Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency
www.daera-ni.gov.uk

# Significant Water Management Issues 2025

## Consultation document

An Agency within the Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Gníomhaireacht de chuid na Roinne Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe

An Agency wi'in the Depairtment o Fairmin, Environment an' Kintra Matthers

## Alternative Formats

You can get a copy of this document in other formats, including.

- Paper Copy
- Large Print
- Braille
- Other Languages

To request an alternative format, please contact: Integrated Catchment Management Team

Email: catchmentplanning@daera-ni.gov.uk

Telephone: 0300 200 7850 and ask to talk to a member of Integrated Catchment Management Team

If you have a hearing difficulty you can contact the Department via Text Relay Dial: 18001 0300 200 7850

Write to:

Integrated Catchment Planning
Northern Ireland Environment Agency
17 Antrim Road
Tonagh
Lisburn
County Antrim
BT28 3AL

## Ministerial Foreword

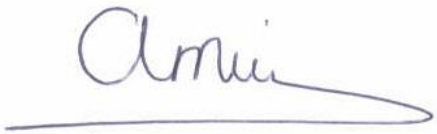
Water quality plays a critical role in both daily activities and the natural environment. Our human health, ecosystem health and sustainable economic growth depend on good water quality and achieving improvements in water quality across Northern Ireland is one of my key priorities. This directly contributes towards 'Protecting Lough Neagh and the Environment', one of the Executive's nine priorities in the Programme for Government.

Concerted efforts are being made to establish robust foundations for the development of the fourth cycle River Basin Management Plan while considering the requirements of all sectors of society. I believe the fourth cycle plan must be ambitious and address the challenges that Northern Ireland faces in relation to declining water quality. Understanding the pressures and impacts of different sources of pollution on the water environment is paramount to being able to act effectively.

We must have open and frank discussions about how we are going to improve water quality. Public participation and stakeholder engagement is central to the River Basin Planning process and there are several consultation stages that we are committed to. Already this year, my Department has launched an eight week call for evidence and a consultation on the timeline for the fourth cycle River Basin Management Plan.

I am pleased to present this Significant Water Management Issues report for consultation, which identifies key issues and will assist in the development of appropriate actions and measures. This consultation is a statutory requirement in the River Basin Management Planning process.

I am committed to engaging stakeholders throughout each phase of this fourth cycle plan, ensuring the development of effective measures that enhance Northern Ireland's water quality for the benefit of us all. I would therefore encourage everyone to respond to both the existing fourth cycle work programme consultation and to this newly launched Significant Water Management Issues consultation.



**ANDREW MUIR MLA**
**Minister of Agriculture, Environment and Rural Affairs**

# Executive summary

Northern Ireland's water resources are managed and protected using a catchment-based approach which includes rivers, lakes and groundwater as well as coastal and transitional water bodies. Under the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017 (the 2017 Regulations), the Department must produce and implement a River Basin Management Plan (RBMP) in six year cycles. The third cycle RBMP covers the period 2022-2027. It was finalised and published on 13 June 2025. The fourth cycle RBMP period runs from 2028-2033.

As part of the development of the fourth cycle RBMP, the Department is required to publish a report on 'Significant Water Management Issues' (SWMI) in Northern Ireland for public consultation by 22 December 2025. The Northern Ireland Environment Agency (NIEA) has prepared this SWMI report which will be open for public consultation for the statutory six-month period.

The SWMI report aims to identify pollution sources and pressures affecting each of Northern Ireland's waterbodies within each Local Management Area (LMA). The consultation seeks feedback on whether the Department has accurately determined the underlying issues, as proper identification is essential for developing effective actions or measures to address these pressures in the fourth cycle RBMP.

This report includes a Driver-Pressure-State-Impact-Response (DPSIR) analysis of each waterbody to help understand the pressures and impacts at waterbody level. The DPSIR framework is used widely to assess and manage environmental problems. A pre-consultation workshop with many key stakeholders was held on 24 October 2025 to help inform the pressures and impacts analysis.

## Key findings

Evidence examined in this report shows that human activities continue to put considerable pressure on Northern Ireland's water environment. The 2024 classification update indicates an overall deterioration in surface waterbody status since 2021, with 29 % of all surface water bodies achieving good or better ecological status compared to 31 % in 2021.

Due to slower flow and transport processes in groundwater, groundwater body status is not updated mid-cycle and the 2021 groundwater body status remains current. In 2021, 51 (71 %) groundwater bodies achieved good chemical status.

The primary sources of these pressures include agriculture, wastewater impacts (originating from urban areas, septic tanks and combined sewer overflows), other pressures and the presence of invasive species. The category labelled as 'other' encompasses local issues such as waste disposal sites and storm overflows - whose impacts are yet to be fully assessed - as well as instances where the source of the impact remains unidentified.
The fourth cycle RBMP will comprise a programme of measures designed to address these pressures, reduce their impact, and inform behaviours throughout the cycle. The measures to improve and protect water quality will be underpinned by science and organised under the four pillars of: Education, Incentivisation and Innovation, Regulation, and Enforcement.

This consultation seeks to involve all stakeholders, including the public, by gathering information, opinions and advice to inform the decision-making process regarding the measures required. Everyone is encouraged to respond to this consultation and play a role in safeguarding Northern Ireland’s water environment for future generations.

