Better Farming *for* Water Campaign

Nore Catchment Action Plan

teagasc
Agriculture and Food Development Authority

DAWN MEATS

Better Farming for Water
8-Actions for Change

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Foreword

Professor Frank O Mara, Director Teagasc

In 2024, Teagasc was asked to lead a multi-actor advisory campaign focused on water quality. The goal was to deliver clear, simple, and positive messages that strengthen farmers' and the wider agri-food sector's understanding of agriculture's impact on water and the urgent need for improvement. In response, Teagasc launched Better Farming for Water – 8 Actions for Change campaign, a flagship initiative designed to promote sustainable farming practices that reduce nutrient, sediment, and pesticide losses to waterways. This work is vital not only for environmental protection but also for Ireland's national interests, as improving water quality is key to ensuring the continuation of the nitrates derogation that underpins the viability of intensive farming systems.

The campaign targets eight priority catchments, including the Nore Catchment, where tailored workplans will set clear targets and timelines for implementing water improvement measures. The Nore Catchment is supported by a dedicated Teagasc Catchment Coordinator working closely with a newly formed Catchment Implementation Group (CIG). Oversight is provided by the CIG Committee to ensure coordinated, effective delivery of actions. Other priority catchments include the Slaney, Barrow, Suir, Blackwater, Boyne, Lee and Bandon-Ilen.

The launch of this catchment plan marks a significant milestone in Ireland's journey to improve water quality in the Nore Catchment. Success depends on a collaborative, multi-actor approach involving farmers, advisors, industry, and regulators working together toward shared goals. This level of engagement is essential to deliver practical solutions that balance improvements in water quality with agricultural productivity. The support of the Minister for Agriculture and department officials highlights the whole-of-government commitment to this campaign, signalling that water quality is a national priority and reinforcing confidence that this plan will be supported at every level to safeguard Ireland's environmental and agricultural future.

I would like to express my appreciation to my colleagues in Teagasc for their invaluable contribution to developing the Nore Catchment Action Plan. I also wish to acknowledge the members of the Nore Catchment Implementation Group Oversight Committee for generously volunteering their time and expertise to support the plan's implementation. I wish everyone involved success in achieving the ambitious targets set out in this comprehensive plan.

Frank O'Mara

Frank O'Mara
Director of Teagasc

Foreword

Eamon Sheehan

Chair of Nore Catchment Implementation Group Oversight Committee

The farmers of the Nore Catchment are rightly proud of the River Nore and the rich farming and natural heritage it supports. Rising in the Devil's Bit Mountains, the river Nore flows for approximately 140 kilometres through the heart of the southeast, sustained by a wide network of tributaries and streams, such as Delour, Dinin, Erkina, Owveg, Arrigle and King's River. The land drained by the Nore and its tributaries has been farmed and cared for by generations of farming families, many of whom continue to live and work on these lands today.

Beyond its historical and cultural significance, the River Nore has great potential as a shared community asset, supporting fishing, recreation, wellbeing and local tourism. Realising this potential depends on continued care for the river and its surroundings, and on building on the many good practices already in place across the catchment. The Teagasc Better Farming for Water (BFFW) campaign provides a positive, practical framework to support farmers in this work.

As Chairman of the BFFW Nore Committee and as a dairy farmer myself, I understand first-hand the day-to-day realities of farming and the deep connection farm families have with their land and water. Farmers are not only food producers but long-term custodians of the countryside, and their commitment to protecting natural resources is central to the sustainability of Irish agriculture. It was for this reason that I was pleased to take on the role of Chair at this important time for the sector.

Across the Nore Catchment, like many river systems nationwide, there are ongoing challenges in achieving the highest possible water quality status. Addressing these challenges is a shared responsibility and requires continued collaboration, support and investment. The science-based measures outlined in the Teagasc 8 Actions for Change programme are designed to build on existing good practice and to support farmers in making incremental, workable improvements that fit within their farming systems.

