the measures in the draft RBMP remain generic rather than specific to any particular location, catchment or water body. They are not sufficiently specific, measurable or time-bound to understand what contributions they will make towards achieving particular outcomes. There is a lack of information that links them towards the stated 2027 Working Target, or any other objectives.

As with the second cycle plans, many of the measures are a continuation of ongoing activity or involve a proposal to consider doing something, or to undertake an assessment with a view to deciding whether to do something later. The box below provides some illustrations.

Examples of measures in the draft third cycle RBMP

Reduce nutrient pollution from agriculture:

- *Continued application of the Nutrients Action Programme (NAP) 2019-2022*
- 'Support the reduction in use of chemical fertiliser and encourage behaviour change based on evidence from further soil analysis'

Measures to reduce sediment from soil erosion and surface run-off:

¹⁵³ See for example: DAERA, 'North Western River Basin Management Plan 2015 to 2021' (2015).

¹⁵⁴ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 10.

¹⁵⁵ ibid 9.

• *'Prioritise 3 catchments (one per RBD) and using spatial technology, identify areas of livestock poaching and focus advice and EFS* [Environmental Farming Scheme] *measures to resolve'*

Natural water retention measures:

 'Implement the Integrated Plan for Drainage and Wastewater Management in Greater Belfast. (Living with Water Programme as committed in New Decade New Approach)'

Reduce nutrient pollution from sewage:

• 'Continue to work together to deliver Sustainable Wastewater Treatment Technologies. NIEA has been working with NI Water on the development of these technologies to ensure the treatment meets the WFD requirements'

Drinking water protection measures:

- 'Continue Source to Tap Programme to protect and improve rivers and lakes in the Erne and Derg cross border catchments'
- 'Continue to work together to improve Forestry Activities in order to reduce the impacts on water quality'
- 'Consider the need for the provision of a Disposal Scheme in Northern Ireland for no longer authorised pesticides, similar to the schemes that have occurred in Donegal & Wales'
- 'Continue monitoring pharmaceutical contaminants in the aquatic environment including antibiotics, as an extension of the EU Watch List, WFD Regulations'

A further example of the limitations of the approach in the implementation of the regulations to date concerns the situation in Lough Neagh. There, prominent algal blooms have led to serious environmental problems with significant recreational and economic impacts. This has led Minister Muir to announce the agreement of a Lough Neagh Action Plan in July 2024 by the Northern Ireland Executive.¹⁵⁶

On the one hand, this is to be welcomed as a response to a clear and serious problem in Lough Neagh. On the other hand, the need for such a plan essentially reflects a failure of previous plans and actions to achieve good water quality and prevent deterioration in and around Lough Neagh. Indeed, while the algal blooms are now more prominent, poor water quality in Lough Neagh is not a new issue. The draft RBMP notes that Lough Neagh had a classification of 'Bad Ecological Potential' in 2015, improving slightly to 'Poor Ecological Potential' in 2020.¹⁵⁷

Had the law been applied more effectively, therefore, there might have been no need for a separate Lough Neagh Action Plan. Rather, as an integral part of the Neagh-Bann RBD, Lough Neagh should already have been subject to the determination of specific Environmental Objectives under the WFD NI Regulations, and the development and

¹⁵⁶ DAERA, 'Muir Welcomes Executive Approval for Lough Neagh Report and 37-Point Action Plan' (n 1).

¹⁵⁷ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 56.

implementation of measures to achieve those objectives. Those measures should have been summarised in the second and draft third cycle RBMPs, even if set out in more detail in a distinct plan for Lough Neagh.

Links between measures, individual water bodies and outcomes

Under the WFD NI Regulations, the Programmes of Measures in RBMPs are to be applied to achieve Environmental Objectives set at the water body level. Assessing the adequacy of the draft Programme of Measures in DAERA's draft third cycle plan is therefore difficult due to the absence of intended outcomes (Environmental Objectives or 'working targets') for individual water bodies.

Absolute certainty when establishing Environmental Objectives and Programmes of Measures to achieve them is not required. 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 in the WFD NI Regulations is to specify and achieve the Environmental Objectives by 22 December 2027,¹⁵⁸ subject to exemptions. The Programmes of Measures must be sufficient to provide reasonable confidence that this will be achieved.

Strategic Environmental Assessment screening

The lack of clear outcomes from the draft Programme of Measures is further illustrated by a draft Strategic Environmental Assessment (SEA) screening report published by the NIEA alongside the draft third cycle RBMP.¹⁵⁹ This assesses the need for an SEA for the draft plan. It explains that: '*The third cycle plan is a modification to the second cycle plans*.'¹⁶⁰ It goes on to conclude that the draft RBMP does not require an SEA 'because the draft plan constitutes minor modifications to existing plans and the modifications are not likely to have significant environmental effects.'¹⁶¹

This conclusion is supported by a table in the screening report that looks at elements of the draft Programme of Measures.¹⁶² The information in the table highlights numerous instances where the environmental impacts of the draft Programme of Measures cannot be assessed because the details or outcomes of reviews or actions provided for in the programme are 'not yet known'.

The Pickering judgment

The need to consider what Programmes of Measures are needed to achieve Environmental Objectives at the level of individual water bodies has also been emphasised by the recent case of *Pickering*¹⁶³ in the High Court in England. This was considered under the

159 Northern Ireland Environment Agency, 'Draft Screening Report on the Determination of the Need for a Strategic Environmental Assessment (SEA) for the: Draft 3rd Cycle River Basin Management Plan for the North Western, Neagh Bann and North Eastern River Basin Districts (2021– 2027)' <<u>www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%20Screening%20</u> <u>report%20on%20the%20determination%20of%20the%20need%20for%20a%20Strategic%20Environmental%20Assessment%20</u> <u>for%20the%20draft%20RBMP%202021%20-%202027.PDF</u>> accessed 10 June 2024.

¹⁵⁸ Or 2033 or 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

¹⁶⁰ ibid 5.

¹⁶¹ ibid 7.

¹⁶² ibid Table 1.

¹⁶³ Pickering Fishery Association v Secretary of State for Environment, Food and Rural Affairs [2023] EWHC 2918 (Admin).

WFD Regulations in England¹⁶⁴ which are broadly the same as those in Northern Ireland. Whilst Northern Ireland courts are not bound by the *Pickering* case, it is likely to be viewed as persuasive.

The Pickering decision

The decision in *Pickering* underlines the need for Programmes of Measures to set out the measures which meet the requirements of the Environmental Objectives. This can include generic measures that apply across a range of water bodies, either across the RBD or more broadly. The level of detail needed will vary. However, the Programmes of Measures must consider what specific measures are necessary to achieve the Environmental Objectives for each water body.¹⁶⁵

The Judge in *Pickering* went further, commenting as follows on the approach taken by the Environment Agency 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*'.¹⁶⁶

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,¹⁶⁷ 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.¹⁶⁸

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.

Our view

The legislation creates a specific and measurable outcome with which the responsible authorities must comply. That outcome is to specify and achieve the Environmental Objectives by 22 December 2027,¹⁶⁹ subject to exemptions. The WFD NI Regulations require DAERA (and the NIEA) to be satisfied that the Programmes of Measures can reasonably be expected to achieve the Environmental Objectives that are set.

Given the absence of specific proposals for Environmental Objectives, it is not possible to assess in any detail the extent to which the draft Programme of Measures might be capable of meeting the Environmental Objectives that might be set, or to know how those measures

¹⁶⁴ The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407.

¹⁶⁵ Pickering, para. 128.

¹⁶⁶ Pickering, para. 134.

¹⁶⁷ Reg 20, WFD NI Regulations; see also Art 11(3)(g), WFD.

¹⁶⁸ Pickering, para. 135.

¹⁶⁹ Or 2033 or 2039 respectively for certain priority substances under Reg 16(4), WFD NI Regulations.

have been determined with a view to meeting any such objectives. We also cannot see an assessment of, or ourselves evaluate, which of the measures in the draft programme are expected to bring about what degree of protection or improvement, at the RBD, catchment or water body levels.

Further, we can see no evidence or assessment to indicate that the draft Programme of Measures will be capable of delivering the 2027 Working Target with reasonable confidence. We think this target is more likely to be missed, possibly by a considerable margin. This reflects the level of improvement needed to meet this target, the short remaining time available, and the largely general nature of the draft measures.

Having analysed the available information, we are also currently of the view that the draft Programme of Measures in the draft third cycle plan may not comply with the WFD NI Regulations. This is due to the generic nature of the measures and the failure to demonstrate how they will contribute to achieving Environmental Objectives at the water body level, or even at the catchment or RBD level. This prevents any meaningful analysis of how Programmes of Measures are expected to achieve the Environmental Objectives that are to be set at the water body level.

In finalising the third cycle RBMP and the Programme of Measures, therefore, DAERA should ensure that measures are sufficiently specific, measurable and time-bound to achieve the Environmental Objectives set in that final plan. We note that the plan itself need only contain a 'summary' of the Programmes of Measures and Programmes of Measures can, if appropriate, be at a generic level. However, it should be possible from the plan to understand the contribution that measures will make to achieving the Environmental Objectives, which are set at the water body level.

We consider that a final plan without such content would trigger the requirement in the WFD NI Regulations for additional measures where Environmental Objectives are unlikely to be met.¹⁷⁰

Based on the available information, we also consider that the failure to set out how Programmes of Measures will contribute to achieving the Environmental Objectives may not comply with the provisions of the WFD NI Regulations on public participation and public consultation.

These are not new issues. The European Commission's compliance check of the UK's second cycle RBMPs also 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.¹⁷¹ We discuss issues of funding in Section 4.3.2.

170 Reg 22, WFD NI Regulations.

¹⁷¹ European Commission, '6th Implementation Report of the Water Framework Directive' (2021) <<u>https://environment.ec.europa.eu/</u> topics/water/water-framework-directive/implementation-reports_en> accessed 15 November 2023.

Recommendation 3: We recommend that DAERA develop a Programme of Measures for the final third cycle RBMP that contains the additional measures necessary to achieve the Environmental Objectives set in that plan, including those to be met by 2027. Programmes of Measure should be produced with specific, 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.

4.3.2 Economic analysis and investment underpinning the draft RBMP

The availability of funding to implement Programmes of Measures is central to application of the WFD NI Regulations. At the time of writing, however, the necessary future funding for the application of the regulations is unclear due to financial constraints on Northern Ireland government departments and other bodies.

There is currently no full investment analysis to accompany the draft Programme of Measures for the third cycle. As we note in Chapter 2 (Section 2.3.4), while the draft RBMP includes a section entitled 'Economic assessment',¹⁷² this does not provide an assessment of the level of investment that has been committed or will be needed to implement the regulations. Rather, it discusses in general terms how certain aspects of water regulation and management are funded in Northern Ireland.

As a point of comparison, when the Environment Agency developed its RBMPs for England, it published alongside those plans a specific analysis of investment requirements for them.¹⁷³ This set out the total funding required to achieve the Environmental Objectives set under the regulations, covering all major pressures, as well as details of the funding that had been committed.

DAERA has told the OEP in this project that it has prepared and intends to publish an *'Economic Analysis of the Programme of Measures – River Basin Management Plan 2021-2027'* as a supporting document with the final third cycle RBMP. Despite the current lack of such an analysis in Northern Ireland, however, there is significant evidence in the draft RBMP and elsewhere of underfunding and insufficient investment. We are concerned this will have a knock-on effect on the implementation of measures and the achievement of outcomes. There is particular evidence that NI Water, which will be delivering many of the measures, is underfunded. We discuss this further in Chapter 5 (Section 5.4.2).

Some aspects of the draft RBMP highlight these funding challenges. For example, it states that: 'Underfunding of the PC15 [Price Control 2015] business plan 2015-21 has resulted in capacity issues in over 100 locations across Northern Ireland with the sewage network and Wastewater Treatment Works at or near their full capacity.'¹⁷⁴

¹⁷² Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) s 1.6.

¹⁷³ Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (29 November 2022) <<u>www.gov.</u> <u>uk/government/publications/investment-requirements-for-englands-river-basin-management-plans/investment-requirements-for-englands-river-basin-management-plans/investment-requirementsfor-englands-river-basin-management-plans> accessed 14 November 2023."plainCitation":"Environment Agency, 'Investment Requirements for England's River Basin Management Plans' (29 November 2022)</u>

¹⁷⁴ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 30.

We have asked DEARA in this project if all the measures listed in the draft RBMP Programme of Measures are fully funded, including the headline measures in the 'Living With Water' programme for Belfast sewage treatment upgrades (see box below). DAERA has confirmed that the draft Programme of Measures is not fully funded. DAERA noted, for example, that NI Water's six-year funding requirement identified through UREGNI's determination for the Price Control period 2021-2027 (see Chapter 5, Section 5.4.3) will be subject to budget availability. Therefore, funding of all elements is not guaranteed. This includes the NI Water elements of the Living With Water programme.

'Living With Water in Belfast'

This is one of the most significant financial commitments reflected in the draft RBMP and the draft Programme of Measures.¹⁷⁵ This plan was endorsed by the Northern Ireland Executive in 2021 and identifies the need for approximately £1.2 billion of investment over a 12-year period. The majority of this investment is aimed at upgrading the overloaded sewerage networks and wastewater treatment works, thus reducing the nutrient and pollution loading on Belfast Lough.¹⁷⁶

The plan discusses, for example, the need for investment to address unsatisfactory intermittent sewerage overflows and continuous discharges from the wastewater treatment works. It highlights the current failure of Belfast Harbour and Inner Belfast Lough to achieve 'Good Status' as well as a decline in the quality of the Belfast Lough Shellfish Water Protected Area due to excessive amounts of bacteria.¹⁷⁷

The Living With Water programme is dependent on available finance, and media reports suggest that the planned sewage and drainage upgrades will cost significantly more than the original figures, with a reported increased estimate of £2.1 billion.¹⁷⁸ While some early works have been completed, Dfl has told us that it is undertaking an internal review of the Living With Water in Belfast plan to assess the impact of increased costs on the programme and delivery timescales.

In addition, some measures in the draft RBMP state that the financing mechanism is EU funding from the 'PEACE PLUS' programme, focused on cross-border improvements.¹⁷⁹ We note that this funding is not yet definite. For example, the draft RBMP includes the measures to '*Consider & prepare PEACE PLUS bid*' in relation to both upgrading sewage treatment facilities¹⁸⁰ and reducing the loading of chemicals and pesticides in raw water.¹⁸¹ The funding applications in question opened in late 2023 and closed in early 2024. As such, decisions on allocations have not been made.¹⁸²

¹⁷⁵ ibid 18, 21, 30, 117.

¹⁷⁶ Department for Infrastructure, 'Living with Water in Belfast' (2021) 6 <<u>www.infrastructure-ni.gov.uk/sites/default/files/publications/</u> <u>infrastructure/living-with-water-in-belfast-plan-updated-apr22.pdf</u>> accessed 10 April 2024.

¹⁷⁷ ibid 48.

¹⁷⁸ John Campbell, 'Sewer £2.1bn Upgrade Cost Alarming – O'Dowd' (BBC News 2024) <<u>https://www.bbc.co.uk/news/uk-northern-ireland-68626097</u>> accessed 13 June 2024.

¹⁷⁹ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 25–26.

¹⁸⁰ ibid 119.

¹⁸¹ ibid 121.

¹⁸² Special EU Programmes Body, 'PEACE Plus Programme – Funding Call Timetable' (2024) 2 <<u>www.seupb.eu/sites/default/</u> <u>files/2024-05/PEACEPLUS%20Call%20Timetable%20May%2024.pdf</u>> accessed 7 June 2024.

Our view

While we recognise that the Northern Ireland Executive has considerable budgetary pressures, the delivery of statutory objectives under the WFD NI Regulations needs to be given a sufficient level of priority and resourcing to ensure the law is implemented. DAERA will need to ensure that the Environmental Objectives in the final third cycle plan, including those based on exemptions, are supported by clear and funded measures to achieve them.

There is no investment analysis accompanying the draft RBMP. We recognise that the current lack of specificity in the draft measures, as noted in Section 4.3.1, creates a barrier in this respect. In our view, this underscores the importance of ensuring that measures are sufficiently specific, measurable and time-bound, such that they can be costed and fully funded. The measures, and the funding for their implementation, also need to be appropriately targeted at all of the relevant major pressures.

We also acknowledge that funding availability is a limiting factor, both in terms of allocations from Westminster and across Northern Ireland government departments and agencies. However, an effective plan needs to be supported by a clear understanding of how much funding is needed and the amounts available and committed to achieve the intended outcomes.

Alongside setting Environmental Objectives and identifying measures to achieve them, DAERA and the DfI should also ensure that those measures are implemented in practice. This necessarily requires the appropriate resources, funding and other mechanisms to secure them.

DAERA and DfI should therefore assess and review the adequacy of current funding levels and other mechanisms to secure and implement the measures needed to deliver the Environmental Objectives. Funding allocations and investment decisions should then match the approved and specific intentions in the Environmental Objectives and Programme of Measures.

At the moment, in contrast, much of the draft Programme of Measures is largely generic and uncosted. It also appears detached from the 2027 Working Target and any Environmental Objectives. As a result, without more specificity in the Environmental Objectives, Programme of Measures and relationship between the two, it will be impossible to set allocations at the right level, or to assess the adequacy of such allocations against required amounts.

We therefore support DAERA's intention, stated to us in this project, to publish an *'Economic Analysis of the Programme of Measures'* for 2021-2027 alongside the final third cycle RBMP. As well as supporting a more confident path towards the implementation of the measures and achievement of Environmental Objectives, this should also provide greater transparency and access to information for stakeholders. **Recommendation 4:** In support of Recommendation 3, we recommend that DAERA and Dfl prepare and publish an economic analysis and assessment of investment requirements for the final third cycle RBMP. This should take account of any new commitments, funding mechanisms and additional measures included in the final Programmes of Measures to achieve the Environmental Objectives, including those to be met by 2027. It should set out the areas, sectors or activities to which funding needs to be directed, the sources of funding, and the levels of funding available and committed to demonstrate the adequacy of the investment to meet the Environmental Objectives in the final plan. It would also be helpful to note any additional funding which might later become available, and the extent to which any further improvements could be achieved through such additions.

4.3.3 Making measures operational within three years

The WFD NI Regulations require that, where a Programme of Measures is updated, '*any new* or revised measures must be made operational within three years.'¹⁸³

From our engagement with the NIEA and DAERA in this project, we understand that their interpretation of this requirement is that it relates in part to putting in place measures under which specific physical or regulatory action will or may be taken later. They have confirmed that, in their view, it means that if a decision has been taken in the Programmes of Measures to introduce a new law or policy, then that law or policy should be 'made operational' by being established within three years.

They have also confirmed that they do not think it means that physical or regulatory actions to protect or improve the water environment which may be taken under such law or policy must happen in this same time period. Such actions may, in their view, be pursued later under those enabling mechanisms.

This interpretation is reflected in the contents of the summary Programmes of Measures. These include measures that are not yet certain and are to be decided at a future date under other decision-making mechanisms, as illustrated in Section 4.3.1.

The draft third cycle RBMP includes a chapter on the delivery of the measures from the second cycle plans.¹⁸⁴ It states that 90% of the 136 'Key Target Measures' in the 2015 plans had been or were on track to be achieved. It also reports that 6% of 'Key Target Measures' were making slow progress with positive impacts not expected to occur until beyond 2021, and the remaining 4% had not started.