# Tables of contents

Ministerial Foreword ..... 3
Executive summary ..... 4
Key findings ..... 5
Tables of contents ..... 6
List of Figures, Tables & Maps ..... 7
Abbreviations ..... 8
1 Introduction ..... 9
2 Methodology for identifying significant water management issues ..... 11
3 Water quality status in Northern Ireland ..... 14
3.1 Surface Water ..... 14
3.1.1 Blue-green algae ..... 15
3.2 Groundwater ..... 15
4 Summary of significant water management issues in Northern Ireland ..... 17
4.1 Pressures affecting all waterbodies ..... 17
4.1.1 Climate change ..... 17
4.1.2 Chemicals ..... 18
4.2 Pressures affecting individual Local Management Areas ..... 18
4.2.1 Agriculture ..... 19
4.2.2 Septic tanks ..... 19
4.2.3 Urban Waste water ..... 20
4.2.4 Hydromorphology ..... 20
4.2.5 Other pressures ..... 20
4.2.6 Invasive species ..... 21
4.2.7 Industry ..... 21
4.2.8 Urban runoff ..... 22
4.2.9 Forestry ..... 22
5 Stakeholder engagement ..... 23
6 Consultation questions ..... 24
Freedom of Information (FoI), Confidentiality of Responses and Sharing of Information ..... 25
Annex: Significant Water Management Issues 2025 report - Summary of water quality and pressures in each Local Management Area
North Western River Basin District
Neagh Bann River Basin District
North Eastern River Basin District

# List of Figures, Tables & Maps

Figure 1 Timeline of the fourth cycle River Basin Management Plan ..... 10
Figure 2 Definition of terminology used in DPSIR assessment..... 11
Figure 3 An illustration of the DPSIR analytical framework..... 12
Figure 4 The most frequently identified pressures in Northern Ireland ..... 19

Map 1 River Basin Districts (RBDs) in Northern Ireland ..... 10
Map 2 Ecology Status of Surface Water in Northern Ireland ..... 14
Map 3 Chemical Status of Groundwater across Northern Ireland..... 16

Table 1 Comparison of ecological status/ potential of surface waterbodies in Northern Ireland ..... 15
Table 2 Comparison of chemical status of surface waterbodies in Northern Ireland ..... 15
Table 3 Comparison of chemical and quantitative status of groundwater bodies in Northern Ireland..... 16
Table 4: Co-design of draft Programme of Measures through sectoral working groups ..... 23

# Abbreviations

| abbreviation | name |
|---|---|
| **ASSI** | Area of Special Scientific Interest |
| **CSO** | Combined Sewer Overflow |
| **DPSIR** | Driver-Pressures-State-Impacts-Responses |
| **FoI** | Freedom of Information |
| **IED** | Industrial Emissions Directive |
| **LMA** | Local Management Area |
| **NIEA** | Northern Ireland Environment Agency |
| **OEP** | Office for Environmental Protection |
| **PCBs** | Polychlorinated biphenyls |
| **PFAS** | Per- and polyfluoroalkyl substances |
| **POMs** | Programme of Measures |
| **RBD** | River Basin District |
| **RBMP** | River Basin Management Plan |
| **SWMI** | Significant Water Management Issues |
| **uPBT** | ubiquitous, persistent, bioaccumulative, toxic |
| **WFD** | Water Framework Directive |
| **WWTW** | Waste Water Treatment Work |

# 1 Introduction

'Protecting Lough Neagh and the Environment' is one of the Executive's nine priorities in the Programme for Government 2024-2027 'Our Plan: Doing What Matters Most'[1]. Actions to improve water quality are also included in the Environmental Improvement Plan for Northern Ireland[2]. These actions will help address the challenges we face with regards to the decline in water quality across Northern Ireland, which has resulted in events like the blue green algae blooms in Lough Neagh.

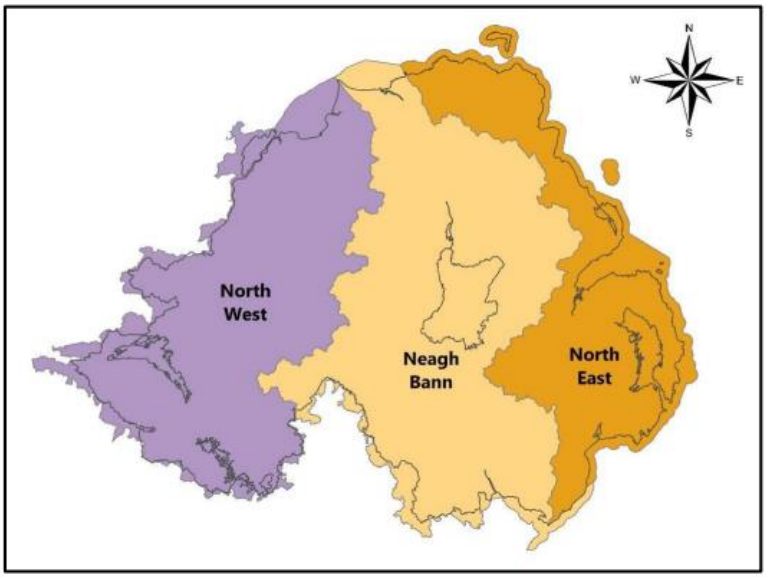
Northern Ireland's water resources are managed and protected using a catchment-based approach which includes rivers, lakes and groundwater as well as transitional and coastal waterbodies. The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017[3] require the production and implementation of a River Basin Management Plan (RBMP) in six yearly cycles. The RBMP takes an integrated approach, identifying those waterbodies which can be classified as being at good or better status. It also sets the objectives and a programme of measures (POMs) for the next six-year cycle to help improve those waterbodies which are classified at less than good status.

Northern Ireland has three river basin districts: North Western, Neagh Bann and North Eastern. North Western and Neagh Bann are international river basin districts shared with Ireland. Each RBD is made up of several Local Management Areas (LMAs).

LMAs, depending on size and geographical location, are made up of a number of waterbodies: river waterbodies, lake waterbodies and groundwater bodies as well as transitional (i.e. tidal) and coastal waterbodies.