Our goal is not to apportion blame, but to work together to protect and enhance the River Nore for farming families, rural communities and future generations. The BFFW Nore Implementation Group Oversight Committee brings together representatives from across the sector and is committed to supporting farmers through advice, guidance and practical assistance. By working in partnership and supporting one another, we can continue to farm productively while safeguarding the River Nore as a vital and valued resource for the years ahead.

Eamon Sheehan

Chair of Nore Catchment Implementation Group Oversight Committee

Introduction and Context

In May 2024, at the request of the Minister for Agriculture, Food and the Marine, Teagasc launched the multi-actor 'Better Farming for Water 8-Actions for Change' campaign.[1] The objective of the campaign is to support all farmers in the adoption of sustainable farming practices that minimize the impact of agriculture on water quality. The campaign will be delivered by way of 6 key pillars:

- Stakeholder engagement- **multi-actor** approach led by local 'champion' farmers.
- **Building Awareness**- acquisition and utilisation of local water quality data.
- **Upskilling** farmers, advisors, lecturers/teachers and students.
- An Impactful **Knowledge Transfer** programme supported by advisory support.
- A supporting **Research Programme** to identify effective mitigation actions.
- Strong **Communication Plan** with target audience.

The campaign is building on existing water quality programmes such as ASSAP, Farming for Water EIP, Waters of LIFE, Blue Dot Catchments and the Agriculture Catchment Programme. This requires the creation of strong collaboration between these initiatives and the 'Better Farming for Water' campaign. The continuation of the ASSAP programme will be critical in focusing on priority 'areas for action' across the country where the status of the water is at risk of falling from agricultural pressure. The Farming for Water EIP will be important in financially supporting farmers in the implementation of measures to improve water quality.

The campaign will focus on **8-Actions for Change** for farmers to adopt to improve water quality through their farming activities. These 8-Actions for Change provide a structure through which farmers can engage with addressing water quality in a more relatable way, help understand why actions are required, and to have confidence that the action being taken is worthwhile and will lead to a positive improvement. The 8-Actions for Change can be divided into three areas of practice improvement: Nutrient Management, Farmyard Management and Land Management.

Nutrient Management :

1. Reducing purchased nitrogen surplus- greater precision in the application of both chemical and organic nitrogen.
2. Optimising soil fertility- initially focus on increasing soil pH to improve nitrogen use efficiency and increase soil available phosphorous.
3. Applying fertilizer at the appropriate rate, time, and conditions- this is especially important in spring.

Farmyard Management:

4. Having sufficient slurry storage- this will allow greater nutrient use efficiency from slurry.
5. Minimising point source nutrient loss from farmyards and roadways- divert clean away from the farmyard and reduce soiled yard areas.

1 *Better farming for water - Teagasc | Agriculture and Food Development Authority,* Teagasc Publication 2024

Land Management:

6. Fence off all water courses to prevent bovine access.
7. Use riparian margins, buffer strips to prevent over land flow of nutrient into watercourses.
8. Maintain over-winter green covers on tillage land- research has shown that cover crops significantly reduced nitrogen leaching over the winter.

The campaign will initially concentrate on the following eight river catchments: Bandon-Ilen, Barrow, Blackwater, Boyne, Lee, Nore, Slaney and Suir. The EPA has identified these river catchments as 'Catchments of Concern' where nitrogen concentrations are too high. [2]A Campaign Manager has been appointed to lead the campaign as well as Six Catchment co-ordinators; one each to the Slaney, Barrow/Nore, Suir, Blackwater, Bandon-Ilen and the Boyne, plus other technical support. The campaign to improve water quality in other river catchments will also continue, but at a lower level of intensity. Each catchment will have a bespoke plan prepared to provide a pathway to deliver water quality improvements.