The draft third cycle Programme of Measures lacks delivery dates or deadlines for the measures proposed other than completion by the end of the cycle in 2027. From our engagement with the NIEA and DAERA in this project, they have told us that the NIEA intends to publish an interim report describing progress in the implementation of the planned programme of measures, including new or revised measures, by December 2024.

¹⁸³ Reg 12(4), WFD NI Regulations.

¹⁸⁴ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) ch 8.

This reflects an obligation in the WFD NI Regulations to produce such a report within three years of publishing or updating an RBMP.¹⁸⁵

Our view

Based on our understanding of DAERA and the NIEA's approach to this provision for measures to be made operational within three years, as set out above, our current view is that it may not comply with the WFD NI 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 or major policy reviews, for example, may not always be practical in a way that brings material implementation within three years. To support the regime's effectiveness, we suggest this should be judged by exception. 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 for such a measure should ensure that all necessary decisions are in place, resources are available, and implementation is being expedited.

Recommendation 5: In relation to the requirement to make measures operational within three years of approval, we recommend that measures in the final third cycle Programme of Measures be time-bound, and implemented accordingly, in alignment with the Environmental Objectives to which they relate 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 DAERA and the NIEA review and clarify their approach to this provision to 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 above, the draft third cycle RBMP suggests an intent to rely on further exemptions under the WFD NI Regulations in setting Environmental Objectives. This was also the case in the second cycle RBMPs. We have reviewed where exemptions have been or may be 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.

¹⁸⁵ Reg 31(3), WFD NI Regulations..

Key findings:

- The WFD NI Regulations require any exemptions and the reasons for them to be set out in the RBMPs. However, there are no specific exemptions detailed in the draft third cycle plan.
- Based on the information gathered during this project, our current view is that the omission of this information on exemptions from the draft RBMP may not comply with the WFD NI Regulations, assuming the intention is to include such exemptions in the final plan.
- DAERA's intentions as regards the use of exemptions in the third cycle are therefore currently unclear. However, our working assumption is that DAERA will include some exemptions.
- Any such further exemptions relied upon in setting the water body level Environmental Objectives the final third cycle plan will need to be set out and justified in that plan.
- Exemptions were also included in the Environmental Objectives set in the second cycle RBMPs. However, there is a lack of robust and transparent justification for these exemptions, which makes scrutiny difficult.
- Based on the information gathered during this project, our current view is that the approach previously used in presenting and justifying exemptions may not comply with the WFD NI 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 DAERA may not have actively involved the public in the exemption process, either for the draft third cycle RBMP or in previous cycles. 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 NI Regulations.

Exemptions in the third cycle RBMP

Specific information on exemptions has not been set out in the draft third cycle RBMP, matching its wider omission of Environmental Objectives for individual water bodies. Rather, the draft RBMP discusses the scope to apply exemptions only in brief and general terms.¹⁸⁶ There is only one specific reference to where an exemption has been applied (Lough Neagh),¹⁸⁷ with no details in the draft RBMP of what that exemption is or the basis for it.

DAERA has told us in this project that the final third cycle RBMP will have a supporting document on exemptions. DAERA has said that this will state for each water body whether exemptions have been applied and the reason for each exemption. However, that information is not yet publicly available and we have not seen it.

187 ibid 12.

¹⁸⁶ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 95.

In Section 4.2, we discuss the 'working target' approach in the draft third cycle RBMP and question how that aligns with the requirement to determine and justify exemptions based on statutory criteria in the regulations. We do not repeat that discussion here but note the following additional points.

Firstly, the vast majority of water bodies will already be subject to an extended deadline just by setting a 2027 date to achieve Good Status (compared to the original deadline of 2021 – see Section 2.2.4). That should be presented and justified in the RBMP.

Secondly, a 'working target' of achieving 70% of water bodies at Good Status by 2027 necessarily leaves 30% of water bodies outside of this target. It is unclear whether the intention is to justify and set out exemptions in relation to these 30% of water bodies outside the 2027 Working Target. The lack of clarity relates in part to the ambiguity around the notion of setting a 'working target' for each water body that 'sits alongside' its Environmental Objective, which we discuss in Section 4.2.

We also discuss in Section 4.2 the possible need to apply exemptions for chemical status objectives in relation to uPBTs, which does not appear to be reflected in the current 'working target' approach. As we note there, assuming it will not be technically feasible to meet Good Chemical Status for surface water bodies due to the presence of uPBTs, exemptions to that effect will need to be presented and justified in the final third cycle RBMP.

Exemptions in the second cycle RBMPs

Given the lack of information in the draft third cycle RBMP, we have looked at information on the use of exemptions from the second cycle RBMPs. The RBMP analysis report¹⁸⁸ includes additional details of these exemptions, which are briefly summarised below.

Extended Deadline Exemptions were applied for the second cycle in a significant number of cases, as shown in Table 4.1. The reasons cited for the exemptions were 'natural conditions' and 'technical infeasibility'. 'Disproportionate costs' were not used as a reason. There were no Less Stringent Objectives Exemptions. There was one exemption in relation to meeting Environmental Objectives affected by a new modification or sustainable development activity concerning a hydroelectric scheme in the North Western RBD.

Table 4.1. Use of extended deadline exemptions in the second cycle RBMPs (Source: WSP, 2023)¹⁸⁹

Surface water				Groundwater			
Ecological		Chemical		Quantitative	9	Chemical	
Number of water bodies	%	Number of water bodies	%	Number of water bodies	%	Number of water bodies	%
344	69	30	6	8	11	46	61

188 WSP (n 34) ch 4. 189 ibid 69.

Determination of exemptions

According to the RBMP analysis report,¹⁹⁰ in applying the WFD NI Regulations for the second cycle, DAERA and the NIEA considered what was achievable by 2021 through a series of workshops carried out in 2015. The workshops reportedly reviewed each water body individually, examining the impacts observed, trends over time, and the effects of the then-current, agreed and funded measures. For each water body, the pressures were examined to determine whether Good Status was likely to be achieved by 2021 and whether a further extension to 2027 was justified.

Further to these workshops, DAERA and the NIEA have told us that they derived exemptions through cross-cutting expert panel discussions. The outcome was recorded in an internal spreadsheet with a published supporting document.¹⁹¹ Our understanding is that they will be updated for the final third cycle plan.

Presentation and justification of exemptions

The second cycle RBMPs did not set out exemptions at the water body level, and only contain limited information that explains them in general terms. They state, for example, that: 'At present we have set extended deadlines in preference to less stringent objectives where an alternative objective was considered necessary.'¹⁹² The RBMPs provide the following explanation concerning exemptions in their discussion of the identification of measures to achieve Environmental Objectives:

'Decisions and choices have therefore had to be made about which measures will be taken forward, how the measures and subsequent improvements will be funded and around which water bodies to prioritise effort on first. This process has been very much linked to the objective setting process outlined in Section 6. In Northern Ireland, disproportionate cost has not been used as a justification for setting extended deadlines in relation to water bodies, rather this has been done on the basis of technical feasibility and natural conditions not allowing for timely improvements although in some cases it is likely that the disproportionate cost exemption could also be applied in respect of measures which would be required to improve certain water bodies for which the other exemptions apply, particularly in respect of water bodies currently at poor and bad status.'¹⁹³

The use of exemptions is also identifiable to some degree in the NIEA Catchment Data Map Viewer,¹⁹⁴ if the user knows where to look. For example, the map viewer sets out the 2021 Environmental Objectives for each water body. Where the objective is less than 'good', the implication is that an exemption has been applied.

However, the exemptions are not explicitly marked as such in the map viewer. In addition, the substance of the exemption is not identified. For instance, where a surface water body had a 2021 ecological objective of 'moderate', the map viewer does not identify the specific

190 ibid.

¹⁹¹ Northern Ireland Environment Agency, 'Reviewing the Environmental Objectives for the Second Cycle River Basin Management Plan' (2015) <<u>www.daera-ni.gov.uk/sites/default/files/publications/doe/what-we-plan-to-achieve-by-2021-and-beyond-2015.pdf</u>> accessed 2 June 2024.

¹⁹² See for example: DAERA, 'North Western River Basin Management Plan 2015 to 2021' (n 153) 34. The North Eastern and Neagh Bann RBMPs contain the same text.

¹⁹³ ibid 10. The North Eastern and Neagh Bann RBMPs contain the same text.

¹⁹⁴ DAERA, 'NIEA Catchment Data Map Viewer' (n 88).

element(s) to which this exemption relates. Nor does it provide any information on the reasons for the exemption.

Information in the RBMPs on review of exemptions and measures

The WFD NI Regulations require that Programmes of Measures be reviewed every six years.¹⁹⁵ For any Extended Deadline Exemption, that 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.¹⁹⁶ In the case of any Less Stringent Objective Exemptions (which as noted above have not been used in Northern Ireland to date), it includes a review of the less stringent environmental objective and whether it should continue to be set.¹⁹⁷

In practice, all water bodies other than those that achieved the Environmental Objectives by the original 2015 deadline in the WFD¹⁹⁸ are subject to Extended Deadline Exemptions. We have confirmed with DAERA that the summary Programme of Measures 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.

DAERA has also told us that the final third cycle plan will have a supporting document on exemptions which will highlight the group of measures from the Programme of Measures that are relevant to the water body in question. We discuss our findings and views on the adequacy of the Programmes of Measures in Section 4.3.1.

Public participation in and scrutiny of exemptions

Given the absence of information on exemptions in the draft third cycle RBMP, there has been no opportunity to date for the public to scrutinise or comment on any further exemptions that may be included in the final third cycle plan.

As we note above, the second cycle 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 that those exemptions in the second cycle will be unjustified in substance. We understand that DAERA (and the NIEA's) decision-making processes for exemptions are based on guidance issued by the EU's Common Implementation Strategy¹⁹⁹ and draft guidance produced by the 'UK Technical

¹⁹⁵ Reg 12(3), WFD NI Regulations.

¹⁹⁶ Reg 16(6), WFD NI Regulations.

¹⁹⁷ Reg 17(7), WFD NI Regulations.

¹⁹⁸ See Section 2.2.4 for an explanation of the original deadline in the WFD.

¹⁹⁹ European Commission, 'Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance Document No. 3, Analysis of Pressures and Impacts' (2003) <<u>https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/</u> <u>Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20(WG%202.1).pdf</u>> accessed 15 November 2023.

Advisory Group' on the WFD.^{200 201} 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.²⁰²

In addition, the RBMP analysis report²⁰³ notes that, in the second cycle RBMPs, the exemptions were linked to associated drivers and pressures as a feature of the UK's electronic reporting to the 'Water Information System for Europe' (WISE).²⁰⁴ This was part of national reporting on implementation of the WFD while the UK was in the EU. In Northern Ireland, from the second cycle RBMPs, diffuse pollution was one of the biggest pressures linked to the use of exemptions for ecological and chemical status in surface water and chemical status in groundwater, with agriculture being the driver. This reporting has not been undertaken for the third cycle (following the UK's exit from the EU) and therefore this information is no longer available.

Our view

Overall, based on the available information we consider that the approach adopted by DAERA and the NIEA in the second cycle RBMPs and draft third cycle RBMP may not comply with the requirements of the WFD NI Regulations in respect of identifying and justifying exemptions.

From the second cycle RBMP analysis, the grounds cited for applying Extended Deadline exemptions appear to be in line with those set out in the WFD NI Regulations. These relate to natural conditions and technical feasibility.

Having looked at the second cycle RBMPs and the information in the NIEA's Catchment Data Map Viewer, however, we are concerned about the presentation of exemptions and the reasons for them. The RBMPs only provide an overview of the general circumstances in which exemptions are applied. While their use can be established for individual water bodies in the map viewer, this information is not clearly stated as involving the application of an exemption. It is left to the user to work this out for themselves.

There is also no presentation of the substance of an exemption, identifying the specific elements for which the deadline has been extended. Nor is there any presentation of the reasons for exemptions, or any obvious link between the use of each exemption and the relevant drivers, pressures, impacts and assessments on the water body concerned.

Based on the information we have assessed, our current view is that the approach adopted in the second cycle RBMPs towards setting out details of exemptions and the reasons for them may not comply with the requirements of the WFD NI Regulations. In our view, at least

²⁰⁰ 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) <<u>www.wfduk.org/sites/default/files/Media/Setting%20objectives%20in%20the%20water%20environment/Principles%20for%20an%20</u> <u>objective%20setting%20framework_Draft_010904.pdf</u>> accessed 31 January 2024.

²⁰¹ UK Technical Advisory Group on the Water Framework Directive, 'UKTAG Recommendations on a Consistent List of Reasons for Setting Alternative Objectives (Working Draft)' (2009) <<u>www.wfduk.org/sites/default/files/Media/Setting%20objectives%20in%20</u> the%20water%20environment/Standard%20list%20of%20reasons%20for%20setting%20alternative%20objective_Final_010508. pdf> accessed 31 January 2024.

²⁰² Environment Agency, 'River Basin Management Plans, Updated 2022: Record of Consultation and Engagement' (22 December 2022) s 2.3 <<u>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/s accessed 31 January 2024.</u>

²⁰³ WSP (n 34) 69.

²⁰⁴ European Commission and European Environment Agency, 'Water Information System for Europe (WISE)' <<u>https://water.europa.</u> <u>eu/</u>> accessed 23 January 2024.

some level of substantive information about why an exemption has been applied should be available at the water body level through the RBMPs and any accompanying documents or tools, such as the map viewer. More broadly, we see scope to improve how the exemptions are presented in the RBMPs and the map viewer to make them more readily accessible and understandable.

Whilst the extent and nature of the exemptions that are intended to be applied in the final RBMP is unclear, it is reasonable to assume that there will be exemptions. However, no such information is included in the draft plan. This omission of proposals for exemptions and the reasons for them calls into question the adequacy of public participation and public consultation in relation to the determination of exemptions for the third cycle RBMP. Based on the available information, therefore, we also consider that DAERA may not have complied with the WFD NI Regulations' public participation requirements²⁰⁵ in this regard.

The European Commission's compliance check of the UK's second cycle RBMPs similarly made recommendations to improve the justification and transparency of exemptions.²⁰⁶ As outlined above, we still see room for improvement in this area.

Recommendation 6: We recommend that DAERA and the NIEA present and justify all approved exemptions in the final third cycle final plan. To comply with the WFD NI Regulations, these should be presented and justified at the level of individual water bodies and be clear and transparent. We recommend that, for each exemption at the individual water body level, the information should include: (i) the specific element(s) to which it relates (as well as the overall classification); and (ii) at least an outline of the substantive justification.

4.5 Production and governance of River Basin Management Plans

This section looks at some broader issues concerned with the production and governance of RBMPs.

Key findings:

- The RBMPs and accompanying information should provide the 'driver-pressure-stateimpact-response' information for the RBD as a whole and each water body. This is not currently the case.
- The draft third cycle RBMP is relatively clear and readable, which makes it accessible to a wide audience. At the same time, it has numerous and significant information gaps.
- The NIEA's Catchment Data Map Viewer allows users to explore and download additional information on the water environment. However, some of its content could be clearer and needs updating, and there is some scope to improve its navigability and explanation.

205 Reg 27(2)(d) WFD NI Regulations.

²⁰⁶ European Commission, '6th Implementation Report of the Water Framework Directive' (n 171).

- Based on the information we have gathered during this project, our current view is that the consultation on the draft third cycle RBMP did not include a number of elements of required content. As a result, there may have been a failure to carry out a lawful public consultation on the draft third cycle RBMP.
- The completion of the third cycle RBMP was delayed by the Covid pandemic and the suspension of the Northern Ireland Executive. While it is imperative that DAERA complete and publish the final third cycle RBMP as soon as possible, we also consider it important to address the gaps that we have highlighted in respect of public participation and consultation on the draft plan.
- One way to effectively target Programmes of Measures at the water body level could be to make better use of catchment-based or other stakeholder partnerships. However, such partnerships need a clear remit and adequate funding to be effective.

4.5.1 How the River Basin Management Plans and accompanying information are presented.

Chapter 2 of this report outlines the structure of the draft third cycle RBMP (see Section 2.3.3). The sections above give additional detail on how the draft plan and previous cycle plans present information on Environmental Objectives, Programmes of Measures and exemptions.

The draft third cycle RBMP is presented as one narrative document for all RBDs, which aids readability in understanding the generic information provided. At the same time, the draft plan contains numerous information gaps concerning water body level information which we have noted in this chapter. These information gaps also existed to some degree in the second cycle plans. Additional information could be provided in supporting documents to address gaps.

The NIEA's Catchment Data Map Viewer, which is part of the draft RBMP, allows users to explore and download information on the water environment. It contains searchable data and maps for catchments and water bodies. However, the viewer has not yet been fully updated for the third cycle. It can also be hard to navigate and understand. For example, it is not accompanied by a user guide or instructions and our experience suggests that users may find it difficult to understand the presentation of information on Environmental Objectives.

Our view

RBMPs should be specific, clear, accessible, and understandable. As a written document, we find that the draft third cycle plan mostly meets these tests, while the map viewer that accompanies it is more complex to use. Whilst the plan is understandable, however, there are significant gaps in information at the water body level on Environmental Objectives, exemptions and measures.

More broadly, the 'driver-pressure-state-impact-response' (DPSIR) 'narrative' for each RBD and its water bodies should be apparent from the RBMP. This should include sufficient, clear and relevant information about classification status, measures and exemptions. Additionally,

our own assessment in Chapter 3 (see Section 3.2.4) identifies further pressures and drivers which we consider are not clearly presented.

In this context, we recognise that it may be necessary for the RBMP to refer and link directly to supporting technical information such as that in the map viewer. However, the current information available through the RBMPs (for the second cycle or in draft for the third cycle) or map viewer offers no link back to the pressures or measures at the water body level. The full DPSIR picture is not there.

We also consider that the missing information in the draft RBMP and the lack of specificity in relation to the Programmes of Measures could exacerbate a risk that we discuss further in Chapter 5 (see Section 5.5). This is concerned with the duty of public bodies to 'have regard to' the relevant RBMP. The current structure or presentation of the plans does not clearly support the implementation of this duty, as the plans are too general or unclear.

Recommendation 7: We recommend that DAERA and the NIEA 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. We also suggest that DAERA and the NIEA seek to make the RBMP (including the final third cycle plan) and supporting documents clearer, and more reader- and user-friendly, including through the provision of a non-technical summary.

4.5.2 Public participation and public consultation

There is significant media and public debate around water quality in Northern Ireland. Capturing and considering these views is a key element in ensuring a partnership approach for managing the status of water bodies.

The WFD NI Regulations contain provisions to ensure transparency and public engagement in river basin planning. These require DAERA to provide opportunities for the public to participate in the development of Environmental Objectives and Programmes of Measures and in the preparation of RBMPs.²⁰⁷ This includes a duty to publicise draft proposals and plans and consult with the public on them. There is also a right of access to background documents and information used in developing draft RBMPs.²⁰⁸

However, as we have noted above, the public consultation on the draft third cycle RBMP did not include a number of elements of required content. Notably, the Environmental Objectives were missing, the Programme of Measures was largely generic, and exemptions were not included. The public therefore had no opportunity to scrutinise, understand or comment on these elements. This means that it is possible or even likely that not all legally required information was provided to the public during consultation on the draft third cycle RBMP.