[1] https://www.northernireland.gov.uk/sites/default/files/2025-03/programme-for-government-2024-2027-our-plan-doing-what-matters-most_1.pdf
[2] https://www.daera-ni.gov.uk/sites/default/files/publications/daera/Environmental%20Improvement%20Plan%20for%20Northern%20Ireland.PDF
[3] https://www.legislation.gov.uk/nisr/2017/81/contents

Map 1 River Basin Districts (RBDs) in Northern Ireland




We are entering the fourth River Basin Management Planning cycle and this Significant Water Management Issues (SWMI) report aims to improve our understanding of pressures and impacts on the water environment.

This report is the first statutory document in the fourth cycle RBMP process and is open for a six-month public consultation period until 18 June 2026. The draft RBMP will be published by 22 December 2026. The final fourth cycle RBMP (2028-2033) will be published by 22 December 2027.

Figure 1 Timeline of the fourth cycle River Basin Management Plan

| Prep | 1st | 2nd cycle | | | | | | 3rd cycle | | | | | | 4th cycle | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000 – 2009 | 2010 - 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 |

| 3rd cycle | | | | | |
|---|---|---|---|---|---|
| 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| | | | Preparation for the fourth cycle RBMP | | |
| | | | Significant Water Management Issues Consultation | draft River Basin Management Plan (2028-2033) consultation | final River Basin Management Plan (2028-2033) |

# 2 Methodology for identifying significant water management issues

Where a waterbody fails or is at risk of failing to meet the relevant environmental objective, i.e. achievement of good status, then the cause of this failure (i.e. the pressure or combination of pressures) must be investigated/ identified.

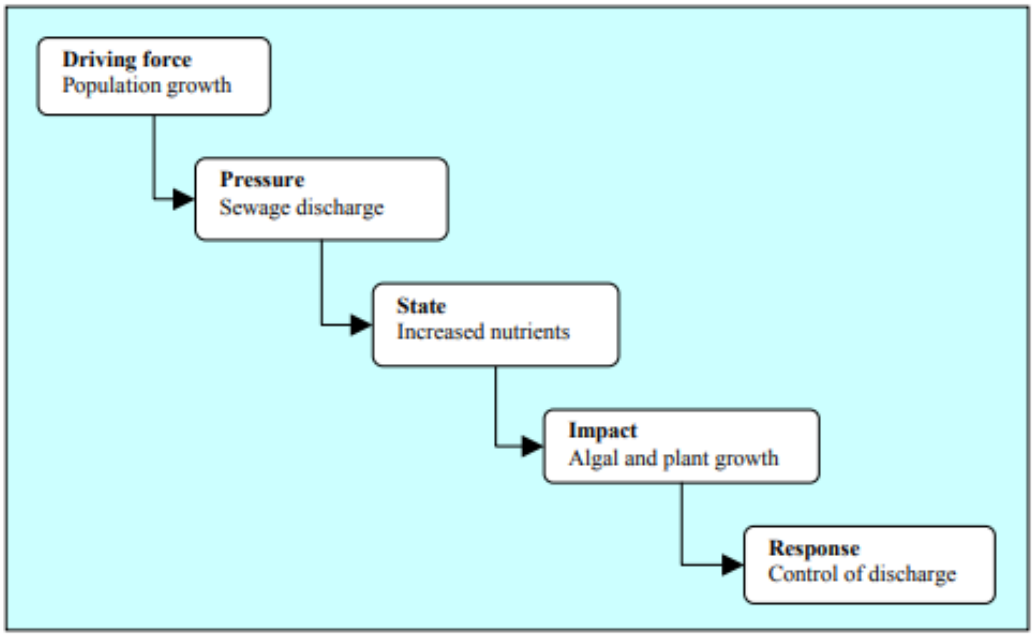
The Driver-Pressures-State-Impacts-Responses Framework (DPSIR) offers a structured way to understand and communicate the complex relationships between human activities and environmental change. DPSIR helps to identify key causal pathways, assess impacts, and design effective responses (Figure 2 and Figure 3). The Office for Environmental Protection (OEP) has recommended that future RBMPs should provide the DPSIR information for the RBD as a whole and for each water body[4].

Figure 2 Definition of terminology used in DPSIR assessment

| Term | Definition |
|---|---|
| **Driver** | Any human activity that may have an environmental effect (e.g. agriculture, industry) |
| **Pressure** | The direct effect of the driver (for example, an effect that causes a change in flow or a change in water chemistry) |
| **State** | The condition of the water body resulting from both natural and anthropogenic factors (i.e. physical, chemical and biological characteristics) |
| **Impact** | The environmental effect of the pressure (e.g. fish killed, ecosystem modified) |
| **Response** | The measures taken to improve the state of the water body (e.g. restricting abstraction, limiting point source discharges, developing best practice guidance for agriculture) |

[4] https://www.theoep.org.uk/report/implementation-water-framework-directive-northern-ireland

Figure 3 An illustration of the DPSIR analytical framework




This initial stage in the development of the fourth cycle RBMP considers the status of water bodies and identifies the range of pressures and drivers that are impacting on water quality.

Status is based on the surface water classification statistics that were published in 2025[5]. The status is presented as ecological status and chemical status. In 2018, new priority substances, so-called 'forever' chemicals, were introduced for the first time in the assessment of chemical status, so a comparison with the 2015 classification could be confusing without a full understanding of the differences. Although a number of these ubiquitous, persistent, bioaccumulative, toxic (uPBT) substances are now banned or have restricted use, their widespread use in the past has resulted in their accumulation in the aquatic environment with subsequent breaching of assigned Environmental Quality Standard (EQS) values.

To assist in the understanding of the changes in how chemical status are now determined, tables show a comparison between 2021 and 2024 of the chemical status sub-group B (which includes cypermethrin but excludes uPBT substances) and the chemical sub-group C (which includes cypermethrin and uPBT substances).

The pressures within each LMA have been identified using monitoring and regulatory datasets, including data on land use and human activities in catchments.