2 *Assessment of the catchments that need reductions in nitrogen concentrations to achieve water quality objectives | Environmental Protection Agency EPA publication,* 2021

The Nore Catchment

The Nore Catchment is located in the south eastern half of the country. It includes the area drained by the River Nore and all streams entering tidal water between its confluence with the River Barrow at Ringwood and the Barrow railway bridge at Drumdowney, Co. Kilkenny, draining a total area of 2,595km². The Nore Catchment area covers parts of several counties, including Carlow, Kilkenny, Laois, Offaly, Tipperary and Wexford. The largest urban centre in the catchment is Kilkenny City, the other main urban centres in this catchment are Abbeyleix, Callan and Thomastown. The larger of the many tributaries include Delour, Dinin, Erkina, Owveg, Arrigle and King's Rivers on the Nore. The Nore catchment is divided into 21 subcatchments, comprising 123 river waterbodies, five transitional waterbodies, and 48 groundwater bodies.

Table 1 shows the ecological status of surface waterbodies in the Nore in each of the last Six monitoring cycles. Of the 128 surface water bodies, 123 are river water bodies and five are transitional waterbodies. The most recent EPA report "Water Quality in Ireland 2019-2024" showed that a total of 38% of Nore surface waterbodies were at Good or High Ecological Status. Between the 2016-2021 and 2019-2024 monitoring periods resulted in the loss one waterbody achieving a good or high status, during this same monitoring period, 16 waterbodies improved in status, and 15 deteriorated in status.

Table 1: *Ecological status of river waterbodies in the Nore Catchment*

		Assigned Status					
No. River waterbodies*	**Monitoring Cycle**	**High**	**Good**	**Moderate**	**Poor**	**Bad**	**High + Good**
Nore (87)	2007-2009	6	41	27	13	0	**47**
Nore (87)	2010-2012	11	41	25	10	0	**57**
Nore (89)	2010-2015	5	46	21	17	0	**51**
Nore (112)	2013-2018	10	49	46	7	0	**59**
Nore (123)	2016-2021	3	45	51	23	1	**48**
Nore (123)	2019-2024	5	42	53	23	0	**47**

*Number of waterbodies in the Nore catchment assigned a status in each cycle.

Table 1 shows the data from the last four EPA Water Quality in Ireland reports on the ecological status of the individual surface waters in the Nore Catchment.

Table 2: *Ecological status of Transitional waterbodies in the Nore Catchment*

		Assigned Status					
Transitional Waterbodies	**Monitoring Cycle**	**High**	**Good**	**Moderate**	**Poor**	**Bad**	**High + Good**
Nore	2007-2009	0	2	3	0	0	**2**
Nore	2010-2012	0	1	3	1	0	**1**
Nore	2010-2015	0	2	3	0	0	**2**
Nore	2013-2018	0	3	2	0	0	**3**
Nore	2016-2021	0	0	5	0	0	**0**
Nore	2019-2024	0	0	5	0	0	**0**

Table 2 shows the data from the last four EPA Water Quality in Ireland reports on the ecological status of the individual surface waters in the Nore Catchment.

Table 3: *Summary of data from the last four EPA Water Quality in Ireland reports on the ecological status of individual surface waters in the Nore Catchment*