This issue was also discussed in the *Pickering* case. The Judge commented that the purpose of such public consultation and right of access to background documents '*is to*

207 Regs 12(2)(b) and 27, WFD NI Regulations.

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

allow active involvement and consultation...where the second reason is to permit intelligent consideration and response to the proposal'.²⁰⁹ As referred to above, *Pickering* is not binding on Northern Irish courts but is likely to be viewed as persuasive.

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 third cycle RBMP. This is in view of our conclusions set out earlier in this chapter on the omission of certain information in the draft plan concerning the Environmental Objectives, Programme of Measures and exemptions.

Future public consultation on draft plans should include all legally required elements and the proposals for these elements should be finalised in advance of consultation.

We note that the European Commission's compliance check of the UK's second cycle RBMPs noted a similar issue.²¹⁰ The review recommended consulting the public in a way that takes into account the plans' purpose and complexity.

DAERA and the NIEA have told us that some such additional information will be included in the final plan. However, the omission of information in the draft plan means that stakeholders were not given any opportunity to understand or comment on these matters during the consultation.

Recommendation 8: For the third cycle plan specifically, we recommend that DAERA identify and implement the most appropriate steps to allow for meaningful and informed public participation in relation to proposals for water body level Environmental Objectives, including any proposed exemptions, and additional measures to achieve them. This could involve further consultation or engagement with a view to developing a supplementary plan if appropriate.

Recommendation 9: We recommend that DAERA improve the approach to public consultation on the draft plans for future cycles. This should ensure the material and proposals consulted upon support full, active and informed public consultation including in relation to water body level Environmental Objectives, any proposed exemptions and measures to achieve those objectives.

4.5.3 Local engagement and partnerships

In Section 4.3.1, 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.²¹¹ Based on the evidence

209 Pickering, para. 152.

²¹⁰ European Commission, '6th Implementation Report of the Water Framework Directive' (n 171).

²¹¹ Pickering, para. 145.

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 or other stakeholder partnerships. This section considers the role for such partnerships in implementing the WFD NI Regulations.

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

Ulster Farmers Union: 'The 'public participation' is a positive aspect of the WFD and when the Regulations in NI were first adopted there was a genuine attempt at public participation at various levels. However, as time progressed, the WFD Stakeholder Forum met less frequently and now hasn't met since 2020. The Catchment meetings that previously took place at a local level have completely stopped. The benefit of public participation is that it allows Stakeholders to be regularly updated on water issues and to feed in comments. The update report that was produced for the WFD Forum meetings provided a useful source of information on what was happening within various Government Departments and Agencies with respect to water issues. It also allowed Stakeholders to engage with officials and each other and build useful contacts and relationships. With both funding and resources under pressure, it will be vital that Government genuinely work in partnership with stakeholders if significant gains are to be made. There is much evidence to show that catchment-based approaches, working with farmers and other partners in local areas is the best way to achieve results and to target the problem catchments. The Sustainable Agriculture Land Management Strategy has recommended this as a way forward. The UFU strongly encourages DAERA and NIEA to further embrace this method when it comes to tackling water quality and allocate sufficient resources to ensure that it happens rather than adopting a broad-brush regulatory approach.'

Wildlife Trusts: highlighted the importance of taking a catchment-based approach to management of the water environment.

Stakeholder meeting: Stakeholders who met in Belfast broadly agreed that a more integrated approach to catchment level management incorporating stakeholder groups would be desirable.

Fundamentally, RBMPs are developed at the RBD level and with the intention of effecting change at the water body level. Following a catchment-based approach to understand drivers, pressures and the measures needed to address them is intrinsic to this approach. Catchment meetings, as referenced above by the Ulster Farmers' Union, were designed to support this approach and embed locally tailored and driven collaborative working at a catchment scale.

Generally, stakeholders in this project have suggested that catchment partnerships have provided a useful forum for coordinated action. However, many have also suggested catchment partnerships have not been able to deliver measures at scale as they lack the funding or status to do so. This challenge of delivery at the water body level following a catchment-based approach is consistent with observations from the Environmental Audit Committee (EAC) in relation to English RBMPs. Specifically, the EAC recommended 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.²¹²

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 partnership working could help to drive improved outcomes.

However, we are also of the view that partnerships need a clear remit and adequate funding to be effective. This highlights a need, as DAERA finalises the third cycle RBMP and the means to implement it, to give careful consideration to the role, design and enabling framework for catchment 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 it would be helpful for DAERA to clarify the funding arrangements, accountability and governance mechanisms for any such partnerships to ensure they are aligned with their intended remit and role.

4.5.4 Producing plans by the statutory deadlines

The third cycle plans for Northern Ireland's RBDs were due by 22 December 2021. DAERA published the draft third cycle draft RBMP covering all three RBDs on 9 April 2021 for a 6-month public consultation which closed on 10 October 2021.

DAERA has told us that the development and completion of the plan were delayed by the Covid pandemic and the suspension of the Northern Ireland Executive (from February 2022 to February 2024), in the absence of which the RBMP could not be approved. With the restoration of the Executive the plan can now be finalised. We encourage DAERA to complete, publish and implement the final plan as soon as possible, while addressing the issues and omissions that we highlight in this report.

As of June 2024, DAERA gave the OEP the following information as regards ministerial approval of the RBMP:

'The draft third cycle RBMP has not yet been submitted to Minister Muir for approval. Before doing so, officials will need time to consider the outworkings of recent relevant reports. These include the Northern Ireland Audit Office's report on Water Quality in Northern Ireland's Lakes and Rivers published on 25 March[²¹³] and the imminent DAERA/ Dfl Water Quality Review on Lough Neagh. The draft RBMP is likely to be reviewed as a result of the findings and recommendations in these reports. Officials will complete this work as soon as possible and bring the draft RBMP to the Minister at the earliest possible opportunity so that he can seek Executive approval for publication.'

²¹² House of Commons Environmental Audit Committee, 'Water Quality in Rivers' (2022) HC 74 para 74 <<u>https://committees.parliament.uk/publications/8460/documents/88412/default/</u>> accessed 10 November 2023.

²¹³ Northern Ireland Audit Office (n 103).

As specified in the regulations, the plan or plans for the next cycle of implementation of the WFD NI Regulations must be approved and published by 22 December 2027.

4.6 Managing transboundary river basins and wider cross-border issues

This section looks at issues concerned with the management of water bodies on the island of Ireland and wider cross-border issues. Our key findings from the analyses in this section are summarised as follows.

Key issues

- A tradition of coordination between the authorities in Northern Ireland and the Republic of Ireland has been maintained for many years in managing water bodies on a transboundary basis. This has been formalised under the implementation of the WFD on both sides of the border.
- Monitoring, classification and reporting are closely coordinated albeit with some differences of technical approach.
- There are mechanisms to identify common actions for the protection and improvement of transboundary water bodies. However, specific measures are limited in the current draft Programme of Measures, in common with the general nature of its wider content.

Monitoring, classification and reporting in Northern Ireland and the Republic of Ireland

The two international RBDs that cross the border between the Republic of Ireland and Northern Ireland are the North Western and the Neagh Bann. The draft third cycle RBMP for Northern Ireland states that there are approximately 70 shared water bodies.²¹⁴

Freshwater monitoring, classification and reporting in shared water bodies in Ireland and Northern Ireland are managed by the North South Rivers and Lakes Group. This is a technical group that includes representatives from the Irish Environmental Protection Agency (EPA), the NIEA, the Agri-Food and Biosciences Institute, the Loughs Agency, DAERA Inland Fisheries and Inland Fisheries Ireland. The key purpose of the group is to ensure proper alignment and consistent reporting for the classification of cross-border water bodies.²¹⁵

There are 55 cross-border river bodies, 29 of which are monitored solely by the NIEA and 13 solely by the EPA. The NIEA has told us that the two agencies exchange the status assessments for these river water bodies. The 13 remaining cross-border river water bodies are jointly monitored by the NIEA and the EPA. Four cross-border lakes are monitored by both jurisdictions. The NIEA and EPA also work together to agree the status for the

²¹⁴ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 75.

²¹⁵ Government of Ireland, Department of Housing, Local Government and Heritage, 'Draft River Basin Management Plan for Ireland 2022 – 2027' <<u>www.gov.ie/pdf/?file=https://assets.gov.ie/199144/7f9320da-ff2e-4a7d-b238-2e179e3bd98a.pdf#page=null</u>> accessed 3 June 2024.

Carlingford Lough and Lough Foyle, both of which are transboundary estuarine water bodies. The two agencies meet to discuss and agree the status of jointly monitored water bodies before either agency publishes the information.

The methods used to assess the status of Biological Quality Elements (BQE) in rivers and lakes in Northern Ireland and Ireland are summarised in Table 4.2.

Table 4.2. Biological assessment methods used to assess ecological status in rivers
and lakes (Source: WSP, 2023) ²¹⁶

Rivers								
Biological Quality elements (BQE)	NIEA Rivers	EPA Rivers						
Macroinvertebrates	River Invertebrate Classification Tool (RICT)	Quality Rating System (Q-value)						
Macrophytes (Aquatic Plants)	Mean Trophic Rank (MTR) LEAFPACS	Mean Trophic Rank (MTR) LEAFPACS						
Phytobenthos (Diatoms)	Trophic Diatom Index (TDI)	Trophic Diatom Index (TDI)						
Fish	Fish Classification Scheme 2 Ireland (FCS2)	Fish Classification Scheme 2 Ireland (FCS2)						
Macroinvertebrates	River Invertebrate Classification Tool (RICT)	Quality Rating System (Q-value)						
Lakes								
Biological Quality elements (BQE)	NIEA Lakes	EPA lakes						
Macrophytes (Aquatic Plants)	Free Macrophyte Index	Free Macrophyte Index						
Phytobenthos (Diatoms)	Lake Trophic Diatom index	Lake Trophic Diatom index						
Phytoplankton	Phytoplankton Lake Assessment Tool with Uncertainty Module (PLUTO)	IE Lake Phytoplankton index						
Fish	Fish in Lakes 2 (FIL2)	Fish in Lakes 2 (FIL2)						

As seen in the table, the two jurisdictions use different BQE assessment methods for macroinvertebrates in rivers and phytoplankton in lakes. The NIEA has told us that these tools have been inter-calibrated while acknowledging that there are some differences between sampling methods, and that the reported data are collected over different time periods and at different frequencies.

The NIEA has also said that any differences identified at the element level are accepted if they do not affect the overall ecological status and reasons for the differences are recorded. The 'one-out, all-out' principle (see Section 2.3 and Annex 4) is applied when there are differences in overall ecological status.

The NIEA also told us that its and the Irish EPA's groundwater teams meet before publishing groundwater body status to compare the most recent information and agree the status.

The status of shared groundwater bodies is determined according to the UK Technical Advisory Group guidance that was developed jointly by the UK and Ireland.

Coordination of action and programmes of measures in Northern Ireland and the Republic of Ireland

The shared waters documents produced by both Ireland and Northern Ireland for previous RBMP cycles highlight that coordination has been maintained for many years in relation to cross-border water quality management. Before the introduction of the WFD, this coordination was less structured and formalised, but it included arrangements on the notification of and responses to pollution incidents. During the early 1990s water quality management strategies were jointly developed for the Foyle and Erne catchments.²¹⁷

The responsible bodies in Northern Ireland and Republic of Ireland are coordinating their water management actions through a North-South Working Group on Water Quality. This group is supported by the North-South Technical Advisory Group and North-South Rivers and Lakes Group. The NIEA also participates in the Irish EPA's National Implementation Group for the WFD.²¹⁸

DAERA's draft third cycle RBMP identifies some of the ways in which Northern Ireland and Ireland are working collaboratively. It explains that the NIEA is a member of the Border Region Operational Committee, which provides a forum to enhance inter-agency networking, sharing of knowledge and experience and seeking opportunities to maximise outcomes for cross-border rivers.²¹⁹

The draft Programme of Measures also identifies several areas of cross-border cooperation. For example, both NI Water and Uisce Éireann (the Irish state utility company) are identified as 'owners' of a measure related to the possible construction or upgrade of wastewater treatment plants.²²⁰ This is subject to the outcome of a PEACE PLUS funding bid (see Section 4.3.2).

A further example is for the protection of fisheries, where ongoing consultation and engagement with cross-border partners on transboundary issues is part of the mechanism identified.²²¹ As with other content in the draft Programme of Measures, most of the cross-border elements are described in general terms rather than as specific actions at particular locations (see Section 4.3.1).

Like Northern Ireland, the Republic of Ireland has not yet finalised its third cycle RBMP at the time of this report. The draft third cycle RBMP for Ireland²²² notes that Ireland and Northern Ireland are required under the WFD to coordinate their efforts in relation to international RBDs.

²¹⁷ DARD, 'Working Together Managing Our Shared Waters' 4 <<u>https://library2.nics.gov.uk/pdf/dard/2009/DXZF.pdf</u>> accessed 7 June 2024.

²¹⁸ Northern Ireland Environment Agency, 'Neagh Bann River Basin Management Plan Summary' (2015) <<u>www.daera-ni.gov.uk/sites/</u> <u>default/files/publications/doe/water-report-neagh-bann-river-basin-plan-2015.pdf</u>> accessed 3 June 2024.

²¹⁹ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 25.

²²⁰ ibid 119.

²²¹ ibid 124.

²²² Government of Ireland, Department of Housing, Local Government and Heritage (n 215).

Wider cross-border issues

Without the EU's overriding policy, there is the possibility that the four UK nations will move further apart in terms of environmental protection. While this reflects the policy of environmental devolution within the UK, post-Brexit divergence between Northern Ireland and Ireland could threaten water quality in Northern Ireland which benefits from cross-border cooperation.

This could become particularly acute if environmental standards differ on cross-border rivers. Ireland's draft third cycle RBMP also notes this, stating that, following the UK's exit from the EU, challenges may occur for Ireland and Northern Ireland with potential regulatory divergence and more complex arrangements for cross border cooperation and consultation.²²³

The draft Environment Strategy for Northern Ireland similarly notes that environmental issues do not respect borders. It highlights that 'we share the same air and water across these islands and have common landscapes, habitats and wildlife movement.' It goes on to say that 'this will require co-operation on a North/South basis as a single biogeographic unit as well as working on an East/West level with the other UK administrations to assess and report on the condition of our biodiversity, habitats and species.'²²⁴

In the recent Northern Ireland Audit Office report 'Water Quality in Northern Ireland's Lakes and Rivers',²²⁵ published in March 2024, one of the key recommendations was 'that the Department develops and publishes an overarching water quality improvement strategy. This will provide a roadmap for tackling key priority areas over the next five years through partnership working, structured in terms of the (funded) initiatives required to address these and linked through to clear delivery milestones.'

In parallel to this report, the OEP has reported separately²²⁶ on the implementation of the equivalent WFD Regulations in England.²²⁷ That report notes many similar issues and challenges as arise in Northern Ireland. It also discusses the interaction of those regulations with the UK Government's EIP²²⁸ as well as Defra's 'Plan for Water' issued in May 2023.²²⁹

Our view

The draft RBMPs for Northern Ireland and the Republic of Ireland show a clear intention and means of interaction to consider transboundary issues. While there are some differences in technical methodologies, practical working arrangements between the authorities in the two jurisdictions appear to have been put in place.

While Northern Ireland's draft third cycle RBMPs include some specific cross-border elements, these reflect the same omissions as other aspects of the plan. In particular, the draft plan does not include any Environmental Objectives for the cross-border water bodies,

223 ibid 18.

²²⁴ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5) 13.

²²⁵ Northern Ireland Audit Office (n 103).

²²⁶ Office for Environmental Protection (n 2).

²²⁷ The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407.

²²⁸ Defra, 'Environmental Improvement Plan 2023' (7 February 2023) <<u>www.gov.uk/government/publications/environmental-improvement-plan</u>> accessed 9 November 2023.

²²⁹ Defra, 'Plan for Water: Our Integrated Plan for Delivering Clean and Plentiful Water' (4 April 2023) <<u>www.gov.uk/government/</u> publications/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water/plan-for-water-our-integrated-plan-fordelivering-clean-and-plentiful-water> accessed 9 November 2023.

or other bodies that affect them, and the draft Programme of Measures remains largely general. The final plan will need to fill these gaps. We note additionally that the omissions highlighted earlier in respect of public participation and consultation will apply equally in respect of the transboundary RBDs.

More broadly, DAERA will wish to consider not just the importance of interaction with the Republic of Ireland in respect of water management and transboundary water bodies, but also wider issues of alignment with other parts of the UK. We note in this regard that Defra has stated in its Plan for Water that it intends to consult on the implementation of the WFD Regulations but has not yet done so.

As well as bringing forward investment for water infrastructure projects, Defra's Plan for Water identified various possible further changes to the water policy and legislative framework in England. These included a commitment to consult on a ban on the use of plastic in wet wipes, proposals to restrict the use of so-called 'forever' chemicals (polyfluoroalkyl *substances*), reducing water demand by encouraging water companies to consider how to increase smart meter installations, and a proposal that fines from water companies be reinvested into a new Water Restoration Fund.

In this regard, Defra's Plan for Water could be considered, in some respects, as a possible model for an 'overarching water strategy' in Northern Ireland as advocated by the Northern Ireland Audit Office. DAERA may wish to consider this further. At the same time, we would caution against the development of a strategy that is separate from and not clearly aligned with the implementation of the WFD NI Regulations.

We suggest the immediate imperative is to complete and implement the final third cycle RBMP for Northern Ireland in a way that meets the requirements of the WFD NI Regulations and has practical effect as soon as possible. It should set out clear Environmental Objectives for each water body, including transboundary water bodies, with clear and tangible funded measures offering reasonable certainty that those outcomes will be achieved. Any wider strategy could then build on such a substantive and effective RBMP and support the achievement of its intended outcomes.

4.7 Ensuring effective monitoring and reporting

This section looks at monitoring and reporting under the WFD NI Regulations including the adoption of the 'one-out, all-out' principle. Our key findings from the analyses in this section are summarised as follows.

Key findings:

- The information we have assessed suggests that the approach taken to monitoring by the NIEA is broadly compliant with the requirements of the WFD NI Regulations. However, we also see some data gaps and room for improvement.
- We suggest that DAERA publish a transparent monitoring programme for the water environment, setting out how it will fulfil its wider monitoring obligations and maintain adequate monitoring of current and emerging major pressures and drivers.

- This should address less developed elements of the monitoring programme including some missing data for classification, balancing chemical and biological monitoring programmes and maintaining sufficient resource to adequately assess emerging chemical risks.
- 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 DAERA explore possible ways to better communicate the process and progress, without lowering levels of protection and ambition.

The context – why monitoring is important

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 water environment.

Under the WFD NI Regulations, DAERA 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 within each RBD.

As set out in Chapter 2 (see Section 2.2.3), this involves monitoring for the various different elements that are used to build the overall picture of whether water bodies meet the Environmental Objective of Good Status.

Monitoring underpins the implementation of the WFD NI Regulations more broadly. It provides information to help understand the drivers and pressures on water bodies as well as their current status. This knowledge is a key building block in deciding what action needs to be taken to achieve the Environmental Objectives. Monitoring also provides a feedback loop on the effectiveness of measures taken, so these can be adjusted as needed.

Approach to water monitoring

The WFD NI 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 NIEA operates a rolling monitoring programme for surface freshwater (rivers and lakes) and groundwater bodies within each RBMP cycle. The Marine Division in DAERA monitors transitional and coastal water bodies, providing the information to the NIEA.