[5] NIEA - WMU - ICP - NI Water Classification Statistics Report 2024.pdf

The DPSIR assessment involved holding several internal workshops to identify pressures impacting on waterbodies on an LMA basis. This was followed by a stakeholder workshop on 24 October 2025.

This assessment process has enabled the identification of significant water management issues for which appropriate responses will need to be developed.

# 3 Water quality status in Northern Ireland

## 3.1 Surface Water

Currently, 29 % of our surface waterbodies are achieving good ecological status (see Information for each LMA can be found in the Annex ‘Summary of water quality and pressures in each Local Management Area’.

Map 2). This is a decline from 2021, when 31 % were achieving good ecological status and 2015 when 32 % were achieving good or high ecological status (see Table 1).

When incorporating uPBT substances, (chemical status sub-group C), currently none of our surface waterbodies are achieving good chemical status; this is unchanged from 2021.

When uPBT substances are not included (chemical status sub-group B), currently 80 % of our surface waterbodies are achieving good chemical status, which is a decline from 2021 when 81 % were achieving good chemical status (see

Table 2).

Information for each LMA can be found in the Annex ‘Summary of water quality and pressures in each Local Management Area’.

Map 2 Ecology Status of Surface Water in Northern Ireland

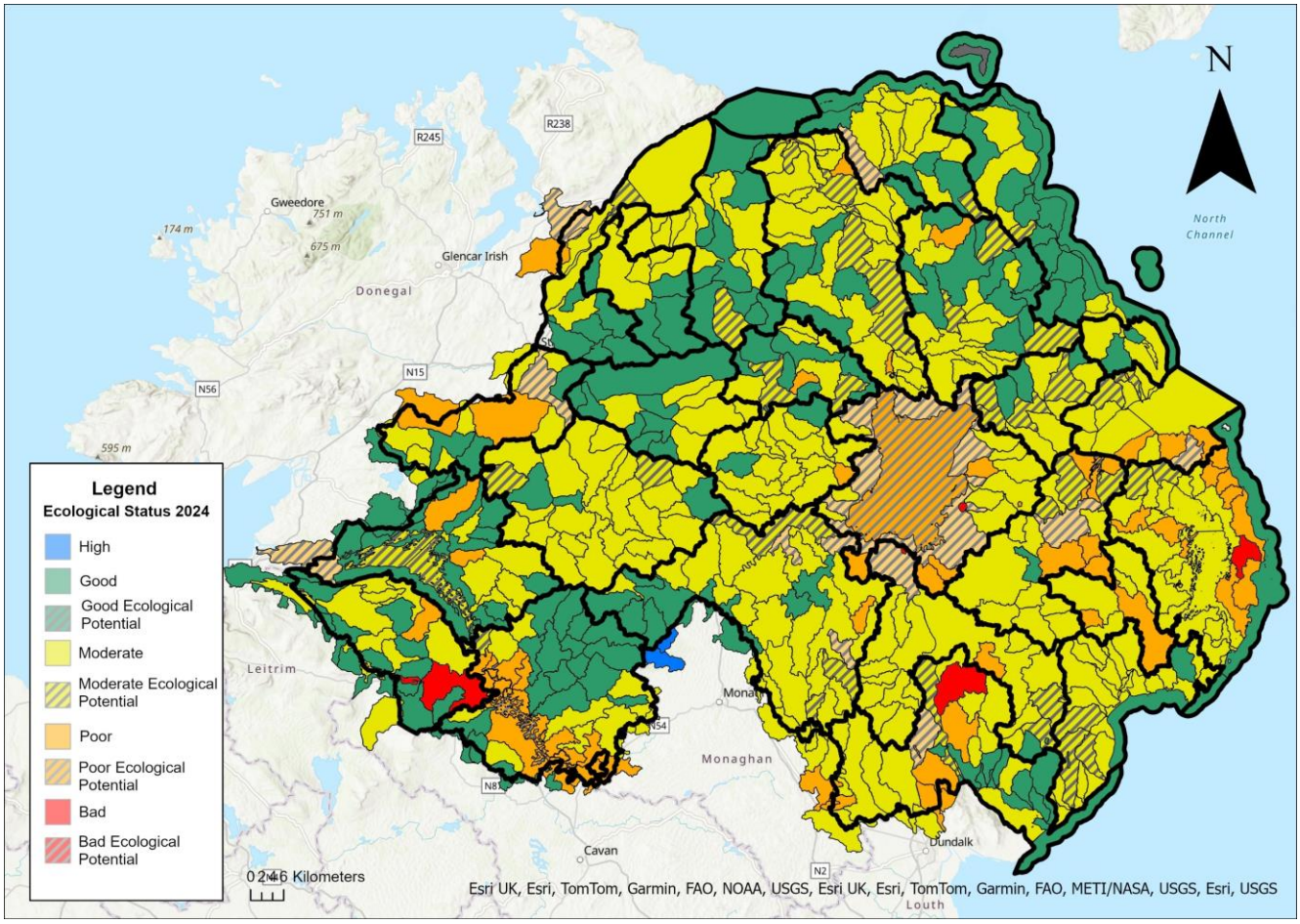



Table 1 Comparison of ecological status/ potential of surface waterbodies in Northern Ireland

| | Ecological status or potential | | | | | |
|---|---|---|---|---|---|---|
| | 2015 | | 2021 | | 2024 | |
| Classification | Number | % | Number | % | Number | % |
| High | 9 | 2 | 2 | 0 | 2 | 0 |
| Good/GEP | 152 | 31 | 151 | 30 | 144 | 29 |
| Moderate/ME | 268 | 54 | 276 | 56 | 290 | 58 |
| Poor/PEP | 50 | 10 | 56 | 11 | 53 | 11 |
| Bad/BEP | 12 | 2 | 7 | 1 | 6 | 1 |
| No Data | 5 | 1 | 4 | 1 | 1 | 0 |