Waterbody (WB) Code	WB Name	Local Authority	Protected Area	Status 10-15	Status 13-18	Status 16-21	Status 19-24	WFD Risk 16-21	Significant Issue(s)	Significant Pressure(s)	Area for Action (AFA)	AFA (lead, type)
IE_SE_14O130860	OAKLANDS_010	Kilkenny County Council	SAC; NSA;	Unassigned	Unassigned	Good	Good	Review				
IE_SE_15A010400	ARIGNA (KILKENNY)_010	Kilkenny CC		Good	Moderate	Moderate	Moderate	At risk	Unknown Impact Type	Ag	Nuenna	LAWPRO, Restoration
IE_SE_15A020100	ARRIGLE_010	Kilkenny CC	SAC;	Good	Good	Good	Moderate	Not at risk				
IE_SE_15A020250	ARRIGLE_020	Kilkenny CC	SAC;	Good	High	High	High	Not at risk				
IE_SE_15A020300	ARRIGLE_030	Kilkenny CC	SAC;	Moderate	Moderate	Moderate	Good	At risk	Nutrients, Organic	Ind		
IE_SE_15A030960	ARDREAGH_010	Tipperary CC		Unassigned	Moderate	Moderate	Moderate	Review			Goul	LAWPRO, Restoration
IE_SE_15B010100	BALLYROAN_010	Laois CC		Moderate	Poor	Moderate	Moderate	At risk	Nutrients, Organic	Ag, UWW	Ballyroan	LAWPRO, Restoration
IE_SE_15B010200	BALLYROAN_020	Laois CC		Poor	Moderate	Poor	Poor	At risk	Morphological, Nutrients, Organic	Unknown, HYMO	Ballyroan	LAWPRO, Restoration
IE_SE_15B020080	BREGAGH (KILKENNY)_010	Kilkenny CC		Moderate	Poor	Poor	Poor	At risk	Sediment, Nutrients	Ag	Bregagh (Kilkenny)	LAWPRO, Restoration
IE_SE_15B020100	BREGAGH (KILKENNY)_020	Kilkenny CC		Unassigned	Moderate	Moderate	Moderate	At risk	Morphological, Nutrients	Ag, For	Bregagh (Kilkenny)	LAWPRO, Restoration
IE_SE_15B020350	BREGAGH (KILKENNY)_030	Kilkenny CC		Poor	Poor	Moderate	Moderate	At risk	Morphological, Nutrients	HYMO, Ag, Ind	Bregagh (Kilkenny)	LAWPRO, Restoration
IE_SE_15B041100	BROWNSTOWN (POCOCKE)_010	Kilkenny CC	SAC;	Poor	Poor	Moderate	Poor	At risk	Nutrients, Organic	UR	Brownstown (Pococke)	LAWPRO, Restoration
IE_SE_15B120080	BAUNBALLINLOUGH STREAM_010	Kilkenny CC		Poor	Poor	Poor	Poor	At risk	Morphological, Nutrients	Ag	Goul	LAWPRO, Restoration
IE_SE_15C010100	CASTLECOMER STREAM_010	Kilkenny CC		Good	Moderate	Moderate	Good	At risk	Oxygetion, Nutrients	For, UR	Dinin	LAWPRO, Restoration
IE_SE_15C030300	CLOGH_010	Laois CC	SAC;	Moderate	Good	Moderate	Moderate	At risk	Nutrients, Organic	Ag, UR	Dinin	LAWPRO, Restoration
IE_SE_15C040400	CLOGHNAGH_010	Kilkenny CC	SAC;	Good	Good	Moderate	Good	Review				
IE_SE_15C050100	Clodiagh_010	Kilkenny CC	DWPA; SAC; SPA;	Unassigned	Good	Good	Good	Not at risk				
IE_SE_15C060600	CAPPANACLOGHY_010	Laois CC		Poor	Poor	Poor	Poor	At risk	Nutrients, Organic, UnknownImpactType	Peat	Ballyroan	LAWPRO, Restoration
IE_SE_15C060900	CAPPANACLOGHY_020	Laois CC		Good	Good	Poor	Poor	At risk	Nutrients	Ag, Peat	Ballyroan	LAWPRO, Restoration
IE_SE_15C060990	CAPPANACLOGHY_030	Laois CC	SAC; SPA;	Unassigned	Moderate	Moderate	Moderate	Review			Ballyroan	LAWPRO, Restoration
IE_SE_15C120400	CAHERLESK STREAM_010	Kilkenny CC	SAC;	Poor	Poor	Poor	Poor	At risk	Nutrients	Ag	Stoneyford-Kells-Burnchurch	LAWPRO, Restoration
IE_SE_15C191100	CLONAWOOLAN STREAM_010	Laois CC		Poor	Poor	Poor	Poor	At risk	Nutrients, Organic, UnknownImpactType	For, Ag, Peat	Ballyroan	LAWPRO, Restoration
IE_SE_15C200040	COALBROOK STREAM_010	Tipperary CC		Good	Good	Good	Good	Not at risk				
IE_SE_15D010060	DELOUR_010	Laois CC	SAC;	High	High	Good	High	Review			Delour - Blue Dot	LAWPRO, Protection
IE_SE_15D010150	DELOUR_020	Laois CC	SAC;	High	High	High	High	Not at risk			Delour - Blue Dot	LAWPRO, Protection