For the second cycle (2015-2021), classifications were updated mid-cycle (2018) and at the end of the cycle (later in 2021). Updated classifications for river water bodies and coastal and transitional water bodies are due to be published in the final RBMP. In principle, the monitoring programme allows for drivers, pressures, state, impact, and response to be monitored.

There have been instances in the classification data in Northern Ireland where the classification, particularly for 2015, is not based on a full suite of quality elements. For example, for the chemical status of rivers in 2015, 206 river water bodies (46%) had no data available.²³⁰ In addition, in 2018 36% of transitional and coastal water bodies had no data available.²³¹

Following the lifting of Covid restrictions. DAERA has said that it has achieved the majority of its statutory monitoring requirements in rivers and lakes, for example exceeding the 90% completion monitoring target during 2022-2023. DAERA has also confirmed to us that not all groundwater bodies have representative monitoring.

In relation to our observations on incomplete data, DAERA has said that under UKTAG guidance on surface water classification not all elements are tested for each interim classification, as some parameters are only tested in three years of every six-year cycle. On occasions where data cannot be collected for a specific parameter, DAERA has told us that the previous data for that parameter is rolled across.

In addition, in relation to emerging chemicals, the NIEA team responsible for developing the annual monitoring programme has advised the OEP that they currently do not have sufficient resources to develop a bespoke monitoring programme for chemicals of emerging concern.

OEP stakeholders also broadly expressed strong views on the monitoring programmes, with some suggesting that the overall system was outdated and underfunded. Several thought there should be a focus on biological rather than chemical parameters. Sediment sampling was identified as a major gap.

Separately, the Sustainable Agricultural Land Management Strategy²³² produced for DAERA by an independent expert group recommended that DAERA provide an enhanced regime of water quality monitoring in targeted catchments, in order to get a more accurate assessment of the status of water bodies. Stakeholders in this project broadly agreed with this position and similarly asked for an enhanced monitoring programme, moving towards continuous monitoring systems to supplement data gained from the large spot sampling programmes operated by the NIEA.

Our view

The information we have assessed suggests that the approach taken to monitoring by the NIEA is broadly compliant with the requirements of the WFD NI Regulations. However, we also see some data gaps and room for improvement.

To ensure public confidence it would be helpful for DAERA to publish a transparent monitoring programme for the water environment, setting out how it will fulfil its monitoring obligations under wider law and policy and maintain adequate monitoring of current and emerging major pressures and drivers. This should address clear gaps such as groundwater monitoring and risks of incoherence or inconsistency in monitoring programmes, for example when undertaken across different teams.

²³⁰ Northern Ireland Environment Agency, 'Northern Ireland Water Framework Directive Statistics Report 2021' (n 6) 10. 231 ibid 31.

²³² DAERA, 'Sustainable Agricultural Land Management Strategy' <<u>www.daera-ni.gov.uk/articles/sustainable-agricultural-land-</u> <u>management-strategy</u>>.

In our view, both biological and chemical monitoring are important in understanding the pressures on and states of the water environment. Enhanced monitoring regimes play an important role for specific parameters and circumstances. Prioritisation will be required to determine when and where these are most effectively deployed.

As far as possible, classifications should be based on a full set of analytical results, including emerging chemicals where new methodologies and procedures for determination may be required. Where this is not possible, DAERA (or the NIEA) should develop a clear, consistent and transparent approach which explains and justifies any instances in the approach to classification where normal elements of the data are missing. They should also consider regular reviews of monitoring in a continuous monitoring, evaluation and learning cycle.

Recommendation 10: We recommend that DAERA develop and implement an ambitious, 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 NI Regulations through to wider monitoring and evaluation of water-related goals under the draft Environment Strategy, Living With Water, and water resource and supply resilience plans.

Reporting using the 'one-out, all-out' principle

Water body classification under the WFD NI Regulations combines biological and chemical quality assessments. It follows the so called 'one-out, all-out' principle where 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.

Some commentators, including the English Environment Agency's former Chief Executive²³³ and the Ulster 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 classification may not change if one element remains at the same status as before.

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.

²³³ Sir James Bevan, 'In Praise of Red Tape: Getting Regulation Right' (4 August 2020) <<u>www.gov.uk/government/speeches/in-praise-of-red-tape-getting-regulation-right</u>> accessed 27 November 2023.

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

'The one-out, all-out classification system used within the WFD means that it is more difficult to make progress visible. The one-out, all-out principle is not properly reflecting reality about the quality of water and masks improvements. Under this principle, there is the potential for substantial financial resources being needed to achieve limited additional benefits. The UFU believes that there needs to be a more flexible system in assessing and reporting water quality.'

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.

An example of the effect of the 'one-out, all-out' rule is shown in Figure 4.2 below. This is based on data for 162 river water bodies in the second cycle RBMP for the North Western RBD. The majority of their individual quality elements monitored across all rivers were at good status (87%). More detailed analysis highlights that while 59 (36%) of those river water bodies were reported at Good Ecological Status, 49 (30%) did not achieve this status due to one parameter failure and a further 29 (18%) failed on two.



Figure 4.2. Effect of one-out, all-out rule on good status classification (Source: DAERA, 2015)²³⁴

Similar issues concerning the 'one-out, all-out' principle have arisen across the EU. The 2019 EU 'fitness check' of the WFD²³⁵ 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

²³⁴ DAERA, 'North Western River Basin Management Plan 2015 to 2021' (n 181) 27.

²³⁵ European Commission, 'Fitness Check of the Water Framework Directive and the Floods Directive' (2 April 2020) <<u>https://</u> <u>commission.europa.eu/publications/fitness-check-water-framework-directive-and-floods-directive_en</u>> accessed 21 November 2023.

considered further as part of the 2022-2024 Work Programme under the EU's 'Common Implementation Strategy' for the WFD.²³⁶

Our view

Overall, we consider that the multielement 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. We suggest that DAERA explore possible ways to communicate better the process and progress, without lowering levels of protection and lessening ambition.

²³⁶ European Commission, 'CIS Work Programme – Stock-Taking and Way Forward' (16 November 2023) <<u>https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/84dfae5d-1a13-4046-94c9-0bba379ce7b0/details</u>> 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 NI 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 Northern Ireland.

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 NI 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 NI Regulations support a long-term vision in relation to the water environment. It discusses:

- the ambition reflected in the WFD NI Regulations' Environmental Objectives
- their potential contributions to the targets and outcomes contained in the draft Northern Ireland Environment Strategy, as well as the Climate Action Programme and Global Biodiversity Framework targets.

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

- the draft Environment Strategy SEOs and targets, in particular the SEO of 'Excellent water quality'
- interaction with 'Sustainable Water A Long-Term Water Strategy for Northern Ireland'
- other water management plans.

Section 5.5 examines issues of governance concerning the WFD NI Regulations and draft RBMP. It addresses questions of:

- accountability for delivery of the WFD NI Regulations and the draft RBMP
- the legal duties on public authorities under the WFD NI Regulations including 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 NI 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 for attention.

5.2.1 Overall approach of the WFD NI 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 DAERA and others to pursue the Environmental Objectives with ambition, drive and purpose.

The approach of the WFD NI 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 NI 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.²³⁷ The six-year cycle allows the information gathered and proposed under the WFD NI Regulations about drivers, pressures, status, impact and planned responses to be recorded and subject to public scrutiny. RBMPs should serve a key governance function in driving forward delivery of the Environmental Objectives, as we discuss in Section 5.5.

Programmes of Measures must include the basic measures listed in the WFD NI 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 NI

²³⁷ Regs 5, 6 and 11, WFD NI Regulations.

Regulations,²³⁸ such as the Urban Waste Water Treatment Regulations (Northern Ireland) 2007, and those additionally introduced by the WFD NI Regulations.²³⁹ 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.²⁴⁰ 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.²⁴¹ There is also a requirement to include measures to address 'any other significant adverse impacts on the status of water'.²⁴² One example of this could be measures to tackle invasive, non-native species (see Chapter 3, Figure 3.2).

Our view

Our overall view is that the fundamental structure and approach of the 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 and recommend retention of the fundamental elements of the WFD NI Regulations.

However, as we discuss in the sections below, there are some specific opportunities to improve upon the existing framework. We therefore support a limited review of the WFD NI Regulations and how they are implemented, focussing on strengthening the law and improving how it is implemented in the key areas that we outline in Section 5.5 below. It is essential that any such review does not result in lowering current levels of protection or lessening ambition.

Recommendation 11: We recommend that the Northern Ireland Executive retain the fundamental underlying structure and approach of the WFD NI 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 NI 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.

 ²³⁸ Reg 20(2), WFD NI Regulations; see also Art 11.3(a) WFD (as amended by Para. 8(a), Part 1, Sch. 5, WFD NI Regulations); see also S.
 5(4) Retained EU Law (Revocation and Reform) Act 2023.

²³⁹ Reg 20(2)(b)-(I), WFD NI Regulations.

²⁴⁰ Reg 20(2)(g) and (h), WFD NI Regulations.

²⁴¹ Reg 20(2)(e), (i) and (k), WFD NI Regulations.

²⁴² Reg 20(2)(i), WFD NI Regulations.

- 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 NI Regulations provide for ongoing monitoring to understand the state of the water environment.²⁴³ However, as we note in Chapter 4 (Section 4.4), DAERA did not report data from monitoring for the third cycle RBMP 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').²⁴⁴

WISE provides an online portal for a wide range of water-related information, serving users from EU institutions to the general public.²⁴⁵ It has supported public scrutiny and public participation in relation to the WFD, including, in the past, information on implementation in Northern Ireland, reported as part of the UK's submission to WISE.

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.

As we note in Chapter 4 (Section 4.5.1), there is also a failure to present information in the draft RBMP itself concerning the high-level pressures and drivers that are causing water bodies to fail their Environmental Objectives. This position has not changed since the second cycle RBMPs, which also did not include this information.

The reduced reporting and lack of information in the third cycle has made it more difficult to scrutinise the draft RBMP. It has also created barriers to public participation in the plan.

Watch List mechanism

DAERA's monitoring programme must cover pollution to surface water bodies by so-called 'priority substances' (see Annex 3).²⁴⁶ 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'.²⁴⁷

²⁴³ Reg 11, WFD NI Regulations.

²⁴⁴ European Commission and European Environment Agency (n 204).

²⁴⁵ European Commission, 'About WISE' <<u>https://water.europa.eu/#about</u>> accessed 23 January 2024.

²⁴⁶ Reg 11, WFD NI Regulations.

²⁴⁷ Reg 6, WFD NI Regulations. See also Annex V to the WFD and the Environmental Quality Standards Directive.

There is also a list of substances of emerging concern in respect of water pollution that DAERA must monitor for.²⁴⁸ This list is based on a 'Watch List' of substances originally compiled by the European Commission.²⁴⁹ The purpose of the 'Watch List' is to gather data about substances of emerging concern, so that they can be considered for inclusion in the list of priority substances.

DAERA also has a relatively comprehensive existing monitoring programme for some substances of emerging concern. However, significant information is absent and resources are insufficient to adequately assess risks from a wider range of substances of concern, as described in Chapters 3 (Section 3.4) and 4 (Section 4.7).

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.²⁵⁰ Following EU Exit, however, DAERA 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 Northern Ireland. Instead, DAERA has a discretionary power, under the Environment Act 2021, to update the list of priority substances and derive the associated environmental quality standards.²⁵¹ There is no timescale for the exercise of this discretionary power.

DAERA has stated in this project that the UK Technical Advisory Group on the WFD (UKTAG)²⁵² is planning to develop a UK list of chemicals of concern. UKTAG was set up as a partnership of the UK environment and conservation agencies to provide coordinated advice on the scientific and technical aspects of the WFD. The NIEA is a member of UKTAG.²⁵³ DAERA has told us during this project that this work would include the review and recommendation for deselection of priority substances that are not relevant to the whole of the UK, as well as identifying new substances of concern.

DAERA did not provide information about whether developing environmental quality standards for new substances of concern will form part of this work. We also have no information from DAERA about how closely the work will remain aligned with EU processes for identifying priority substances and, where relevant, developing environmental quality standards.

DAERA has the final decision on removing and adding priority substances in Northern Ireland.²⁵⁴ However, DAERA has not provided information about the governance arrangements or processes to support that decision making.

Our view

The WFD NI Regulations apply a structural model based on the management of water in natural units (RBDs) covering all types of water bodies, and applying an integrated, DPSIR approach at the ecosystem level. In this context, the WFD NI Regulations remain

²⁴⁸ 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.

²⁴⁹ European Commission, 'Surface Water' <<u>https://environment.ec.europa.eu/topics/water/surface-water_en</u>> accessed 23 January 2024. See also Article 8b, Environmental Quality Standards Directive.

²⁵⁰ ibid.1.

²⁵¹ S.91, Environment Act 2021.

²⁵² UKTAG, 'UK Technical Advisory Group on the WFD (UKTAG)' <<u>www.wfduk.org/</u>> accessed 16 April 2024.

²⁵³ UKTAG, 'About UKTAG' <<u>www.wfduk.org/about-uktag-and-jagdag</u>> accessed 16 April 2024.

²⁵⁴ In exercise of its discretionary powers under s.91, Environment Act 2021.

highly relevant as a 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, pressures and trends in the state of the water environment.

The OEP's view is that DAERA 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 NI Regulations.

As we note above, it is unclear whether the process for identifying and developing environmental quality standards for substances of emerging concern in the future has begun and whether processes for this work have been defined. It is also unclear whether DAERA has developed processes for deciding whether to deselect or add priority substances, assuming that work to identify them is carried out by UKTAG. In the meantime, as set out in Chapter 3, new and emerging chemical risks to the water environment in Northern Ireland may be receiving inadequate attention.

Recommendation 12: We recommend that DAERA (working with the UK Technical Advisory Group as appropriate) determine how to approach the monitoring and regulation of new and emerging chemicals. In particular, we highlight the need for effective processes to replace the former EU 'Watch List' mechanism and for setting environmental quality standards. This should ensure the WFD NI Regulations can provide a continuing framework for addressing new and emerging threats.

5.3 Creating a vision

This section considers the extent to which the WFD NI 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 NI 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 NI Regulations are ambitious. If achieved, they will significantly improve the water environment and make important contributions to the related outcomes and targets of the draft Environment Strategy, the Climate Action Programme and the Global Biodiversity Framework.

Our assessment of the Environmental Objectives

As we explain in Chapters 1 and 2, the Environmental Objectives of the WFD NI 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.²⁵⁵ This allows the tailoring of measures to local conditions, supporting the DPSIR framework.

Our view

Achieving Good Status as defined by the WFD NI Regulations would significantly improve the state of water bodies in Northern Ireland and would make an important contribution to the related outcomes and targets of the draft Environment Strategy, the Climate Action Programme, 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 standards specified in the WFD NI 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.

5.4 Coherent law, policy and targets

Chapter 4 presents our assessment of the Environmental Objectives in the draft RBMP. In summary, our key finding in Chapter 4 is that the draft RBMP does not propose Environmental Objectives at the water body level. Instead, it refers to an overall 'working target' to have 70% of water bodies at Good Status or better by 2027 (the '2027 Working Target').²⁵⁶

The draft RBMP refers to working targets that have been set for each water body for 2027 and that will sit alongside the environmental objective of Good Status set out in the WFD NI Regulations.²⁵⁷ However, these water body level working targets and objectives are not presented in the draft RBMP.

Based on the publicly available information, our interpretation is that the 2027 Working Target is aiming for 70% of all water bodies to reach either Good Ecological Status (or

²⁵⁵ Reg 12, WFD NI Regulations.

²⁵⁶ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) para 7.1.

²⁵⁷ ibid.

equivalent) by 2027 for surface water, or Good Status (including both Good Quantitative Status and Good Chemical Status) for groundwater by 2027.

On the face of it, the 2027 Working Target also appears to include aiming for Good Chemical Status for surface water bodies by 2027. However, as we explain in more detail in Chapter 4 (Section 4.2), it would not be technically feasible to achieve Good Chemical Status for surface water bodies by 2027, due to pollution by uPBTs.

Our working conclusion is that the 2027 Working Target does not include aiming for Good Chemical Status for 70% of surface water bodies, although there could be an aim to meet the standards for non-uPBT chemicals in surface water bodies. However, DAERA has not confirmed either of these points.

The draft RBMP also does not provide detailed information about the draft Programme of Measures to demonstrate how the 2027 Working Target will be met. Overall, we conclude in Chapter 4 that the 2027 Working Target cannot be achieved without significant additional investment, measures and initiatives. As things stand, the 2027 Working Target appears 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 NI Regulations.

In the absence of greater clarity regarding its substance and whether it will remain the same in the final third cycle RBMP, the assessment in this section is based on our current understanding of the 2027 Working Target, as set out above and in more detail in Chapter 4.

The WFD NI Regulations and the 2027 Working Target 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 the Northern Ireland Executive's vision, ambitions and legal obligations, including the Environmental Objectives and the Strategic Environmental Outcomes identified in the draft Environment Strategy, 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 2027 Working Target in the draft RBMP and the outcomes and targets of the draft Environment Strategy, and international commitments.
- There is a lack of coherence between the Programme of Measures in the draft RBMP and the actions in 'Sustainable Water – A Long-Term Water Strategy for Northern Ireland'.
- There is also a lack of integration between different water management plans and the objectives they contain.
- 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 Draft Environment Strategy

In late 2021, the Northern Ireland Executive published for consultation its draft Environment Strategy for Northern Ireland. This is the draft Environmental Improvement Plan for Northern Ireland under the Environment Act 2021, the purpose of which is to significantly improve the natural environment.²⁵⁸ The draft Environment Strategy was published for consultation in November 2021, after the draft RBMP. At the time of writing, there is no publicly available information to indicate whether the final Environment Strategy will differ significantly from the draft Environment Strategy.

Environment Strategy proposals for excellent water

The draft Environment Strategy contains six 'Strategic Environmental Outcomes' (SEOs).²⁵⁹ These are not legally binding targets but are instead proposed outcomes through which the Northern Ireland Executive intends to deliver on its environmental commitments in the Programme for Government.²⁶⁰ Each SEO is underpinned by a set of 'proposals' relating to a specific environmental issue relevant to that SEO.²⁶¹ These proposals set out: (i) the current position in respect of the relevant environmental issue; (ii) actions to improve the environment; (iii) targets relating to the actions; and (iv) a vision or intended outcome.²⁶² The vision or intended outcome for each set of proposals will in turn contribute to the achievement of that SEO.

SEO 1 is 'Excellent air, water, land & neighbourhood quality'.²⁶³ There are three sets of proposals underpinning the 'excellent water' aspect of SEO 1.²⁶⁴ The second set of proposals relating to 'Water Resources: Quality & Quantity' (Proposal 2)²⁶⁵ and the fourth set of proposals relating to 'Sustainable Drainage & Wastewater Management' (Proposal 4)²⁶⁶ are the most clearly aligned with the WFD NI Regulations' Environmental Objectives. The third set of proposals relating to 'Marine and Coastal Water Resources: Quality & Quantity' (Proposal 3)²⁶⁷ is also relevant to the WFD NI Regulations' Environmental Objectives.

We discuss the coherence of the draft Environment Strategy more broadly with other actions related to biodiversity in the OEP's forthcoming *Pressures affecting terrestrial and freshwater biodiversity in Northern Ireland* report. In this report, we focus mainly on the water environment aspects of the draft Environment Strategy.