Table 2 Comparison of chemical status of surface waterbodies in Northern Ireland

| | Chemical subgroup B | | | | Chemical subgroup C | | | |
|---|---|---|---|---|---|---|---|---|
| | 2021 | | 2024 | | 2021 | | 2024 | |
| Classification | Number | % | Number | % | Number | % | Number | % |
| Good | 404 | 81 | 396 | 80 | 0 | 0 | 0 | 0 |
| Bad | 73 | 15 | 80 | 16 | 496 | 100 | 496 | 100 |
| No Data | 19 | 4 | 20 | 4 | 0 | 0 | 0 | 0 |

### 3.1.1 Blue-green algae

The impact of pollution on the water environment was highlighted by the very significant algal blooms we witnessed at Lough Neagh in 2023 and in subsequent years, with negative implications for human, animal and environmental health.

Blue-green algae blooms are not unique to Lough Neagh; in 2024 they were observed in 90 locations across Northern Ireland. The waterbodies where blue-green algae have been observed are noted in each of the LMA sections in the Annex to this document. Further information can be found on the blue-green algae viewer.

## 3.2 Groundwater

For groundwater, the number of groundwater bodies at good chemical status improved slightly from 2015 (68 %) to 2021 (71 %), see **Error! Not a valid bookmark self-reference.**. However, this is mostly related to changes in monitoring.

The quantitative status is good for 95 % of our groundwater bodies. This is an improvement from 89 % in 2015 (see Table 3).

Information for each LMA can be found in the Annex ‘Summary of water quality and pressures in each Local Management Area’.

If you would like to find out the status of an individual waterbody, or find further information, you can access this by clicking on the NIEA Catchment Data Map Viewer

Map 3 Chemical Status of Groundwater across Northern Ireland

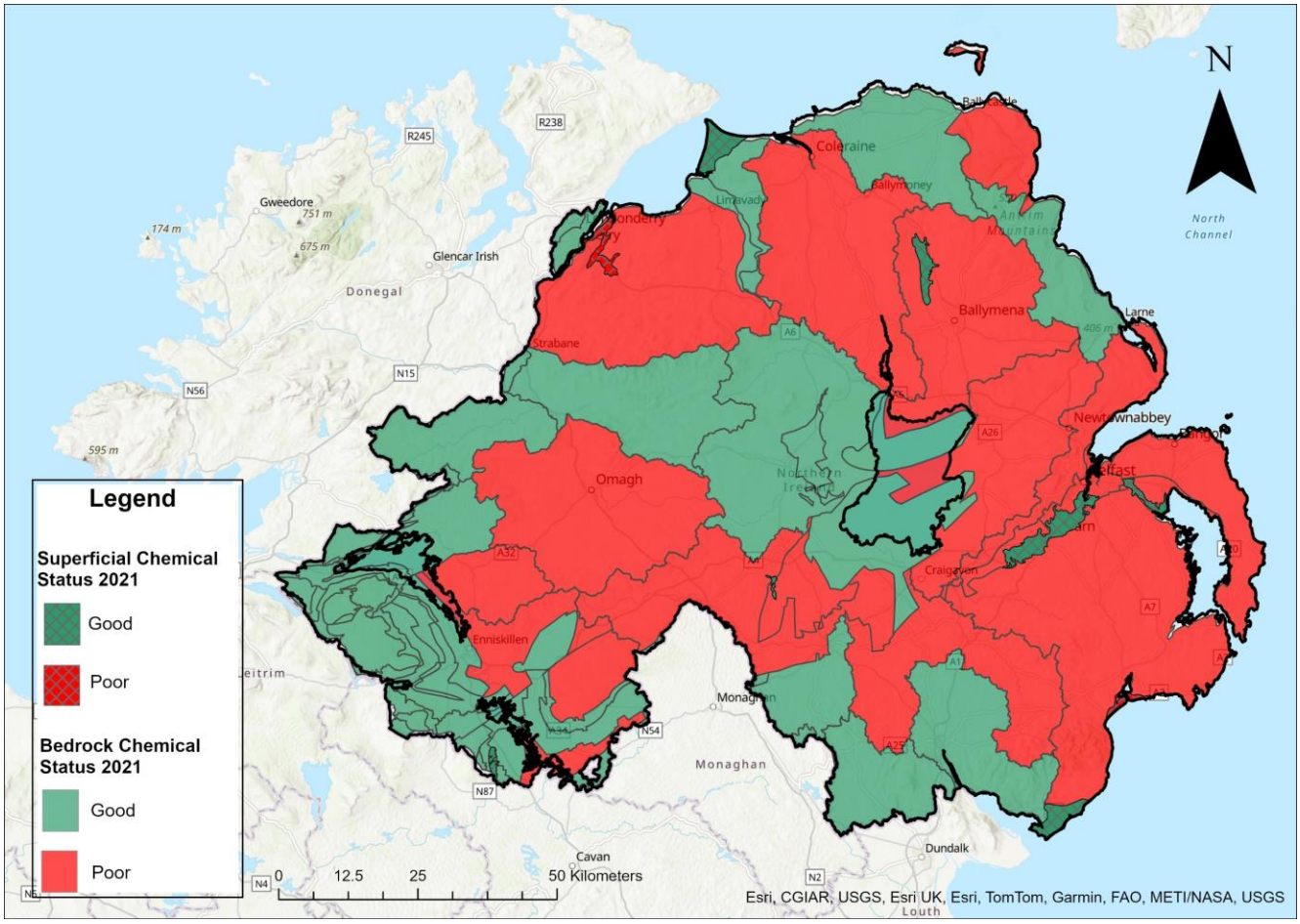



Table 3 Comparison of chemical and quantitative status of groundwater bodies in Northern Ireland

| | | Chemical Status | | | | Quantitative status | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2015 | | 2021 | | 2015 | | 2021 | |
| Classification | | Number | % | Number | % | Number | % | Number | % |
| Bedrock | Good | 46 | 61 | 46 | 61 | 57 | 76 | 63 | 84 |
| | Poor | 20 | 27 | 20 | 27 | 9 | 12 | 3 | 4 |
| Superficial | Good | 5 | 7 | 7 | 9 | 6 | 8 | 8 | 11 |
| | Poor | 4 | 5 | 2 | 3 | 3 | 4 | 1 | 1 |

# 4 Summary of significant water management issues in Northern Ireland

## 4.1 Pressures affecting all waterbodies

### 4.1.1 Climate change

All of Northern Ireland's water bodies and intercoastal basins will be affected by climate change. We are already seeing the effects of climate and this is expected to continue and intensify.