Waterbody (WB) Code	WB Name	Local Authority	Protected Area	Status 10-15	Status 13-18	Status 16-21	Status 19-24	WFD Risk 16-21	Significant Issue(s)	Significant Pressure(s)	Area for Action (AFA)	AFA (lead, type)
IE_SE_15D010400	DELOUR_030	Laois CC	SAC; SPA;	High	High	Good	Good	At risk	Sediment	Ag	Delour - Blue Dot	LAWPRO, Protection
IE_SE_15D020700	DININ (MAIN CHANNEL)_010	Kilkenny CC	SAC;	Good	Moderate	Moderate	Good	At risk	Nutrients	Ag, DWTS	Dinin	LAWPRO, Restoration
IE_SE_15D020800	DININ (MAIN CHANNEL)_020	Kilkenny CC	DWPA; SAC;	Moderate	Moderate	Moderate	Moderate	At risk	Hydrological, Nutrients, UnknownImpactType	Ag, Ab, M+Q	Dinin	LAWPRO, Restoration
IE_SE_15D030700	DONAGHMORE STREAM_010	Laois CC		Moderate	Moderate	Poor	Moderate	At risk	Nutrients	Ag	Erkina	LAWPRO, Restoration
IE_SE_15D040500	DESART STREAM_010	Kilkenny CC		Poor	Poor	Poor	Poor	At risk	Morphological, Nutrients	For, Ag	Stoneyford-Kells-Burnchurch	LAWPRO, Restoration
IE_SE_15D070080	DININ (NORTH)_010	Laois CC		Poor	Good	Moderate	Moderate	At risk	Nutrients	Ag	Dinin	LAWPRO, Restoration
IE_SE_15D070200	DININ (NORTH)_020	Kilkenny CC	SAC;	Good	Good	Moderate	Moderate	At risk	Nutrients	Ag	Dinin	LAWPRO, Restoration
IE_SE_15D070250	DININ (NORTH)_030	Kilkenny CC	DWPA; SAC;	Unassigned	Moderate	Moderate	Moderate	Review			Dinin	LAWPRO, Restoration
IE_SE_15D070400	DININ (NORTH)_040	Kilkenny CC	SAC;	Good	Moderate	Moderate	Good	At risk	Nutrients, Organic	UWW, UR, Ag, DWTS	Dinin	LAWPRO, Restoration
IE_SE_15D080450	DININ (SOUTH)_010	Laois CC		Good	Moderate	Good	Good	Not at risk			Dinin	LAWPRO, Restoration
IE_SE_15D080600	DININ (SOUTH)_020	Kilkenny CC	SAC;	Moderate	Good	Good	Good	Not at risk			Dinin	LAWPRO, Restoration
IE_SE_15D420500	DREELINGSTOWN_010	Kilkenny CC		Unassigned	Good	Moderate	Moderate	Review			Bregagh (Kilkenny)	LAWPRO, Restoration
IE_SE_15E010040	ERKINA_010	Laois CC		Moderate	Good	Good	Moderate	Review			Erkina	LAWPRO, Restoration
IE_SE_15E010100	ERKINA_020	Laois CC		Unassigned	Moderate	Moderate	Moderate	Review			Erkina	LAWPRO, Restoration
IE_SE_15E010200	ERKINA_030	Laois CC		Poor	Moderate	Poor	Poor	At risk	Nutrients	UWW, Ag	Erkina	LAWPRO, Restoration
IE_SE_15E010300	ERKINA_040	Laois CC		Moderate	Poor	Moderate	Poor	At risk	Sediment, Nutrients	Ag	Erkina	LAWPRO, Restoration
IE_SE_15E010550	ERKINA_050	Laois CC	SAC; SPA;	Moderate	Moderate	Moderate	Moderate	At risk	Nutrients	Ag	Erkina	LAWPRO, Restoration
IE_SE_15E020700	ENNISNAG STREAM_010	Kilkenny CC	SAC;	Poor	Poor	Poor	Poor	At risk	Nutrients	Ag, DWTS	Stoneyford-Kells-Burnchurch	LAWPRO, Restoration
IE_SE_15E030400	ERRILL_010	Laois CC		Unassigned	Good	Moderate	Moderate	Review			Erkina	LAWPRO, Restoration
IE_SE_15E030500	ERRILL_020	Laois CC		Moderate	Good	Good	Moderate	Review			Erkina	LAWPRO, Restoration
IE_SE_15G010045	GLORY_010	Kilkenny CC		Moderate	Poor	Poor	Poor	At risk	Sediment, Nutrients, Organic	UWW, HYMO, Ag	Glory Kilkenny	LAWPRO, Restoration
IE_SE_15G010190	GLORY_020	Kilkenny CC	SAC;	Unassigned	Moderate	Moderate	Moderate	At risk	Nutrients	For, Ag	Glory Kilkenny	LAWPRO, Restoration
IE_SE_15G010300	GLORY_030	Kilkenny CC	SAC;	Good	Moderate	Poor	Moderate	At risk	Nutrients, Organic	UR, Ag	Glory Kilkenny	LAWPRO, Restoration
IE_SE_15G020060	GOUL_010	Tipperary County Council		Unassigned	Good	Moderate	Moderate	Review			Goul	LAWPRO, Restoration
IE_SE_15G020110	GOUL_020	Tipperary County Council		Unassigned	Good	Poor	Poor	Review			Goul	LAWPRO, Restoration
IE_SE_15G020200	GOUL_030	Kilkenny County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	At risk	Nutrients	Ag	Goul	LAWPRO, Restoration
IE_SE_15G020300	GOUL_040	Kilkenny County Council		Moderate	Moderate	Poor	Poor	At risk	Morphological, Nutrients	For, Ag	Goul	LAWPRO, Restoration