The actions and targets for Proposal 2 include the 2027 Working Target, which is described as '*By 2027: 70% of water bodies at Good Status*', and publishing the final third cycle RBMP in 2022.²⁶⁸ Various measures from the draft RBMP are also listed as key actions for both Proposal 2 and Proposal 4.²⁶⁹

²⁵⁸ Para. 1, sch. 2, Environment Act 20201..

²⁵⁹ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5) 21.

²⁶⁰ The Executive Office, 'Programme for Government' (29 May 2015) <<u>www.executiveoffice-ni.gov.uk/topics/making-government-</u> work/programme-government> accessed 22 May 2024.

²⁶¹ DAERA, 'Draft Environment Strategy for Northern Ireland' (n 5) 20.

²⁶² ibid.

²⁶³ ibid 22–32. 264 ibid 24–29.

²⁶⁵ ibid 24–25.

²⁶⁶ ibid 28–29.

²⁶⁷ ibid 26-27.

²⁶⁸ ibid 24.

²⁶⁹ ibid 24-25, 28-29.

Meanwhile, the actions and targets for Proposal 3 include implementing the WFD NI Regulations through delivery of the third cycle RBMP and certain measures from the draft RBMP.²⁷⁰ Overall, implementing the third cycle RBMP is the foundation for delivering the vision associated with Proposals 2 and 4 and is a key component for delivering Proposal 3. In turn, implementing the third cycle RBMP measures will be critical to achieving the 'excellent water' element of SEO 1.

Alongside the action or target to publish the final third cycle RBMP in 2022, many of the other actions and targets underpinning delivery of the SEOs have not yet been implemented. At the time of writing, this includes the Ammonia Strategy, the Peatland Strategy, the Nutrient Action Programme, elements of the Future Agricultural Policy and the Climate Action Programme.

These actions are all relevant to addressing major pressures on the water environment. Some of them are also measures in the draft RBMP. Failure to implement the Nutrient Action Programme, in particular, is a major gap that is also a measure in the draft RBMP. Similarly, the Climate Action Programme's focus on implementing nature-based solutions will tackle important pressures we identify in Chapter 3.

Failure to implement these targets and actions is therefore a significant barrier to achieving the Environmental Objectives. We understand that the reasons for the delay relate to the lack of a functioning Northern Ireland Executive between February 2022 and February 2024. We discuss this in more detail at Section 5.5.1 below.

More broadly, many draft Environment Strategy actions and targets are undoubtedly relevant to addressing pressures on the water environment, but most of these actions and targets are not measurable, time-bound or sufficiently specific in terms of the environmental outcome aimed for. The OEP has previously raised this issue in written advice to DAERA on the suitability of adopting the draft Environment Strategy as the EIP for Northern Ireland.²⁷¹

In addition, as noted above, many of the plans and strategies referred to have not yet been published. It is therefore not possible to quantify the contribution that draft Environment Strategy actions and targets would make to achieving the 2027 Working Target.

As with the draft RBMP, the draft Environment Strategy makes no reference to the requirement under the WFD NI Regulations to aim for Good Chemical Status for surface water or the rationale behind the 2027 Working Target for 70% of water bodies. The document also expresses no intended outcome for the remaining 30% of water bodies.

Our view

Our interpretation is that delivery of the 2027 Working Target in the draft RBMP is the foundation for achieving the Northern Ireland Executive's intended outcome of 'excellent water', as outlined in SEO 1. The 2027 Working Target is the only measurable environmental outcome referred to in Proposal 2 and measures from the draft RBMP are key to delivering Proposals 2, 3 and 4 that underpin the 'excellent water' outcome. Failing to deliver the 2027 Working Target would therefore lead to failure to achieve this aspect of the draft Environment Strategy.

270 ibid 26-27.

²⁷¹ Office for Environmental Protection, 'OEP Supports Adoption of NI EIP but Identifies Areas for Improvement' (22 September 2022) <<u>www.theoep.org.uk/index.php/report/oep-supports-adoption-ni-eip-identifies-areas-improvement</u>> accessed 22 May 2024.

However, this relationship is not made explicit in the published documents. There is no explanation about the contribution that different targets and actions will make towards achieving the vision or intended outcome associated with each set of proposals, or in turn the relevant SEO. There is also no explanation of why certain draft RBMP measures are listed while others are not. There is therefore a lack of clarity and a risk that intended outcomes in the draft Environment Strategy are viewed as being inconsistent with or separate from existing legal commitments.

As it finalises and takes forward its Environment Strategy, we suggest that DAERA publicly confirm that Proposals 2 and 4 and the relevant aspects of Proposals 3 are not intended to alter legally binding commitments to achieve the Environmental Objectives, and that meeting the 2027 Working Target will be the foundation for achieving them. The final Environment Strategy should stipulate the specific, measurable and time-bound actions that will be necessary for achieving Proposals 2, 3 and 4. DAERA should clarify how actions will contribute to achieving the Environmental Objectives.

5.4.2 Sustainable Water – A Long-Term Water Strategy for Northern Ireland

Background

Dfl published a water policy paper, 'Sustainable Water – A Long-Term Water Strategy for Northern Ireland'²⁷² in 2016 ('the Strategy'), which was endorsed by the Northern Ireland Executive. The stated purpose of the Strategy is to set out '*a range of initiatives to deliver the Executive's long-term goal of a sustainable water sector in Northern Ireland.*'²⁷³ The Strategy relates to the period 2015-2040 and concerns the maintenance of an adequate water supply for Northern Ireland while also meeting environmental obligations.

The Strategy is intended to deliver a more joined-up approach '*for the whole of the water sector in managing all our water needs.*' Regarding environmental outcomes, the Strategy aims to support compliance with several Northern Ireland environmental laws, including the WFD NI Regulations.²⁷⁴ However, the Strategy's relationship to the draft Environment Strategy and the draft RBMP, and its role in delivering the Environmental Outcomes, is unclear.

According to the Strategy, the aim is to 'meet the environmental requirements of the Water Framework Directive in a sustainable manner'. In this regard, the Strategy places an emphasis on preventing substances from entering waterways as the most cost-effective and energy-efficient way of tackling water quality issues and introducing the concept of 'sustainable catchment management'.

Sustainable catchment management recognises the impact that land management, planning and drainage have on water quality and flood risk and seeks to sustainably manage these interconnected elements.²⁷⁵ This approach acknowledges the need to '*look at every part of the water cycle from rainfall to drainage and treatment of wastewater, as well as the supply and treatment of drinking water.*'

273 ibid 2.

²⁷² Department for Regional Development (n 24).

²⁷⁴ ibid 16.

²⁷⁵ ibid 16-19.

Funding and investment

The Strategy acknowledges its far-reaching scope and the significant investment that will be required to implement it. It also acknowledges that reductions in funding for key stakeholders, including government departments and NI Water, may have an impact on their ability to deliver some objectives of the Strategy, '*at least in the short-term*.'²⁷⁶ However, the longer-term problems, both environmental and economic, of not implementing the Strategy are also acknowledged. The Strategy therefore seeks to set short, medium and long-term priorities in order to '*maximise benefits from public expenditure funding as and when it becomes available*.'

Key principles and aims

The Strategy sets out five key principles,²⁷⁷ one of which is environmental improvement and compliance (Principle 3).²⁷⁸ In this regard, the Strategy states that: '*Major investment in water and sewerage infrastructure and in agriculture over the last decade has resulted in significant improvements in the quality of drinking water and of our inland and coastal waters. As wastewater treatment continues to improve through investment, priority now needs to be given to reducing the risks of pollution from sewage discharges.*'²⁷⁹

This statement runs partially counter to our own findings as presented in Chapter 3 concerning major pressures on the water environment that need to be addressed. However, alongside effective and efficient wastewater collection and treatment, the following are also stated as key aims: sustainable environmental policy and regulation, the reduction of diffuse pollution through sustainable catchment management, maintaining sustainable levels of water in the environment, and improving river and coastal water morphology and biodiversity.²⁸⁰

The key principles are underpinned by four high-level aims, one of which is to 'achieve the environmental requirements of the Water Framework Directive in a sustainable manner'.²⁸¹ The other key aims relate to providing high quality drinking water, managing flood risk, and providing sustainable water and sewerage services. The aim to achieve WFD requirements in a sustainable manner is addressed in Part 4 of the Strategy (Environmental Protection and Improvement).²⁸²

The aims are intended to be delivered through several policies.²⁸³ The policies, in turn, have a number of measures to deliver them.²⁸⁴ Elements of all the key aims are relevant to the WFD NI Regulations' Environmental Objectives. However, the policies and associated measures are high-level and it is not clear what relative contributions they would make to achieving the Environmental Objectives.

276 ibid 19.
277 ibid 21–22.
278 ibid 22.
279 ibid.
280 ibid 26.
281 ibid 24.
282 ibid 93–124.
283 ibid 26.
284 ibid 28.

Governance and delivery risks

A key delivery risk is that the Strategy is being led by Dfl, while many of the measures underpinning it will be delivered by other bodies outside of its control. Effective cross-government and inter-agency working will therefore be essential, as well as effective working with other public authorities with delivery functions.

There is also a risk of competing priorities. Dfl's policy remit includes the maintenance and development of critical water, transport and planning infrastructure in Northern Ireland, elements of which may not align with the Environmental Objectives. At the same time, it must have regard to the relevant RBMP and the need to achieve the Environmental Objectives.

The Strategy states that it will be driven by delivery measures, to be set out in a Strategy Implementation Action Plan, including agreed timescales for their completion and delivery.²⁸⁵ The Strategy Implementation Action Plan was published in November 2017.²⁸⁶ However, it does not set out specific, measurable, outcome-focused delivery measures to achieve the high-level policies and proposed actions in the Strategy. Instead, the document re-lists the high-level proposed actions associated with each policy and key aim. The document does add information stating which Northern Ireland government department or other body owns each action and whether the 'achievable timeframe' for the action is short, medium or long-term. However, these descriptions are not quantified and therefore the actions are not sufficiently time-bound.

According to the Strategy, an inter-departmental Water Strategy Implementation Board oversees implementation.²⁸⁷ There is a monitoring framework, with Dfl retaining responsibility for reporting on progress to the Implementation Board and the Northern Ireland Executive.²⁸⁸ Formal reviews of the Strategy are planned for every six years, to align with the water industry investment periods and the review period for RBMPs and Flood Risk Management Plans (FRMPs – see Section 5.4.3). Informal reviews are planned for every three years.

Dfl publishes annual reports on implementation of the Strategy. The most recent annual report, for the period 2022/23, was published in January 2024.²⁸⁹ The report states that since 2015, 41 out of 200 actions have been completed (35 short-term, 5 medium-term and 1 medium/long-term). However, there is no assessment of how these contribute to the high-level list of actions in the Implementation Action Plan. It is therefore difficult to meaningfully scrutinise progress towards achieving the actions set out in the Strategy.

The implementation report goes on to acknowledge and underline that funding is a key challenge to implementation of the Strategy.²⁹⁰ The report states that: '*Full implementation of the Strategy will require significant financial investment over the 25-year period of the Strategy. The increasing pressure on the availability of funding is likely to have an impact on key stakeholders' ability to deliver the objectives of the Strategy. Stakeholders therefore*

285 ibid.

287 Department for Regional Development (n 24) 28.

²⁸⁶ Department for Infrastructure, 'Long-Term Water Strategy – Implementation Action Plan' <<u>www.infrastructure-ni.gov.uk/sites/</u> <u>default/files/publications/infrastructure/long-term-water-strategy-implementation-action-plan-november-2017.pdf</u>>.

²⁸⁸ ibid.

²⁸⁹ Department for Infrastructure, '7th Annual Report on Sustainable Water A Long-Term Water Strategy for Northern Ireland (2015 – 2040)' <<u>www.infrastructure-ni.gov.uk/sites/default/files/publications/infrastructure/2022-23-seventh-sustainable-water-annual-report.pdf</u>> accessed 7 June 2024.

²⁹⁰ ibid 6.

*may need to prioritise the actions they can deliver.*²⁹¹ However, there is no publicly available information on how decisions about which measures should be prioritised are reached or what guidance is available to stakeholders as they make these decisions.

Our view

If it is implemented, the Strategy would undoubtedly contribute to achieving the Environmental Objectives of the WFD NI Regulations. It is also identified as a key plan underpinning delivery of Proposal 4 (Sustainable Drainage & Wastewater Management) of the draft Environment Strategy, which in turn will contribute to achieving SEO 1.

The Strategy contains important information and insights about water quality in Northern Ireland. For example, it acknowledges the need to tackle water quality at the catchment scale, because of combined impacts from local land management, planning policy and decisions and different drainage systems.

However, the Strategy identifies availability of funding as a significant challenge to the implementation of measures. In this context, it is unclear how actions will be prioritised for delivery. This creates significant uncertainty about the implementation of those measures and, consequently, the likelihood of their contributing towards the Environmental Objectives.

There is a significant degree of overlap between the proposed actions in the Implementation Action Plan and the draft Programme of Measures in the draft RBMP. One of the stated aims of the Strategy is to achieve compliance with the WFD, while RBMPs are the key delivery vehicle for delivering the WFD NI Regulations.

While the Strategy lists actions and policy initiatives, it is unclear what relative contribution they will make towards achieving the Environmental Objectives by their due dates. This is particularly the case given the high-level nature of the proposed actions in the Implementation Action Plan, which are not sufficiently specific, measurable, time-bound or outcome-focussed.

For example, the proposed actions to achieve the key aim of sustainable environmental policy and regulation include an action for Northern Ireland government departments to 'work in partnership with land owners to encourage sustainable land management practices'. However, it is not explained what such practices would look like, how they would be encouraged or what work has been undertaken to understand the uptake and outcomes of this work.

As outlined in in the OEP's forthcoming *Pressures affecting terrestrial and freshwater biodiversity in Northern Ireland* report, pollution is one of three major pressures on the Northern Ireland water environment.

We support and encourage actions to tackle key pressures, such as developing and maintaining water quality models for water bodies.²⁹² However, pace is an issue. For example, the timeframe for achieving this action in the Implementation Action Plan

291 ibid.

²⁹² Department for Regional Development (n 24) 102.

is 'long-term'.²⁹³ This is not broken down into smaller milestones or measurable actions and there is no quantitative explanation of what 'short, medium and long-term' mean in the context of the Implementation Action Plan. Working with landowners to encourage sustainable land management practices is marked medium to long-term, again with no milestones, measurable actions or explanation of the timescale.²⁹⁴

In addition, the Strategy and the draft RBMP do not appear to be sufficiently coherent with one another. Although the Strategy document acknowledges that the draft RBMP and achieving the Environmental Objectives are fundamental to its Water Quality Strategy (see for example its figure 4.1)²⁹⁵ and broader water and flood risk management, there is no explanation of how actions in the Implementation Action Plan will be integrated into the Programme of Measures to achieve the Environmental Objectives.

The draft RBMP provides a summary of the Programmes of Measures. However, this does not include all relevant delivery measures from the Strategy. This is the case even though the Strategy pre-dates publication of the draft RBMP. The relationship between the two documents is therefore unclear and risks being incoherent or inconsistent. There is also no explanation of the relationship between the Strategy and the draft Environment Strategy, or the relative contribution of the proposed actions towards achieving the Strategic Environmental Objectives.

Overall, the WFD NI 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 coordinated.

In order to demonstrate this, there is a need for measures that are time-bound, outcome-focussed, measurable and more specific, to address pressures on specific water bodies. We discuss this in more detail in our discussion of the Programmes of Measures in Section 4.3 of Chapter 4. Meanwhile, availability of funding and effective cross-government, inter-agency working and working with other bodies are key challenges to the implementation of measures across different plans, and ultimately to achieving the Environmental Objectives.

5.4.3 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.

The targets and commitments in these plans are 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 facilitate the achievement of the Environmental Objectives.

294 ibid 23.

²⁹³ Department for Infrastructure, 'Long-Term Water Strategy – Implementation Action Plan' (n 286) 25.

²⁹⁵ Department for Regional Development (n 24) 98.

We set out in Table 5.1 a summary of some of the current key plans relevant to water management in Northern Ireland. The table is illustrative rather than exhaustive.

Plan name	Cycle	Summary information
River Basin Management Plans (RBMPs)	6 years	These are statutory plans made under the WFD NI Regulations and produced by DAERA. The purpose of the plans is to 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. For the third cycle of river basin planning, DAERA has produced a draft RBMP that combines reporting for all three Northern Ireland RBDs.
Sustainable Water – A Long-Term Water Strategy for Northern Ireland	2015-2040 (Reviewed every 6 years)	Led by Dfl and endorsed by the NI Executive, this is a plan for sustainable water use in Northern Ireland. It focuses on providing an overarching approach to the water sector, including compliance with the WFD and other laws designed to protect and improve the quality of the water environment. The plan is reviewed every six years, to align with the water industry investment periods and the review period for RBMPs and FRMPs.
NI Water's 'Water Strategy'	2021-2046 (Updates 2015-2040 existing long-term strategy, reviewed after 6 years)	This is the business plan for NI Water. It includes information on asset management, investment, maintenance, operational and other activities that the company plans to take to meet statutory and non-statutory obligations and ensure a sustainable water supply to its customers. The current plan updates NI Water's existing long-term strategy (2015-2040) for the current Price Control period ('PC21').

Table 5.1. Summary of key water management plans and planning cycles in Northern Ireland

Plan name	Cycle	Summary information
Water Resource and Supply Resilience Plan (WRSRPs)	2014/15 to 2042/43 (Updated every 6 years – a draft updated plan was recently consulted on)	This is a statutory plan led by NI Water that combines the legal requirements for Water Resource Management Plans and Drought Plans. The Plan outlines how NI Water will ensure there is enough water to meet the future needs of people, businesses and the environment. It includes information on supply and demand management, sets out measures to reduce water use and increase efficiency and outlines how NI water will manage water supply during periods of drought to maintain supplies. The plan has a long-term outlook and is
Strategic Drainage Infrastructure Plans (SDIPs)	Living With Water (LWW) in Belfast: 2021-2033 (Reviewed every 6 years)	 updated every six years. These plans are led by Dfl. They are not statutory plans but are endorsed by the Northern Ireland Executive. The LWW in Belfast Plan is at present the only SDIP for Northern Ireland that has been endorsed by the Northern Ireland Executive and has commenced implementation. The LWW in Belfast Plan was developed by the 'Living With Water' Programme, which is led by Dfl working in partnership with stakeholders including DAERA and NI Water. DAERA has told us during this project that work has also commenced on the development of a LWW Derry/Londonderry Plan. The draft plan has yet to be consulted on. The intention for SDIPs is that they will outline how drainage and wastewater systems will be managed to provide effective and efficient services. The aspiration is to focus on holistic and integrated solutions to identified pressures, whilst promoting the use of blue/ green infrastructure, delivering multiple benefits. Living with Water in Belfast commits to a full review of the plan in advance of the next Price Control period ('PC27').

Plan name	Cycle	Summary information
Flood Risk Management Plans (FRMPS)	6 years	These are statutory plans for how DAERA will manage the risk of flooding and coastal erosion in Northern Ireland at the RBD and local levels. They set out objectives, policies and measures to reduce the risk and impact of flooding. The FRMPs are updated every six years on a cycle aligned with that of the RBMPs. The current (second cycle ²⁹⁶) plan
		consolidates each of NI's three principal RBDs into one plan and covers the period
		2021-2027.