Temperatures are projected to increase in both summer and winter. Summer rainfall is projected to decrease, although extreme downpours will be heavier despite the overall drying trend. Winters are projected to become wetter, in terms of both the total amount of rainfall and the number of wet days. Sea levels are also projected to rise. Changing climatic conditions and extreme weather event impacts may also be exacerbated in future due to the degraded state of the natural environment[6].

Aquatic ecosystems are particularly vulnerable to changes in temperature and rainfall. These risks could lead to aquatic species exceeding their thermal tolerance or bringing about detrimental habitat changes including algal blooms, loss of sensitive species, increases in bacterial pollution at sensitive areas, changes in hydrology, and changes in timing of life cycle stages and species composition.

Coastal aquifers and agricultural land are at risk to saline intrusion as sea level rises. Coastal species and habitats areas are at risk to sea level rise and storms.

There is a need to prioritise research on potential responses of aquatic habitats and species to climate change and highlight implications for measures to improve water quality. There needs to be an increased focus on measures designed to improve water quality that are resilient to climate change, anticipate future stresses and consider climate change adaption, including the impacts of carbon emissions. This will include the use of nature-based solutions for climate change mitigation and adaptation.

[6] CCRA-Evidence-Report-Northern-Ireland-Summary-Final.pdf

### 4.1.2 Chemicals

All of Northern Ireland's water bodies and intercoastal basins are affected by chemicals. Chemicals enter the water environment primarily through agricultural runoff, industrial discharges, wastewater, and improper disposal of household products. These substances can include pesticides, fertilizers, heavy metals, and synthetic compounds, which often persist in ecosystems. The impact of chemicals is significant and can degrade water quality, harm aquatic life by disrupting reproductive and growth cycles, and accumulate in the food chain, posing risks to human health. Additionally, chemical contamination can alter the natural balance of ecosystems, reduce biodiversity, and increase the cost and complexity of water treatment for safe consumption.

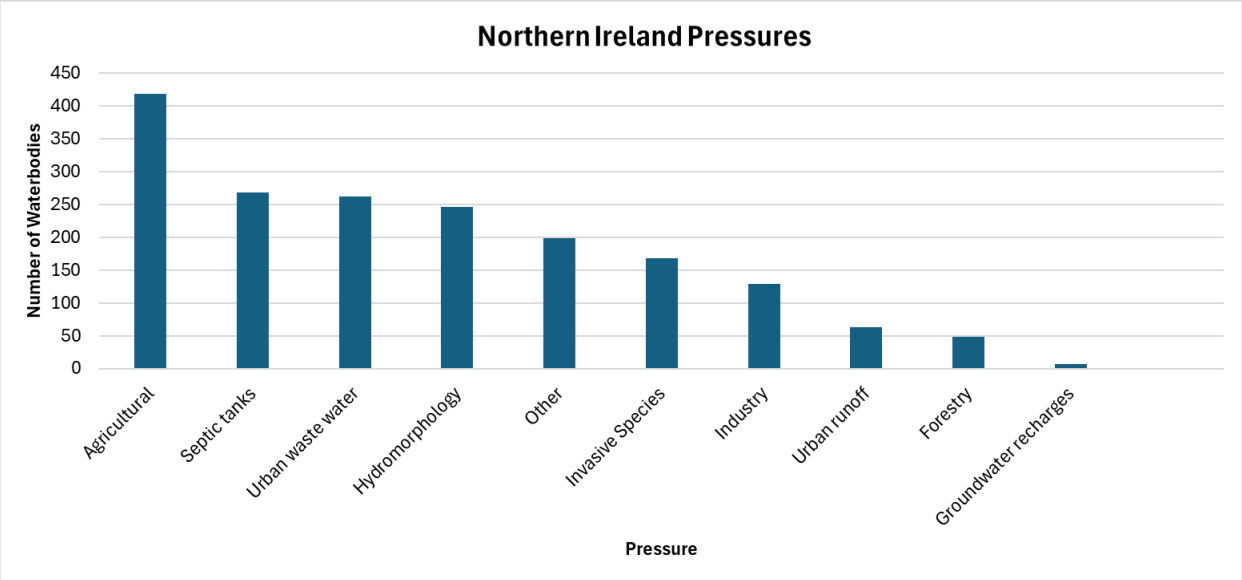
uPBTs are a group of chemicals characterized by their persistence in the environment, ability to bioaccumulate in living organisms, and high toxicity. Common examples include certain industrial chemicals, flame retardants, and legacy pollutants like Polychlorinated biphenyls (PCBs) and per- and polyfluoroalkyl substances (PFAS). In aquatic systems, uPBTs pose a severe risk because they do not readily degrade, allowing them to remain in water and sediments for decades.

## 4.2 Pressures affecting individual Local Management Areas

The pressures within each LMA have been identified using monitoring and regulatory datasets, including data on land use and human activities in catchments. The most frequently identified pressures affecting water quality are agricultural, septic tanks, urban wastewater and hydromorphology. This is followed by a group referred to as 'Other' pressures which includes a range of unquantified and/ or yet to be determined pressures (Figure 4).