Waterbody (WB) Code	WB Name	Local Authority	Protected Area	Status 10-15	Status 13-18	Status 16-21	Status 19-24	WFD Risk 16-21	Significant Issue(s)	Significant Pressure(s)	Area for Action (AFA)	AFA (lead, type)
IE_SE_15G020360	GOUL_050	Kilkenny County Council		Moderate	Moderate	Moderate	Moderate	At risk	Nutrients	Ag	Goul	LAWPRO, Restoration
IE_SE_15G020500	GOUL_060	Laois County Council	SAC; SPA;	Moderate	Poor	Poor	Poor	At risk	Sediment, Morphological, Nutrients	HYMO, Ag	Goul	LAWPRO, Restoration
IE_SE_15G030060	GULLY_010	Laois County Council		Poor	Poor	Poor	Poor	At risk	Morphological, Nutrients	Ag	Gully	LAWPRO, Restoration
IE_SE_15G030100	GULLY_020	Laois County Council		Poor	Moderate	Poor	Good	At risk	Sediment, Hydrological, Morphological	HYMO	Gully	LAWPRO, Restoration
IE_SE_15G030300	GULLY_030	Laois County Council		Good	Good	Good	Good	Not at risk			Gully	LAWPRO, Restoration
IE_SE_15G080300	GORTEENAHILLA_010	Kilkenny County Council		Good	Poor	Moderate	Moderate	At risk	Oxygetion, Nutrients	For, Ag	Nuenna	LAWPRO, Restoration
IE_SE_15G100060	GARRANACOOL STREAM_010	Tipperary County Council		Good	Good	Good	Good	Not at risk				
IE_SE_15G720980	GLEBE_010	Kilkenny County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	Review				
IE_SE_15G820400	Glory River_010	Kilkenny County Council		Unassigned	Good	Moderate	Moderate	Review			Glory Kilkenny	LAWPRO, Restoration
IE_SE_15H010300	HOLLY PARK STREAM_010	Laois County Council		Unassigned	Moderate	Moderate	Moderate	At risk	Nutrients, Organic	Ag	Dinin	LAWPRO, Restoration
IE_SE_15K010400	KILLEEN (DELOUR)_010	Laois County Council	SAC;	High	Good	Good	Good	At risk	Sediment, Oxygetion	Ag, DWTS, For	Delour - Blue Dot	LAWPRO, Protection
IE_SE_15K020200	KING'S (KILKENNY)_010	Tipperary County Council		Good	Good	Moderate	Good	At risk	Nutrients	Ag	King's (Kilkenny) Tipperary	Tipperary County Council, Protection
IE_SE_15K020400	KING'S (KILKENNY)_020	Tipperary County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	Review				
IE_SE_15K020560	KING'S (KILKENNY)_030	Kilkenny County Council	SAC;	Good	Moderate	Good	Moderate	Review				
IE_SE_15K020600	KING'S (KILKENNY)_040	Kilkenny County Council	SAC; SPA;	Moderate	Moderate	Moderate	Moderate	At risk	Morphological, Nutrients, Organic	Other, HYMO, Ag	Caherleske GWS	NFGWS, Restoration
IE_SE_15K020910	KING'S (KILKENNY)_050	Kilkenny County Council	SAC; SPA;	Moderate	Moderate	Bad	Moderate	At risk	Nutrients	Ag	Stoneyford-Kells-Burnchurch	LAWPRO, Restoration
IE_SE_15K540650	KILDERRY_010	Kilkenny County Council		Unassigned	Good	Moderate	Moderate	Review			Brownstown (Pococke)	LAWPRO, Restoration
IE_SE_15K750910	Knockwilliam_010	Kilkenny County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	Review				
IE_SE_15L010200	LITTLE ARRIGLE_010	Kilkenny County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	At risk	Nutrients, Organic	UWW, Ind, UR		
IE_SE_15L020100	LISDOWNEY_010	Kilkenny County Council		Moderate	Good	Moderate	Moderate	At risk	Nutrients	Ag	Nuenna	LAWPRO, Restoration
IE_SE_15M010080	MOUNTRATH_010	Laois County Council	SAC;	Good	Good	Good	Moderate	Not at risk			Mountrath	LAWPRO, Restoration
IE_SE_15M010100	MOUNTRATH_020	Laois County Council	SAC;	Good	Moderate	Moderate	Moderate	At risk	Oxygetion, Nutrients, Organic	For	Mountrath	LAWPRO, Restoration
IE_SE_15M010300	MOUNTRATH_030	Laois County Council	SAC;	Good	Moderate	Moderate	Good	At risk	Oxygetion, Organic	Ag	Mountrath	LAWPRO, Restoration
IE_SE_15M020100	MUCKALEE_010	Kilkenny County Council		Good	Good	Good	High	At risk	Sediment, Nutrients	For	Dinin	LAWPRO, Restoration