We discuss below how these different plans relate to each other and consider barriers to their integration with RBMPs that could be hindering alignment of the objectives in these plans with the Environmental Objectives.

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 NI Water plans.

NI Water plans and **RBMPs**

NI Water is a publicly-funded regulated utility.²⁹⁷ Every six years, UREGNI carries out a regulatory process known as 'Price Control' (PC). This determines the levels of customer bills,²⁹⁸ capital investment and company performance in the control period.

During this process, NI Water submits a business plan to UREGNI. The business plan sets out information on asset management, investment, maintenance, operational and other activities that the company plans to take to meet statutory and non-statutory obligations and ensure a sustainable water supply to its customers.²⁹⁹ This includes actions needed to meet obligations under the WFD NI Regulations and other water law, for example delivering those RBMP measures which they must implement. UREGNI reaches a determination based on the business plan and the funding allocations indicated by Dfl.

There is a high risk of conflicting objectives within NI Water plans and RBMPs, with NI Water needing to carefully consider how it can ensure that customers are provided with a water supply that is both secure and environmentally sustainable. The Price Control process provides DAERA and Dfl with the opportunity to engage with and provide guidance to NI Water concerning its obligations under the WFD NI Regulations regarding both delivery and 'WFD assessment'.

'WFD assessment' broadly means that NI Water must ensure that the plans it produces prevent the deterioration of any water body, support the achievement of the Environmental

²⁹⁶ The second FRMP cycle is intended to align with the third RBMP cycle.

²⁹⁷ NI Water, 'Our Strategy 2021-2046' 26 < www.niwater.com/siteFiles/resources/HaveYourSay/strategy-2020.pdf>.

²⁹⁸ Only non-domestic customers pay water bills in Northern Ireland.

²⁹⁹ NI Water, 'Our Strategy 2021-2046' (n 297).

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 NI Water plans reflect WFD requirements in Section 5.5 below.

NI Water's 'Water Strategy'

NI Water's 'Water Strategy' is a short, public-facing document rather than its full business plan. It includes basic information on asset management, investment, maintenance, operational and other activities that the company plans to undertake to meet statutory and non-statutory obligations and ensure a sustainable water supply to its customers.³⁰⁰

The draft Northern Ireland Environment Strategy identifies the Water Strategy as a key plan underpinning delivery of Proposal 2 (Water Resources: Quality & Quantity). This in turn will contribute to achieving SEO 1. The current Water Strategy is for the period 2021-2046 and refreshes the previous strategy (which was for the period 2015-2040) for the current Price Control period ('PC21').

The Water Strategy states that chronic underfunding through the Price Control process has prevented it from achieving more stringent standards to achieve water quality targets.³⁰¹ As an example, the Water Strategy refers to underfunding of the previous Price Control period ('PC15') business plan 2015-2021, with £990 million allocated versus the £1.7 billion required.³⁰²

There is also a stark warning that continued underfunding could result in impacts on the environment:³⁰³ 'Over the past 15 years the capital budget made available for investment in sewerage services has not been able to keep pace with the investment required to provide increased capacity to facilitate growth or achieve more stringent standards to achieve water quality targets. As a result, many of our sewerage networks and treatment plants are now having to operate at or beyond their design capacity, limiting opportunities for new connections and constraining economic development. We will work with principal stakeholders to agree a capacity framework against which future applications for new connections will be assessed. We will communicate these constraints spatially so that this can inform development plans by others.'

Protecting and enhancing the natural environment is a strategic priority in the Water Strategy.³⁰⁴ However, while the Water Strategy makes pledges, there is an absence of specific, measurable actions. For example, it states: '*We will invest in our treatments works so that they are efficient and reliable, producing the optimum residual byproducts and in future energy and nutrient recovery.*' However, there is no information about the level of investment, timescales or standards that are being targeted.

The strategy also pledges various actions to make a more resilient network, including gradually transforming the sewerage network. It refers to the need to invest in treatment works, while stating that 'the sustainable long term solution is to work in partnership with farmers, land owners and other stakeholders to manage the source waters using catchment

300 ibid.

- 301 ibid 26.
- 302 ibid 4. 303 ibid 26.

³⁰⁴ ibid 12.

management.³⁰⁵ However, there is no information about how NI Water plans to coordinate and work with others in partnership to achieve these solutions.

NI Water's 'Annual Integrated Report & Accounts 2022/2023' provides some additional information.³⁰⁶ The document demonstrates a capital investment of around £297 million, including an estimated spend of around £30 million on '*improving our sewerage network and our treatment works*'.³⁰⁷ This is set against a revenue of £479 million for the year to 31 March 2023.³⁰⁸ The spend reportedly increased slightly for 2022-2023, with a substantial increase of around £45 million projected for 2023-2024. The high-level figure is not broken down in terms of the improvements delivered and whether or how they contribute to achieving environmental improvements, including the Environmental Objectives.

Meanwhile, as outlined in Chapter 4 (Section 4.3.2), there is currently no information available from DAERA or the NIEA about the level of investment that is needed or committed to implement measures in the draft RBMP or achieve the 2027 Working Target.

Water Resource and Supply Resilience Plan

NI Water produces a statutory Water Resource and Supply Resilience Plan (WRSRP) every six years. This sets out how it will maintain the balance between supply and demand for water for all its customers over the long-term, as well as the operational options to respond to drought, demand surges and freeze-thaw.³⁰⁹ This plan is identified as a key plan underpinning delivery of Proposal 2 (Water Resources: Quality & Quantity) of the draft Environment Strategy, which in turn will contribute to achieving SEO 1.

NI Water initially published a separate Water Resource Management Plan (WRMP) in 2012 and Drought Plan in 2013. The legislation was then changed to combine WRMPs and Drought Plans in a single document.³¹⁰ The plan period for the new combined plan was also readjusted to better align it to the Price Control periods. As a result, this plan is also aligned with the planning cycle for FRMPs and RBMPs.

NI Water has recently consulted on an updated draft WRSRP.³¹¹ This was accompanied by a draft Strategic Environmental Assessment (SEA) report. The SEA report includes the findings of a WFD assessment for the draft WRSRP. This assesses the impact of the draft plan on affected water bodies and whether this could hinder achievement of their Environmental Objectives. We discuss this further at Section 5.5 below. It is not known whether NI Water consulted with DAERA or DfI in the preparation of the WFD assessment.

305 ibid 20.

307 ibid 97.

³⁰⁶ NI Water, 'Annual Integrated Report & Accounts 2022/2023' <<u>www.flipsnack.com/8ECD65DD75E/ni-water-annual-report-2022-23/full-view.html</u>> accessed 3 June 2024.

³⁰⁸ ibid 93.

³⁰⁹ NI Water, 'Our Strategy 2021-2046' (n 297) 20.

^{310~} NI Water, 'Water Resource and Supply Resilience Plan' (n 99) 1.

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 NI Water, 'Draft Water Resource & Supply Resilience Plan – SEA Appendices' <<u>https://www.flipsnack.com/8ECD65DD75E/niw-strategic-environmental-assessment-appendices-dh8r0qfk9s/full-view.html</u>> accessed 23 April 2024.

Dfl Plans and RBMPs

Flood Risk Management Plans (FRMPs) and RBMPs

FRMPs are required under the Water Environment (Floods Directive) Regulations (Northern Ireland) 2009.³¹² The Regulations were originally implemented to transpose the EU Floods Directive (2007/60/EC) and now form part of the body of 'assimilated law' in Northern Ireland (formerly 'retained EU law').³¹³

There is potential synergy and complementarity between FRMPs and RBMPs. Not only can FRMPs 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 FRMPs are designed to address flood risk, they can also contribute to achieving Environmental Objectives under the WFD NI 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 FRMPs. The WFD NI Regulations contain provisions that enable competing objectives to be addressed where RBMPs and FRMPs are properly aligned. For example, when water bodies need to be modified to prevent flooding, the WFD NI 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 FRMPs are well-aligned. Dfl is under a legal duty to carry out WFD assessment when preparing FRMPs, to ensure that they support and do not hinder the achievement of the Environmental Objectives.³¹⁴ In addition, when producing FRMPs, Dfl is under a specific legal duty to coordinate the development and review of FRMPs with the review of the RBMPs.³¹⁵

This notwithstanding, there is a risk that producing separate plans could result in them being un-coordinated, thus reducing their coherence. The Long-Term Water Strategy for Northern Ireland acknowledges this, listing coordination between RBMPs and FRMPs as a 'proposed action' to achieve its sustainable environmental policy goal. The Strategy (which was published prior to EU Exit) also states that '*it is important that all opportunities are taken to maximise synergies in the implementation of the Water Framework and Floods Directives*.'³¹⁶

Strategic Drainage Infrastructure Plans (SDIPs): Living With Water in Belfast

Dfl has led on producing the SDIP for Belfast, 'Living With Water in Belfast'. This is an integrated plan for drainage and wastewater management in the greater Belfast area.

³¹² Water Environment (Floods Directive) Regulations (Northern Ireland) 2009, Statutory Rule no. 376.

 ³¹³ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks. See also ss. 2-4, European Union (Withdrawal) Act 2018 and s.5, Retained EU Law (Revocation and Reform) Act 2023.
 214 Page 20, WED NL Page violations

³¹⁴ Reg 30, WFD NI Regulations.

³¹⁵ Reg 18(1), Water Environment (Floods Directive) Regulations (Northern Ireland) 2009.

³¹⁶ Department for Regional Development (n 24) 100.

Implementing Living With Water in Belfast is a target contributing to the delivery of Proposal 2 (Water Resources: Quality & Quantity) of the draft Environment Strategy, which in turn will contribute to achieving SEO 1. More broadly, implementing the Living With Water in Belfast Plan is a target for Proposal 3 (Marine and Coastal Water Resources: Quality & Quantity) and is referred to in relation to Proposal 4 (Sustainable Drainage & Wastewater Management) of the draft Environment Strategy.

For the purposes of this report, we have considered the Living With Water in Belfast plan. According to Living With Water in Belfast, implementing the plan is '*central to the delivery of the Water Framework Directive*'.³¹⁷ Implementing the plan is listed in the draft Programme of Measures in the draft RBMP.³¹⁸

Broadly, the plan consists of a series of potential integrated drainage proposals which can be categorised under the following headings:³¹⁹

- (i) Policy measures new policies and procedures to encourage greener drainage solutions and a collaborative approach to drainage and wastewater management;
- (ii) Catchment-based solutions focused on managing rain water more naturally through the catchment by controlling run-off, reducing peak flows in the drainage systems and providing areas for flood storage. These measures include both blue/green infrastructure and conventional hard engineered measures; and
- (iii) Upgrades to wastewater treatment works.

The issue of funding is raised again, with the plan stating that '*it will be a significant challenge for the Northern Ireland Executive to fund delivery of the Plan in the current financial climate.*^{'320} Dfl has also told us during this Project that while some early works have been completed, it is undertaking an internal review of the Living With Water in Belfast plan to assess the impact of increased costs on the programme and delivery timescales.

Section 3 of the Living With Water in Belfast Plan focuses on the plan outputs, including policy measures (Chapter 6). Table 6.18 in the plan provides a detailed list of policy measures to be taken forward by government departments that will help contribute to the three key objectives of the Living With Water in Belfast Plan, including listing the policy lead. Some of the measures listed in table 6.18 are lacking in specificity and measurability, and most are not time-bound. There is no explanation of how measures will contribute to achieving the Environmental Objectives or how they will be integrated into the draft RBMP.

Our view

The planning periods for these various plans are well-aligned with the Price Control period and the planning cycle for RBMPs. The plans with a longer-term outlook, such as the Long-Term Strategy for Water, also appear to be reviewed and updated ahead of each Price Control period.

³¹⁷ Department for Infrastructure, 'Living with Water in Belfast' (n 176) 6.

³¹⁸ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) 117.

³¹⁹ Department for Infrastructure, 'Living with Water in Belfast' (n 176) 10.

³²⁰ ibid 11.

In theory, there should be clarity of sequencing and interactions so that one plan can feed consistently into another to optimise outcomes both in terms of delivery of the Environmental Objectives and other policy goals and targets in Northern Ireland. The aim should be to enable synergies between the objectives in different water management plans with the Environmental Objectives and the integration of measures in different plans to achieve them. In turn, this should inform planning during the Price Control process, to better couple delivery with environmental ambition and prevent delays in taking action.

However, as different bodies with varying statutory and policy remits lead the plans, there is a significant risk of competing priorities. Again, there is a need for effective cross-government working, particularly with DAERA (including the NIEA), as well as effective working with NI Water. In addition, the implementation of some key delivery measures under these plans has been delayed by the lack of a functioning Northern Ireland Executive in recent years. For example, putting in place and implementing a Nitrates Action Plan and an Ammonia Action Plan are listed as key measures in the Living With Water in Belfast Plan,³²¹ but these have yet to be approved. We discuss these issues in further detail at Section 5.5.1 below.

Overall, the WFD NI 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.

Currently, there is a risk of incoherence between these different plans and the commitments they contain with the RBMPs and the Environmental Objectives. The Northern Ireland Executive's proposed action in the Long-Term Strategy for Water to coordinate FRMPs with RBMPs suggests that this risk is more than theoretical.³²²

Underinvestment is also again highlighted in NI Water's 'Water Strategy'³²³ and the Dfl-led 'Living With Water in Belfast' plan³²⁴ as a significant issue that is preventing NI Water and others from making the necessary investments to achieve the Environmental Objectives. This is of particular concern given that, as we note in Chapter 3 (see Section 3.2.4), pollution from wastewater is a major pollution pressure on the water environment. NI Water therefore has a crucial role in the of delivery of measures to address that pressure. Linked to this, increased costs are also creating barriers to implementation – for example, we understand from Dfl that this is affecting delivery of the Living With Water in Belfast plan.

In terms of the geographical context, the various plans appear to be broadly aligned in following a catchment-based approach that is synergistic with the RBMPs. The need for sustainable catchment management that also considers land management features in many of these plans. In this regard, 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. To optimise outcomes, the production cycles for other important land management plans, such as nutrient action plans and conservation management strategies, will also need to be aligned.

321 ibid 77.

³²² Department for Regional Development (n 24) 100–101.

³²³ NI Water, 'Our Strategy 2021-2046' (n 297) 5.

³²⁴ See for example, ibid; Department for Infrastructure, 'Living with Water in Belfast' (n 176) 5.

Recommendation 13: We recommend that DAERA and Dfl (working with other government departments, agencies and public bodies as needed): i) clarify how the objectives, goals, targets and measures contained in the draft RBMP, the draft Environment Strategy and the key water management plans outlined at Table 5.1 of this report relate and contribute to each other for both surface water and groundwater, including chemical status; (ii) review the coherence of the RBMPs 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, to ensure that their alignment and sequencing serve to optimise outcomes.

5.5 Governance

This section looks at governance issues in relation to the WFD NI 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 2027 Working Target and (once set) the Environmental Objectives in the final RBMP will be assured across government departments and other public bodies with functions relevant to RBDs. Our key findings from the analysis in this section are as follows.

Key findings:

- Overall, when coupled with the implementation issues noted in Chapter 4, a picture emerges of the WFD NI Regulations broadly succeeding in technical analysis and creating a vision but currently lacking robust governance mechanisms to create accountability and drive delivery of coordinated measures to realise outcomes. This is creating barriers to achieving the Environmental Outcomes.
- DAERA does not have control over implementing all elements of the Programmes of Measures in the draft RBMP. The bodies for delivery of Programmes of Measures are numerous and there is no single body that has overall accountability for their delivery. There does not appear to be any publicly available information concerning mechanisms for delivery of the Programmes of Measures. Coupled with the practical issues we discuss in Chapter 4 and Section 5.4 above concerning the lack of specific and measurable measures that are coordinated across plans and tailored to local conditions, this is creating barriers to transparency and scrutiny concerning the delivery of Programmes of Measures.
- The lack of a functioning Northern Ireland Executive in recent years has led to significant implementation delays for key plans and measures.
- There is a need for more effective cross-government working and collaboration on policy and delivery, particularly between DAERA (including the NIEA) and Dfl. There is also a need for more effective working and collaboration between government departments and other public bodies, such as NI Water and local councils.
- DAERA is considering whether the creation of an independent environment protection agency could support delivery of better environmental outcomes.

- The WFD NI Regulations create a general duty on DAERA and Dfl 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 DAERA and Dfl) 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:
 - DAERA and Dfl do not have specific procedures for WFD assessment, instead relying on more general processes.
 - The evidence suggests that there is a lack of guidance about how to carry out WFD assessment.
 - There is no standardised process for carrying out WFD assessment.
 - It is not known whether public authorities other than DAERA and Dfl have in place internal guidance concerning how to carry out WFD assessment.
 - There is no free-standing duty to consult DAERA (including the NIEA) when carrying out WFD assessment.
- These gaps in respect of WFD assessment 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.
- DAERA has the power to issue guidance on the WFD NI Regulations to any public body. However, there are no transparent processes for reviewing implementation and issuing guidance.

5.5.1 Accountability for delivery

DAERA (including the NIEA) has confirmed during this project that it maintains general responsibility for implementation of the WFD NI Regulations. However, Dfl also delivers certain functions under the regulations, while a number of different bodies, departments and agencies work together to implement them.

As explained in Chapter 2, DAERA must prepare proposals for Environmental Objectives and Programmes of Measures to achieve them. DAERA must also review and update each RBMP every six years.

Measures in Programmes of Measures where bodies other than DAERA have responsibility

DAERA has control over some elements of the Programmes of Measures. However, as we note in Chapter 4 (see Section 4.3) there are numerous other bodies involved in implementing Programmes of Measures, with many aspects sitting outside DAERA's functions. This creates a situation where DAERA has responsibility for implementing key parts of the regime, such as preparing RBMPs, yet other major parts are out of its control.

This further reflects the need for effective cross-government working, particularly with Dfl, which has key implementation responsibilities. In its responses during this project, DAERA

confirmed that it works with Dfl to coordinate the implementation and enforcement of the WFD NI Regulations. An inter-departmental WFD Board convenes regularly and provides governance in relation to implementation of the regulations. The draft RBMP itself refers to the delivery and implementation of the Programmes of Measures being overseen by the 'WFD Project Board' and states that regular engagement with stakeholders occurs through a WFD 'Strategic Planning and Resources Group'.³²⁵

It is unclear whether the WFD Board and the WFD Project Board are the same entity. In addition, the draft RBMP provides no detail about how the WFD Project Board ensures that measures which will be delivered or regulated by others are made operational. It is therefore difficult to assess the effectiveness of the governance arrangements and whether they have resulted in effective cross-government working to implement measures.

Mechanisms underpinning implementation

There appears to be a lack of publicly available information concerning mechanisms for delivering Programmes of Measures or monitoring their implementation. As we note in Chapter 4 (Section 4.3), many of the Programmes of Measures lack specificity and measurability and are not time-bound or outcome-focused. Even where measures are more specific and measurable, there does not appear to be any publicly available information concerning mechanisms to ensure that they will be made operational in time to contribute to the 2027 Working Target and with sufficient certainty and permanence.

On the contrary, DAERA and Dfl have provided information during this project that suggests there may be a failure to assess and factor in adequate delivery mechanisms when deciding which measures to include in Programmes of Measures. For example, according to DAERA and Dfl, in some instances where Dfl Rivers does not own land, work is carried out in cooperation and agreement with landowners. DAERA and Dfl have said that causes occasional difficulties when undertaking measures that require such work.