Collectively, each pressure is impacting on water quality and appropriate measures will need to be developed to ensure that the environmental objective of good status can be achieved. Further analysis will be undertaken to quantify the impact each of these significant water management issues is having on water quality.

Figure 4 The most frequently identified pressures in Northern Ireland




### 4.2.1 Agriculture

Pressures from agriculture affect 67% of our waterbodies and intercoastal basins. At RBD scale 65 % are affected in the North Western RBD, 70 % in the Neagh Bann RBD and 64 % in the North Eastern RBD. These mainly take the form of nitrates and phosphates which can reach waterways in nutrient rich sediment run-off or leached through the soil and field drains in solution following heavy rainfall. This can be exacerbated in areas of bare soil or where livestock have access to rivers. Risks are highest where ground is steeply sloped and where livestock has access to waterways.

Management of excess phosphorus is typically the main issue for rivers and lakes. Management of excess nitrogen is typically a major issue for groundwaters, estuaries and coastal waters. In addition, the ratios of nitrogen to phosphorus in waterways determines what types of algal blooms are prevalent. This can also impact gravel habitats for fish and other dependent species.

### 4.2.2 Septic tanks

Septic tanks affect 43 % of our waterbodies and intercoastal basins. At RBD scale 46 % are affected in the North Western RBD, 42 % in the Neagh Bann RBD and 39 % in the North Eastern RBD. Septic tanks are used to treat sewage where a house/ premises is not connected to the main sewer. These can negatively impact water quality when located in

unsuitable areas and/ or are not adequately maintained resulting in failure to operate satisfactorily. These issues can lead to chronic nutrient and organic pollution of surface water and groundwater. Microbial pollution can affect drinking water quality resulting in illness, as well as impacting bathing and shellfish water quality.

### 4.2.3 Urban Wastewater

Urban wastewater pressures affect 42 % of our waterbodies and intercoastal basins. At RBD scale 38 % are affected in the North Western RBD, 45 % in the Neagh Bann RBD and 42 % in the North Eastern RBD. The discharge of nutrients from Waste Water Treatment Works (WWTW) can have a negative impact on water quality. Excess nutrients from phosphorus and ammonia can cause eutrophication in rivers and lakes, while nitrogen and phosphorus are the key nutrients causing impacts for transitional and coastal waters. Any elevation in bacteria such as *E. coli* can impact public health and aquatic habitats. Pharmaceuticals, personal care products and microplastics etc. may not be removed by WWTW resulting in chemical impacts on a waterbody. Some WWTW are known to be operating beyond their designed capacity/ population equivalent (PE).

### 4.2.4 Hydromorphology

Hydromorphology pressures are affecting 39 % of waterbodies and intercoastal basins. At RBD scale 32 % are affected in the North Western RBD, 47 % in the Neagh Bann RBD and 38 % in the North Eastern RBD. Human activities can alter the natural functioning of a water body. Impacts from abstraction and in-channel works like dredging, drainage, straightening, widening and deepening rivers alter the natural flow, sediment transport regime and diversity of habitat. Bank erosion can add excess fine sediment and other pollutants to watercourses, while removal of riparian vegetation can reduce shade, increase water temperatures and reduce sources of food for aquatic species. Barriers can not only impede the transport of water and sediment but also impact the movement of fish.

### 4.2.5 Other pressures

This pressure category affects 32 % of waterbodies and intercoastal basins. At RBD scale 28 % are affected in the North Western RBD, 31 % in the Neagh Bann RBD and 37 % in the

North Eastern RBD. This pressure category is used  where an unknown source is impacting on a waterbody. Impacts may include chemical pollution or nutrient pollution. There are several known pressures where not enough information, quantitative data or specific locations are currently available at a Northern Ireland scale to assign them to specific waterbodies. However, where data points are available, these have been recorded in the pressure analysis for the LMAs (see Annex).

### 4.2.6 Invasive species

Invasive non-native species (INNS) affects 27 % of waterbodies and intercoastal basins. INNS can have significant ecological and economic impacts. At RBD scale 25 % are affected in the North Western RBD, 26 % in the Neagh Bann RBD and 31 % in the North Eastern RBD. Once these are established, control is often prohibitively expensive or technically infeasible and often unsuccessful. Climate change may affect the variety, abundance, frequency and distribution of these species. Many of our protected areas and protected species are vulnerable to the introduction and spread of invasive species. Some examples of invasive species in Northern Ireland include Japanese Knotweed, Himalayan Balsam and zebra mussels. Zebra mussels have played a significant role in contributing to blue-green algal blooms in Lough Neagh and other waterbodies across Northern Ireland.

### 4.2.7 Industry

Industry pressures affect 21 % of Northern Ireland’s waterbodies and intercoastal basins. At RBD scale 17 % are affected in the North Western RBD, 28 % in the Neagh Bann RBD and 15 % in the North Eastern RBD. Industries or activities that can cause harm to the environment are regulated under the Industrial Emissions Directive (IED) which has been brought into effect by the Pollution Prevention and Control Regulations (Northern Ireland) 2013 (the PPC Regulations) as amended. These activities must operate under a permit issued by NIEA or local councils and may include industries such as quarries, intensive farming and anaerobic digestion plants. Some industries/ activities may also require an industrial consent for surface water discharge. Water quality issues at licensed facilities can occur when a facility is not managed in line with permit conditions and good practice. Water quality impacts can include nutrient pollution and/ or organic pollution (from phosphorus and

nitrogen inputs causing eutrophication), sediment release, chemical pollution and microbiological pollution.

### 4.2.8 Urban runoff

Urban runoff affects 10 % of waterbodies or intercoastal basins. At RBD scale 9 % are affected in the North Western RBD, 8 % in the Neagh Bann RBD and 14 % in the North Eastern RBD. The pressure refers to pollution from towns and cities and run off from the road network. In addition, combustion of fuels from vehicles and domestic wood fires can contribute to atmospheric nitrogen deposition and acidification of upland areas. Contaminants can settle in soils and the beds of rivers and lakes. These can be released back into the environment (remobilised) once they have been disturbed following high rainfall events or by human activities (dredging).

### 4.2.9 Forestry

Forestry pressures affect 8 % of waterbodies or intercoastal basins. At RBD scale 16 % are affected in the North Western RBD, 3 % in the Neagh Bann RBD and 4 % in the North Eastern RBD. Typical water quality issues arising from forestry and associated activities relate to the release of sediment and nutrients to the aquatic environment, hydromorphological impacts (physical alteration to aquatic habitats) and acidification. These impacts are often a result of forestry operations such as afforestation, deforestation and/or thinning. During the intermittent periods, when the forests are stable, water quality can recover. Stable, well-designed forests, with appropriate setback distances from watercourses can therefore also be a measure to protect water quality.

# 5 Stakeholder engagement

This consultation on the identified significant water management issues is a key stage in the development of the fourth cycle RBMP. The Plan will cover the six-year period from 1 January 2028 to 31 December 2033.

Early in 2026 we will commence the development of appropriate measures to address the identified issues. We will continue to use the DPSIR framework to develop the measures that will be necessary to achieve the objective of good status.

There are basic measures that must be included in the Programme of Measures and, where necessary, other supplementary measures may be designed and implemented. The mandatory measures are listed in regulation 20 of the 2017 Regulations

Consideration will be given to the development of measures at water body level, LMA level and RBD level. Where applicable, special consideration will be given to measures that are necessary to meet the more stringent objectives that apply in Protected Areas. This will include Drinking Water Protected Areas, Bathing Water Protected Areas, Shellfish Water Protected Areas, Nutrient Sensitive Areas and Protected Areas for habitats and species.

The Department will be engaging with stakeholders during the consultation period to develop the necessary measures. This stakeholder engagement will provide an opportunity to participate in the development of the draft RBMP that will be published for consultation in December 2026.

We propose that draft measures will be developed through co-design in five sectoral working groups:

Table 4: Co-design of draft Programme of Measures through sectoral working groups

| Overarching Considerations:<br>Climate Change, Education, Incentivisation & Innovation, Regulation and Enforcement | | | | |
|---|---|---|---|---|
| Agriculture & Forestry | Urban pressures | Drinking Water & Chemicals | Morphology, abstractions, fisheries | Invasive non-native species |

# 6 Consultation questions

1. Do you think we have correctly identified the significant issues impacting on water resources in Northern Ireland?
   Yes/ No
   Please provide details.
2. Are there other significant issues we have not captured?
   Yes/ No
   Please provide details and identify the Local Management Area(s) if possible.
3. What interventions would you suggest to tackle these issues under the following four pillars?
   a) education
   b) incentivisation and innovation
   c) regulation
   d) enforcement
4. We will carry out screening or impact assessments when developing the draft Programme of Measures. Is there anything that you think needs to be considered when carrying out the Equality screening, Rural Needs Assessment, Strategic Environmental Assessment and Habitats screening?
   Please provide details.

## Freedom of Information (FoI), Confidentiality of Responses and Sharing of Information

NIEA will publish a summary of responses following completion of the consultation process. We are unable to reply individually to the points you may raise as part of your reply.

Your response, and all other responses to the consultation, may be disclosed on request. The Department can only refuse to disclose information in exceptional circumstances. Before you submit your response, please read the paragraphs below on the confidentiality of consultations and this will provide you with guidance on the legal position about any information submitted by you in response to this consultation.

Section 8 (e) of the Data Protection Act 2018 permits processing of personal data when necessary for an activity that supports or promotes democratic engagement.

Information provided by respondents to this stakeholder engagement exercise will be held and used for the purposes of the administration of this current exercise and subsequently disposed of in accordance with the provisions of the Data Protection Act 2018 and the General Data Protection Regulation. For more information and to view the DAERA Privacy Statement please go to: https://www.daera-ni.gov.uk/publications/daera-privacy-statement-document

The FOI Act gives the public a right of access to any information held by a public authority, namely, the Department in this case. This right of access to information includes information provided in response to a consultation. The Department cannot automatically consider as confidential information supplied to it in response to a consultation. However, it does have the responsibility to decide whether any information provided by you in response to this consultation, including information about your identity should be made public or be treated as confidential. If you do not wish information about your identity to be made public, please include an explanation in your response including any harm you believe such a disclosure might cause.

This means that information provided by you in response to the consultation is unlikely to be treated as confidential, except in very particular circumstances. The Lord Chancellor's Code of Practice on the FOI Act provides that:

- The Department should only accept information from third parties in confidence if it is necessary to obtain that information in connection with the exercise of any of the Department's functions and it would not otherwise be provided.
- The Department should not agree to hold information received from third parties "in confidence" which is not confidential in nature, acceptance by the Department of confidentiality provisions must be for good reasons, capable of being justified to the Information Commissioner.

For further information about confidentiality of responses please contact the Information Commissioner's Office, or visit the ICO Website

Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency
www.daera-ni.gov.uk

For further information:

Integrated Catchment Planning
NIEA Lisburn
17 Antrim Road
Tonagh
Lisburn
BT28 3AL

Tel: 0300 200 7850
Email: catchmentplanning@daera-ni.gov.uk
www.daera-ni.gov.uk

INVESTORS IN PEOPLE®
We invest in people Standard

2025-12-08

An Agency within the Department of
Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Gníomhaireacht de chuid na Roinne
Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe

An Agency wi'in the Depairtment o
Fairmin, Environment an' Kintra Matthers