Progress towards implementation, including funding availability and lack of functioning Northern Ireland Executive

The draft RBMP provides a high-level progress report on delivery of measures in the second cycle and ongoing implementation. According to the draft RBMP: (i) 90% of the Key Target Measures (KTMs) identified in the second cycle plans are achieved or on track to be achieved; (ii) a further 6% are making slow progress but the positive impacts on water quality resulting from them will not be expected to occur until beyond 2021; and (iii) the remaining 4% were not started.³²⁶

There is also a small amount of information in the progress report concerning measures introduced since the last RBMP.³²⁷ However, the draft RBMP provides no information about precisely which measures have been implemented, or the relative contributions that these KTMs have made to achieving the Environmental Objectives in the second cycle RBMPs. On the contrary, the failure to achieve the 2021 objectives and working target suggests that

³²⁵ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) para 8.1.

³²⁶ ibid.

³²⁷ ibid 8.2.

the measures that have been implemented or are underway have fallen far short of what is needed. $^{\ensuremath{^{328}}}$

The draft RBMP itself appears to attribute the lack of progress largely to 'the natural time lag between the introduction of some measures and their impact on expected improvements.' However, funding availability (as discussed in Sections 5.4.2 and 5.4.3 above) is likely to be a significant barrier to the implementation of measures.

The lack of a functioning Northern Ireland Executive in recent years has also been a significant obstacle to implementing measures. This is the case in particular for KTMs that would see the introduction of major new policy requiring significant public expenditure commitments. Finalising such measures would require cross-departmental consultation and consideration by ministers in order to be approved.

Although civil servants were granted decision-making powers while the Executive was not sitting, these measures were unable to be finalised in its absence.³²⁹ This has delayed the implementation of key plans and policies (and the measures cascading from plans and policies) to tackle the major pressures on the Northern Ireland water environment, including the Nutrient Action Programme, the Ammonia Strategy, the Future Agricultural Policy and the Climate Action Programme.

Our view

In most cases, it is not possible to assess progress towards implementing individual measures from publicly available information. While there is a requirement to provide a report 'describing progress' in the implementation of planned measures,³³⁰ the summary in the draft RBMP lacks detail and does not provide an opportunity for meaningful scrutiny of progress.³³¹ However, it is clear that not all measures are on track for delivery and availability of funding is likely to be a limiting factor in this regard.

The WFD Project Board is tasked with overseeing delivery and implementation of the Programmes of Measures. However, there is a lack of publicly available information concerning the mechanisms and monitoring arrangements put in place to ensure that Programmes of Measures will be made operational in time to contribute to the 2027 Working Target. Additionally, DAERA 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. It is also unclear whether the WFD Project Board is facilitating effective cross-government working between departments and also with other public bodies to implement measures. This may be creating barriers to implementing measures and achieving the Environmental Objectives.

Overall, it is not possible from publicly available information to scrutinise progress towards implementing measures, or whether they are sufficiently certain, beyond our assessment in Chapter 4. This is creating barriers to transparency and the scrutiny of measures and

³²⁸ ibid 13.

³²⁹ Under the Ministerial Code and the Northern Ireland (Executive Formation etc) Act 2022.

³³⁰ Reg 31(3), WFD NI Regulations.

³³¹ Northern Ireland Environment Agency, 'Draft 3rd Cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 – 2027)' (n 10) ch 8.

their ability to deliver the Environmental Objectives. However, the evidence suggests that funding availability and the lack of a functioning Northern Ireland Executive in recent years have delayed the implementation of key measures to tackle major pressures on the Northern Ireland water environment.

DAERA and Dfl therefore need to take urgent action to implement key measures as soon as possible. This will require coordinated working across government departments and with key public bodies responsible for implementing measures.

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.³³²

Case law on 'WFD assessment'

The purpose of WFD assessment is to help authorities understand the impact of activities on water bodies and whether they comply 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. 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. 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.

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.

³³² 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.

Guidance relevant to WFD assessment

DAERA has general responsibility for implementation of the WFD NI Regulations. DAERA also has the power to issue guidance to any public body concerning their implementation.³³³ However, DAERA told us that Dfl is responsible for issuing guidance to UREGNI on the *'key environmental...policies that the Minister for Infrastructure expects it to contribute to in carrying out its role in regulating the water industry during the 6-year price control period.'* Dfl therefore has important implementation responsibilities and it is critical that DAERA and Dfl work closely together, to ensure a coordinated approach that results in effective implementation of duties under the WFD NI Regulations.

The NIEA also has a key role in ensuring implementation of general duties under the WFD NI Regulations. In view of DAERA's policy remit, which includes responsibility for matters ranging from fisheries and farming through to biodiversity, there is significant scope for competing priorities. It is therefore pertinent to consider whether an environmental protection agency independent from government could lead to better implementation of general duties under the WFD NI Regulations. The question of whether Northern Ireland would benefit from an independent environmental protection agency is under active consideration within DAERA.³³⁴

In 2012, the NIEA issued guidance on carrying out WFD assessment, specifically in the context of developments that are subject to Environmental Impact Assessment.³³⁵ The guidance correctly expresses the legal tests for and aims of WFD assessment.³³⁶ It is not known whether DAERA (including the NIEA) has issued any other guidance on WFD assessment. However, DAERA has said that it works with local authorities and other stakeholders to support the effective implementation of the RBMP.

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). While it has the discretionary power to issue guidance as referred to above, we have no information about whether DAERA intends to actively take forward the role previously delivered by the Common Implementation Strategy. We recognise 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 NI Regulations. There is also a clear need for DAERA and Dfl to continue engaging with public authorities concerning their WFD NI Regulations' duties.

However, our view is that, in order to support better implementation of the WFD NI Regulations at the strategic level, DAERA should continue to assess the need to provide further high-level internal guidance to the NIEA and DfI 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 NIEA and DfI may continue to take into account.

³³³ Reg 33, WFD NI Regulations.

³³⁴ See for example, Micheal Donnelly, 'New NI Environment Minister Backs Creation of New "Independent Environmental Protection Agency" (15 February 2024) <<u>www.endsreport.com/article/1861595/new-ni-environment-minister-backs-creation-new-independent-environmental-protection-agency</u>> accessed 22 May 2024.

³³⁵ NIEA Water Management Unit, 'Carrying Out A Water Framework Directive (WFD) Assessment On EIA Developments' <<u>www.</u> <u>daera-ni.gov.uk/sites/default/files/publications/doe/water-guidance-carrying-out-water-framework-directive-wfd-assessment-oneia-developments-2012.pdf</u>> accessed 22 April 2024.

³³⁶ ibid 2, 4.

We therefore highlight a need for DAERA to determine its intended approach to providing and updating strategic, high-level guidance on the WFD NI 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. The guidance issued by the NIEA in relation to WFD assessment for EIA development³³⁷ referred to above suggests that 'each specific component of the scheme, that may interact with or pose a potential risk to a water body, needs its potential impact assessed.' This involves providing a description of the scheme component activity being assessed and identifying the potentially affected water bodies. The OEP considers that these principles appear to be broadly sound and applicable to assessing impacts from other plans and projects on water bodies in Northern Ireland.

The guidance from the NIEA broadly reflects the same approach as that expressed in more detailed guidance issued by the Environment Agency in England.³³⁸ That guidance relates to estuarine and coastal waters in England and suggests considering WFD Regulations³³⁹ impacts in a three-stage approach:

- 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 Environment Agency'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, both in England and in Northern Ireland.

General duties

The need for WFD assessment is underpinned by the general duties on DAERA and Dfl to secure compliance with the WFD and its 'daughter directives' when exercising their 'relevant

³³⁷ NIEA Water Management Unit (n 335).

³³⁸ Environment Agency, 'Water Framework Directive Assessment: Estuarine and Coastal Waters' <<u>www.gov.uk/guidance/water</u> <u>framework-directive-assessment-estuarine-and-coastal-waters</u>> accessed 16 January 2024.

³³⁹ The equivalent regulations in England, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument No. 407.

functions', and on other public bodies as well as DAERA and Dfl to 'have regard to' the relevant RBMP when exercising functions that may affect an RBD.³⁴⁰

Duty to 'secure compliance'

The 'relevant functions' referred to in the WFD NI Regulations include the duties (the things that DAERA (including the NIEA) and Dfl 'must do') and powers (the things they 'could do') that these bodies use to manage and protect the water environment.³⁴¹ They include:

- Determining and issuing water discharge consents (NIEA)
- Determining and issuing water abstraction and impoundment licences (NIEA)
- Determining and issuing pollution prevention and control permits
- Undertaking relevant enforcement activity (for example, pollution control)
- Functions under the WFD NI Regulations themselves (for example, making proposals for Environmental Objectives)
- Undertaking flood risk management activities (Dfl Rivers)
- Undertaking water supply and sewerage functions (Dfl Water and Drainage Policy Division)
- Marine licensing functions (DAERA Marine and Fisheries Division)

The duty to secure compliance with the requirements of the WFD requires DAERA and Dfl to undertake WFD assessment when deciding whether to carry out or authorise a water management activity. The OEP's view is that the duty also requires the DAERA and Dfl 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.

'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 undertake WFD assessment when carrying out or authorising an activity that could affect an RBD.

Public bodies include, amongst others: DAERA (including the NIEA) and its ministers; Dfl and its ministers; other government departments and their ministers; NI Water; and local councils. Given the competing priorities inherent in their broad statutory remits, it is important to underline that both DAERA and Dfl are under the 'have regard to' duty when making decisions that may not be caught by the 'secure compliance with' duty. This means that when exercising important policy-making functions (for example in relation to agricultural, fisheries or infrastructure matters) that could have an impact on a water body, the departments must ensure that the Environmental Objectives for that water body are not undermined.

³⁴⁰ Regs 3(1) and 30, WFD NI Regulations.

³⁴¹ Reg 2, WFD NI Regulations states that 'relevant functions' means functions under the WFD NI Regulations and, so far as material, the enactments listed in Schedule 2 to the WFD NI Regulations.

The duty also covers other activities that could affect an RBD, for example the provision of advice when DAERA (including the NIEA) is consulted on a planning application that is accompanied by an Environmental Statement (these are generally major developments) or other planning application. In these cases, DAERA (including the NIEA Water Management Unit as appropriate) 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.

DAERA (including NIEA) and Dfl duties

The OEP requested information from DAERA and Dfl about how they discharge their duties under the WFD NI Regulations. DAERA and Dfl have indicated during this project that the WFD NI Regulations are considered in the normal course of providing information and analyses to ministers for decision, including on regulatory matters.

However, neither department has a high-level position document or more specific WFD assessment guidance or processes in place. This is despite the fact that some of the functions which engage the 'secure compliance with' duty³⁴² allocate significant responsibilities to the departments. These functions include relevant policy-making functions, as well as determining applications for: major development, discharge consents, water abstraction and impoundment licences, and marine licences.

This does not necessarily mean that DAERA or DfI have not carried out adequate WFD assessment. However, it creates barriers to transparency, making it difficult to subject relevant decisions to scrutiny in terms of their compliance with WFD NI Regulations requirements. There is also a risk of non-compliant decision-making.

The scrutiny of individual permitting or other regulatory decisions and advice that engages the general duties of DAERA (including the NIEA) and DfI was beyond the scope of this project. Chapter 4 considers how DAERA has discharged its duties when exercising functions under the WFD NI Regulations such as preparing proposals for Environmental Objectives and Programmes of Measures to achieve them.

Decision-making by other public bodies, providing advice and other functions

Many public bodies beyond DAERA or Dfl 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 undertake WFD assessment when carrying out or authorising activities that could affect an RBD.

As referred to above, DAERA and DfI must also have regard to the relevant RBMP when carrying out other functions that may affect RBDs that are not caught by the duty to secure compliance, such as providing advice or other functions not listed at Schedule 2 to the WFD NI Regulations. 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.

³⁴² These are functions under the enactments listed at Sch 2, WFD NI Regulations.

A public body generally would need to have 'cogent reasons' for departing from a 'have regard to' duty.³⁴³ In addition, an England and Wales High Court judgment has established the principle that, 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.³⁴⁴ Decisions of the High Court of England and Wales are not binding on Northern Ireland courts, but could be persuasive. 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.

NI Water

NI Water is an important public body as regards the RBMPs and achieving the Environmental Objectives. For example, it carries out wastewater treatment and discharge activities and is responsible for various plans that could affect water bodies (see Section 5.4.1 above).

DAERA and DfI have told us that there is a well-established approach to providing guidance on the WFD NI Regulations' requirements to NI Water through the Price Control process. DfI prepares Social and Environmental Guidance for Water and Sewerage Services for each six-year Price Control period, which sets the strategic framework for water and drainage policy and includes actions for NI Water, to help meet its legal obligations under the WFD NI Regulations and other Northern Ireland environmental laws relating to water quality and pollution prevention and control.

The most recent Dfl guidance (the 'Guidance')³⁴⁵ is for the Price Control period 2021-2027 ('PC21'). As described in section 5.4.1 above, UREGNI uses this information, together with the budget indication from Dfl, to set customer bills, capital investment and company performance for the Price Control period. This again highlights the need for careful coordination between DAERA and Dfl, to ensure that Dfl advice meets statutory requirements.

The Guidance acknowledges that government is operating within a constrained budgetary environment and states that funding the requirements in PC21 will be an even greater challenge than for the previous Prince Control period, PC15.³⁴⁶ The Guidance also recognises that longer investment plans will have a degree of uncertainty and refers to the need for mid-term review in order to consider any recalibration of targets required over the PC21 period.³⁴⁷ The Guidance refers to the Long-Term Water Strategy for Northern Ireland, clarifying that the Strategy underpins the environmental objectives for the PC21 period³⁴⁸ and that the Regulator should 'have regard to' the delivery of those objectives when assessing NI Water's proposals for PC21.

The Guidance also states that 'It should be ensured that NI Water fully plays its part in progressing the relevant actions in the Strategy, working in collaboration with other

services/2021-2027-final.pdf> accessed 23 April 2024.

³⁴³ See for example R v Ashworth Hospital Authority ex p Munjaz [2005] UKHL 58.

³⁴⁴ Harris & Anor v The Environment Agency [2022] EWHC 2264 (Admin), paras. 86, 87.

³⁴⁵ Department for Infrastructure, 'Social and Environmental Guidance for Water & Sewerage Services (2021-27)' <<u>www.</u> infrastructure-ni.gov.uk/sites/default/files/consultations/infrastructure/pc21-social-and-environmental-guidance-water-sewerage-

³⁴⁶ ibid 1.9.

³⁴⁷ ibid 1.10.

³⁴⁸ ibid 1.26.

stakeholders as appropriate.³⁴⁹ The Guidance is addressed to UREGNI and presumably the intention is that UREGNI should ensure that NI Water progresses these actions.

WFD NI Regulations' requirements are referenced throughout the Guidance, with its Chapter 4 on Environmental Protection and Improvement being the most relevant. Chapter 4 lists the aims and related actions from 'Sustainable Water – A Long-Term Water Strategy for Northern Ireland'. These appear to broadly summarise the actions allocated to NI Water in the Strategy Implementation Action Plan, again underlining the importance of the Strategy in delivering the Environmental Objectives.

For each Price Control period, Dfl also participates with all key water stakeholders in the prioritisation of schemes, through Price Control working groups. These identify a prioritised list of schemes for water and wastewater to deliver defined quality improvements or major upgrades.

Dfl, NI Water and other key water stakeholders also participate in a mid-term review of each Price Control period, led by UREGNI. This includes reviewing NI Water's investment proposals and amending them as necessary following any changes that might have occurred in the first half of the Price Control period, to help ensure the correct schemes are progressed.

Regarding other NI Water plans and WFD assessment, there is a WFD screening assessment for the draft WRSRPs available.³⁵⁰ The assessment is a screening of the initial list of feasible options identified; a 'final' or 'full' WFD assessment will be carried out for the preferred option. Dfl and the NIEA have contributed to the draft WRSRP,³⁵¹ although it is not known whether they were consulted regarding the WFD screening assessment.

There is also the separate issue of DAERA's role in ensuring the implementation of NI Water 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.

NI planning system

Local councils are responsible for local development planning and determining the vast majority of planning decisions. Dfl, on the other hand, is responsible for oversight of the planning system, as well as regionally significant planning applications and policy that is significant to all or most of Northern Ireland. Determining regionally significant planning applications is not a function that is caught by Dfl's duty to secure compliance with the WFD; however, the general duty to 'have regard' to the RBMP applies.

Local councils and DfI are therefore also important public bodies as regards RBMPs and achieving the Environmental Objectives in respect of planning matters. When adopting plans or determining planning decisions that could affect a water body, local councils and DfI 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.

349 ibid 1.25.

³⁵⁰ NI Water, 'Draft Water Resource & Supply Resilience Plan – SEA Appendices' (n 311) app L.

^{351 &#}x27;Managing Northern Ireland's Water Resources – Northern Ireland Water' <<u>www.niwater.com/managing-northern-irelands-water-resources/</u>> accessed 23 April 2024.

DAERA has said that it works with local authorities and other stakeholders to support the effective implementation of the RBMP. However, there is no information about the nature or extent of such engagement.

There is no free-standing duty to consult DAERA where WFD assessment is required due to possible impacts on an RBD. DAERA is not a statutory consultee in all planning applications determined by local councils. Rather, the duty to consult arises only in specified circumstances, such as for more major development proposals that require Environmental Impact Assessment.³⁵² DAERA is also a statutory consultee for Strategic Environmental Assessments required for strategic plans.³⁵³

In addition, DAERA has provided advice for developers on the circumstances where it would like to be consulted because the development may affect the water environment.³⁵⁴ 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 should consider the potential risks to surface water and groundwater quality and describes the types of development, activities and location where developers should consult DAERA because of the potential impact on the water environment. This includes all housing developments (over 10 units), all livestock housing and agricultural development, development that includes deep drilling or boreholes, abstraction of groundwater and works to be conducted in or within 10 metres of a waterway where there is a potential risk that the waterway could be affected.³⁵⁵ 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 DAERA.

Our view

While there is clearly a route through which DAERA (including the NIEA) is able to provide substantial advice to NI Water concerning WFD NI Regulations' obligations, as discussed in Chapter 3, pollution from wastewater treatment remains a key pressure on many water bodies (while not being the only important pressure to address). In addition, Dfl has a key implementation role of providing statutory advice to NI Water. It is therefore critical that DAERA and Dfl work effectively together to coordinate that advice.

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 NI Water actions, additional actions are needed. There is also a lack of coordination between NI Water measures in different plans.

It is unclear whether the failure to include the additional NI Water measures needed to fully tackle pollution from wastewater stems from: (i) a lack of clear advice and guidance provided by Dfl; (ii) a deficient input from DAERA (including the NIEA); (iii) difficulty in agreeing measures with NI Water or mechanisms to make them certain; (iv) the role that

³⁵² DAERA, 'When to Consult DAERA' <<u>www.daera-ni.gov.uk/articles/when-consult-daera</u>> accessed 23 April 2024.

³⁵³ DAERA, 'Strategic Environmental Assessment' <<u>www.daera-ni.gov.uk/topics/land-and-landscapes/strategic-environmental-assessment</u>> accessed 23 April 2024.

 ³⁵⁴ DAERA, 'Development That May Have an Effect on the Water Environment (Including Groundwater and Fisheries)' <<u>www.daera-ni.gov.uk/articles/development-may-have-effect-water-environment-including-groundwater-and-fisheries</u>> accessed 23 April 2024.
 355 ibid.

UREGNI provides in approving NI Water plans; (v) failure to coordinate measures across different plans; (vi), other reasons, or (vii) a combination of these factors. It is clear, however, that lack of funding is a significant factor as we have previously noted.

Where other public bodies and functions are concerned, scrutinising individual planning and other decisions that engage the general duty to have regard to the relevant RBMP was beyond the scope of this project. However, we suggest that the Northern Ireland Executive incorporate an assessment of compliance in this area into the recommended, limited review on implementation of the WFD NI Regulations (see Section 5.2.1 and Recommendation 11). This could include assessing the extent to which local councils and other public authorities that are key to delivering the Environmental Objectives have in place adequate internal guidance and processes concerning WFD assessment.

In practice, the OEP has identified the following barriers to implementation of these general 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 RBMP and achieving the Environmental Objectives, such as relevant government departments. This creates a risk of non-compliant decision-making.
- Government departments do not appear to have in place internal guidance or standardised processes concerning WFD assessment. This creates a risk of non-compliant decision-making. There is a specific risk of lack of coordination between government departments, in particular DAERA and Dfl.
- From our engagement during this project, the WFD NI Regulations' requirements appear to be well understood within the NIEA. However, the absence of a free-standing statutory obligation for public bodies to consult DAERA (including the NIEA) means they 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 DAERA and Dfl with other public authorities concerning their WFD NI Regulations' obligations, in particular NI Water; (ii) engagement with DAERA (including the NIEA) as a statutory consultee concerning certain planning applications and plans; and (iii) the provision of guidance by DAERA, Dfl and others concerning WFD NI Regulations' obligations. The lack of clear process and statutory mechanisms for some of these interventions makes it difficult to assess their effectiveness.

However, there may be a need for further engagement with important actors such as local councils. Consultation with DAERA (including the NIEA) 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.

Meanwhile, DAERA and DfI processes for WFD assessment have not been formalised. There is a need to ensure effective coordination between the departments. The lack of a prescribed approach for WFD assessment within DAERA and DfI creates a risk of non-compliant decision and policy-making. Given their policy remit, it is critical that DAERA
and Dfl undertake adequate WFD assessment, particularly when considering matters such as agricultural, fisheries and infrastructure policy and how this could support, or alternatively affect, the achievement of the Environmental Objectives. This requires cross-government collaboration to avoid the risk of siloed policy-making that could hinder the delivery of environmental outcomes.

There is also a need for DAERA to decide how to assess the need for, provide, and update strategic high-level guidance concerning implementation of the WFD NI 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 NI 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 and government departments 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 DAERA undertake a discrete review of implementation of the WFD NI Regulations' general duties among public bodies and relevant government departments, aimed at understanding whether there is a need for the following:

- 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 DAERA (including the NIEA) 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 14: We recommend that DAERA assess current levels of understanding of and compliance with the general duty on public authorities, including relevant government departments, to have regard to the RBMPs (Regulation 30). The assessment should prioritise public authorities with functions that are key to delivering the Environmental Objectives.

Recommendation 15: We recommend that DAERA (or Dfl where relevant) 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 14 above. We also recommend that DAERA (or Dfl where relevant) engage with public authorities concerning implementation of the guidance, prioritising those with functions that are key to delivering the Environmental Objectives. DAERA and Dfl should also adopt and apply a standardised process for WFD assessment in relation to their own decision-making and ensure effective coordination between themselves and other government departments.

Recommendation 16: We recommend that, in relation to the provisions of the WFD NI Regulations, DAERA 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 DAERA (including the NIEA) 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. DAERA should also provide more detailed information in its report describing progress on 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 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 NI Regulations.

Artificial or heavily modified water body (AHMWB)	This is a specific type of surface water body designated as such under Regulation 15 of the WFD NI 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'. 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.	
Classification and status	Regulation 6 of the WFD NI Regulations is concerned with the 'classification' of water bodies. It refers to the requirement to class 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.	
Coastal water	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 NI Regulations.	
The comparative analysis	This refers to a comparison of river basin management approaches and outcomes in England and Northern Ireland with those in other U administrations, other European countries and selected jurisdictions in other parts of the world, undertaken by the consultants WSP for t OEP as part of this project. This is published on the OEP's website alongside this report, as part of the supporting evidence.	

	This refers to two EU directives which are related to and support the WFD. These are:	
Daughter directives	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	
	 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). 	
Driver-pressure- state-impact- response (DPSIR)	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 NI Regulations. ³⁵⁶ 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).	
Environmental Improvement Plan (EIP)	This refers to the plan required to be prepared by DAERA to protect and improve the environment under the Environment Act 2021. The Northern Ireland Executive published for consultation its draft Environment Strategy for Northern Ireland in late 2021.	
Environmental Objectives	The 'Environmental Objectives' are specified in Regulation 13 of the WFD NI 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.	
	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 NI Regulations (where there is no exemption), or different (where an exemption has been approved).	
	For convenience, in this report we use the expression 'Environmental Objectives' to refer to both the objectives in the WFD NI Regulations, or those specified for individual water bodies, or both, as the context requires.	
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'.	

³⁵⁶ 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 229).

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Exemption	This refers to an exemption from the requirement to set Environmental Objectives in accordance with Regulation 13 of the WFD NI Regulations, which may be determined and justified for an individual water body and set out in the relevant RBMP. The WFD NI Regulations provide for 'Extended Deadline Exemptions' (Regulation 16) and 'Less Stringent Objective Exemptions' (Regulation 17). Regulations 18 and 19 also provide for exemptions from the requirement to achieve the Environmental Objectives set under Regulation 12 in certain circumstances.	
Extended Deadline Exemption	An 'Extended Deadline Exemption' may be determined under Regulation 16 of the WFD NI 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 NI 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 NI 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 NI 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 NI 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 NI Regulations, 'quantitative status' is an expression of the degree to which a body of groundwate 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 considere such as saline intrusion.	

Good Status Objective	This is an overall target objective for all water bodies under Regulation 13 the WFD NI 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.	
	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.	
Groundwater	As defined in Schedule 1 to the WFD NI 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 NI Regulations, this means a distinct volume of groundwater within an aquifer.	
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 NI Regulations. Subject to certain conditions, it allows for the setting of a less stringent 'Environmental Objective' for a water body than 'Good Status'.	
No Deterioration Objective	This refers to the 'Environmental Objective' in Regulation 13 of the WFD NI 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 NI 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'.	
Price Control (PC)	The regulatory process carried out by the Utility Regulator of Norther Ireland (UREGNI) which determines the levels of customer bills, capital investment and company performance for Northern Ireland Water during the control period in question. Price Control processes work on a six-year cycle and are typically referred to using the start year for each period. For example, 'PC15' refers to control period 2015-2021, 'PC21' refers to control period 2021-2027 and 'PC27' refers to control period 2027-2033.	

	Priority substances' are certain pollutants of EU-wide concern,	
Priority substances and priority hazardous substances	identified in the WFD, for which environmental quality standards have been set under the Environmental Quality Standards Directive.	
	'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.	
	The priority (hazardous) substances and their environmental quality standards are to be taken into account in assessing the chemical status of surface waters.	
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 NI Regulations. The Programmes of Measures are determined under Regulations 12 and 20 of the WFD NI Regulations. A summary of the Programmes of Measures should be included in the River Basin Management Plans.	
Protected Area Objectives	These are additional Environmental Objectives under Regulation 13 of the WFD NI 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 NI Regulations, this includes a wide range of 'persons' (i.e. people or organisations) that carry out public functions. This includes Northern Ireland government departments, district councils and statutory undertakers, as well as other bodies established under statutory provisions.	
Relevant functions	The 'relevant functions' for the purposes of the WFD NI Regulations are those set out in a list of legislation in Schedule 2 to the WFD NI Regulations. The WFD NI Regulations require DAERA and Dfl 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 NI 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 NI 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.	

	As defined in Regulation 2 of the WFD NI Regulations, this is an area		
River Basin District (RBD)	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 DAERA under Regulation 4(1) of the WFD NI Regulations.		
River Basin Management Plan (RBMP) First, second and third cycle RBMPs	These are plans developed under Part 6 of the WFD NI Regulations to protect and improve the water environment in RBDs. Under the WFD NI Regulations, RBMPs are prepared on a cyclical basis every six years, with three cycles to date. We refer in this report to the 'first cycle RBMPs' (2009), 'the second cycle RBMPs' (2015) and the 'third cycle RBMP' (due in 2021 but not yet published in Northern Ireland, although a draft has been consulted on).		
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.		
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 NI Regulations, this means inland waters (except groundwater), transitional waters and coastal waters (except in respect of chemical status for which it also include territorial waters, i.e. those up to 12 nautical miles from the coast).		
Surface water bodyAs defined in Schedule 1 to the WFD NI Regulations this mea discrete and significant element of surface water such as a la reservoir, a stream, river or canal, part of a stream, river or ca transitional water or a stretch of coastal water.In this context, what may be thought of in everyday terms as continuous water body (e.g. a river along its whole length) may treated as multiple water bodies for the purposes of the WFD Regulations (each comprising a different stretch of that river).			
Transitional water	As defined in Schedule 1 to the WFD NI Regulations, this means a body of surface water in the vicinity of a river mouth which is partly saline in character as a result of its proximity to coastal waters, but which is 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. DAERA'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 NI 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 Councestablishing a framework for the 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 NI Regulations	
WFD Regulations	The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017 (Statutory Rule 2017 No. 81).	
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.	
The 2027 Working Target	This is the working target stated in the draft third cycle RBMP for 70% of all Northern Ireland's water bodies to be at good or better status by 2027.	

List of Abbreviations

AHMWB	Artificial or heavily modified water body		
DAERA	Department of Agriculture, Environment and Rural Affairs		
Dfl	Department for Infrastructure		
DPSIR	Driver-pressure-state-impact-response		
EU	European Union		
EIP	Environmental Improvement Plan		
EPA	Environmental Protection Agency (Ireland)		
FRMP	Flood Risk Management Plan		
GBF	Global Biodiversity Framework		
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services		
КТМ	Key Target Measure		
NGO	Non-governmental organisation		
NIEA	Northern Ireland Environment Agency		
NI Water	Northern Ireland Water		
OEP	Office for Environmental Protection		
PC	Price Control		
RBD	River Basin District		
RBMP	River Basin Management Plan		
SEA	Strategic Environmental Assessment		
SEO(s)	Strategic Environmental Objective(s) (within the draft Environment Strategy)		
UCB	Upper Costa Beck		
UREGNI	Utility Regulator of Northern Ireland		
(u)PBT	(ubiquitous,) persistent, bio-accumulative and toxic		
WFD	Water Framework Directive		
WISE	Water Information System for Europe		
WRSRP	Water Resource and Supply Resilience Plan		



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 NI Regulations, the equivalent regulations in England 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
- NI Water
- Ofwat
- Royal Society for the Protection of Birds
- Ulster Farmers Union
- Ulster Wildlife
- UREGNI
- 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 NI 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), focussing 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 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 Belfast workshop. Discussions were in groups and focused on three main topics.

Workshop Topic 1: The WFD NI 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 NI Regulations rather than seeing specific problems with the current legal regime. Cross cutting themes of discussion included the following points:

- Improved transparency on decision making and improved communication to the public on progress, positive outcomes and challenges. For example, participants suggested increasing the frequency of reporting to enable trends to be established earlier and the need to include provision to address new and emerging issues at pace, to ensure the regulations are kept up to date with developing science.
- A need for improved coherence and a more integrated approach with other frameworks, regimes and targets, and other environmental policies and principles (such as on biodiversity). Some participants also suggested modifying the WFD NI Regulations or other measures to align regulatory reporting periods and cycles.
- There was also a call to improve partnership working for delivery and the need for clarity on the implementation and regulatory framework in respect of the land border between Northern Ireland and the Republic of Ireland.

Workshop Topic 2: How the WFD NI Regulations are implemented in practice – what works well, what could be improved?

- Cross cutting themes from discussion groups included comments suggesting that the approach to sensitive area reviews is seen as a positive feature of the current implementation of the WFD NI Regulations. Visualisation of water status is also seen as a helpful tool when reviewing catchments.
- Participants suggested there should be greater public consultation and participation in aspects of the discussion and development process for Programmes of Measures. It was suggested this should include the possibility of working in partnership with bodies outside of the regulatory authorities, and a clear visualisation of all regulatory drivers and strategies allowing easy interpretation of the regulations and their implementation.
- Participants generally thought that there need to be improvements in monitoring, including 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 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 by some that, in its current form, application of the 'one-out, all-out' rule in the Good Ecological Status test can mask some parameters and disincentivise efforts.

Workshop Topic 3: Do you think any changes are needed to the broader landscape of laws, policies, and institutional arrangements to protect and improve water? What, why?

- Participants generally thought that there was a need for a more integrated approach at catchment level incorporating stakeholder groups. It was suggested that a collective of inputs needs to be part of the WFD NI Regulations' planning process. This should include other departments outside of DAERA and the NIEA, for example to include NI Water, local government and planning authorities.
- Participants felt that the interruption of the Northern Ireland Assembly had resulted in a lack of direction and contributed to legislation and policies not keeping pace with environmental developments and needs.
- There was also a view that the current legal and institutional landscape is complex and has been built up incrementally as new problems have emerged, rather than

having been developed as a coherent whole. It was suggested that this needs to be reassessed to meet the current needs.

Expert review

Prior to its completion, we sent a draft copy of chapters of this report to external experts for independent review. These were drawn from the OEP's College of Experts based on their subject matter expertise and availability to undertake the review. The contributing experts were:

- Howard Brett
- Liz Buchanan
- Professor Margherita Pieraccini
- Professor Nigel Watson
- Wendy McKinley
- Marcus McCauley
- Dr Viviane Gravey
- All the 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^{357 358 359 360 361 362 363 364}).

Background

EU laws to improve water standards were first introduced in the mid-1970s.³⁶⁵ 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 described³⁶⁶ 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.³⁶⁷

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 and

³⁵⁷ European Commission, 'Water Framework Directive' (n 131).

³⁵⁸ 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 <<u>https://china.elgaronline.com/view/edcoll/9781788970662/9781788970662.xml</u>> accessed 15 November 2023.

³⁵⁹ William Howarth, Simon Jackson and AS Wisdom, Wisdom's Law of Watercourses (Sixth edition, Sweet & Maxwell 2011) ch 15.

³⁶⁰ Nigel Haigh, EU Environmental Policy: Its Journey to Centre Stage (Routledge 2016) ch 5.

³⁶¹ Justine Thornton and Silas Beckwith, Environmental Law (2nd ed, Thomson Sweet & Maxwell 2004) ch 8.

³⁶² Elizabeth Fisher, Bettina Lange and Eloise Scotford, Environmental Law: Text, Cases, and Materials (Second edition, Oxford University Press 2019) ch 15.

³⁶³ Charles Sabel and Jonathan Zeitlin, 'Experimentalist Governance' in David Levi-Faur (ed), Oxford Handbook of Governance (Oxford University Press 2012) ch 12.

³⁶⁴ 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.

³⁶⁵ European Commission, Introduction to the EU Water Framework Directive <<u>https:// ec.europa.eu/environment/water/water-framework/info/intro_en.htm</u>> accessed 28 November 2022.

³⁶⁶ Thornton and Beckwith (n 361) 207–209.

³⁶⁷ European Commission, Introduction to the EU Water Framework Directive <<u>https:// ec.europa.eu/environment/water/water-framework/info/intro_en.htm</u>> accessed 28 November 2022

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.³⁶⁸

River Basin Districts (RBDs)

The WFD introduced a new requirement in EU law to manage water at the level of RBDs.³⁶⁹ 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 reportedly³⁷⁰ 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.³⁷¹ 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.³⁷² Additionally, the WFD requires Member States to establish programmes to monitor the status of water bodies in RBDs.³⁷³

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'.³⁷⁴

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.³⁷⁵

368 Art 1, WFD.

³⁶⁹ Art 3, WFD.

³⁷⁰ William Howarth, 'Water Quality and Land Use Regulation under the Water Framework Directive' (2006) 23 Pace Environmental Law Review 351, 20.

³⁷¹ Art 3(1), WFD.

³⁷² Art 5, WFD.

³⁷³ Art 8, WFD.

³⁷⁴ Art 4, WFD.

³⁷⁵ 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.³⁷⁶

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.³⁷⁷ The WFD also requires public participation in relation to its implementation, in particular regarding the production of RBMPs.³⁷⁸

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 Directive³⁷⁹ 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 Directive³⁸⁰ 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 Northern Ireland. The current lists of substances and standards are therefore maintained in domestic law unchanged unless amended by the Northern Ireland Assembly.

³⁷⁶ Art 13, WFD.

³⁷⁷ Art 13, WFD.

³⁷⁸ Art 14, WFD.

³⁷⁹ 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.

³⁸⁰ 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,³⁸¹ amended the WFD to create a new 'Watch List' mechanism to improve available information on new and emerging substances of concern.³⁸² EU Member States have to monitor substances on the list at least annually and report the results to the European Commission.³⁸³ The Commission updates the list every two years.³⁸⁴ After its establishment in 2015, the list was updated in 2018, 2020 and most recently 2022.^{385 386 387}

Common Implementation Strategy

Finally, the EU has developed a 'Common Implementation Strategy' to support the implementation of the WFD.³⁸⁸ 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.³⁸⁹

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 NI Regulations.

385 European Commission, 'Surface Water' (n 249).

- 387 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.
- 388 European Commission, River and Lakes: Typology, Reference Conditions and Classification Systems (OPOCE 2003).produced by Working Group 2.3 REFCOND, aims at guiding experts and stakeholders in the implementation of Directive 2000/60/EC establishing a framework for Community action in the field of water policy (the water framework directive

³⁸¹ 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.

³⁸² Art 2, Priority Substances Directive.

³⁸³ Art 2, Priority Substances Directive.

³⁸⁴ Art 2, Priority Substances Directive.

³⁸⁶ 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.

³⁸⁹ EU Water Directors, 'Common Implementation Strategy EU Water Law Work Programme 2022-2024' (23 November 2021) <<u>www.</u> <u>minzp.sk/files/sekcia-vod/spolocna-implementacna-strategia-2022-2024_eng.pdf</u>>.



Annex 4. Summary of monitoring, assessment and classification under the WFD NI Regulations

Annex 4. Summary of monitoring, assessment and classification under the WFD NI 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 Northern Ireland, 496 surface water bodies and 76 groundwater bodies are assessed. Each water body requires a large number of tests to assess status.³⁹⁰

In relation to surface water, the monitoring programmes required under the WFD NI 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	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	Quantitative test only Water balance
Hydro- morphological supporting	рН		Chemical test only General chemical test Drinking Water Protected Area
elements Hydrological regime changes	Presence of invasive species	Other pollutants	Trend assessment Prevent or limit inputs of pollutants Measures to reverse upward trends

390 DAERA, 'Northern Ireland Environmental Statistics Report' (May 2023) <<u>www.daera-ni.gov.uk/articles/northern-ireland-environmental-statistics-report</u>> accessed 15 November 2023.

Protected areas must also be monitored. These include drinking water and shellfish water protected areas designated under the WFD NI 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, phytobethos 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. 'Specific pollutants'

were set originally by individual EU member states. 'Priority (hazardous) substances', 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.

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