Waterbody (WB) Code	WB Name	Local Authority	Protected Area	Status 10-15	Status 13-18	Status 16-21	Status 19-24	WFD Risk 16-21	Significant Issue(s)	Significant Pressure(s)	Area for Action (AFA)	AFA (lead, type)
IE_SE_15M030540	MUNSTER_010	Kilkenny County Council	SAC;	Good	Good	Good	Good	Not at risk				
IE_SE_15M030600	MUNSTER_020	Tipperary County Council	SAC;	Good	Good	Good	Good	Not at risk				
IE_SE_15M030700	MUNSTER_030	Kilkenny County Council	SAC;	Good	Good	Good	Good	Not at risk				
IE_SE_15M340730	MODESHIL_010	Tipperary County Council	SAC;	Unassigned	Moderate	Moderate	Moderate	Review				
IE_SE_15N010080	NORE_010	Tipperary County Council	Fish;	Good	Good	Moderate	Good	Review				
IE_SE_15N010100	NORE_020	Tipperary County Council	Fish;	Unassigned	Good	Moderate	Moderate	Review			Couraguneen GWS	NFGWS, Protection
IE_SE_15N010200	NORE_030	Tipperary County Council	Fish;	Unassigned	Good	Moderate	Moderate	Review				
IE_SE_15N010300	NORE_040	Tipperary County Council	Fish;	Good	Moderate	Poor	Poor	At risk	Nutrients, Organic	Peat		
IE_SE_15N010400	NORE_050	Laois County Council	Fish;	Unassigned	Moderate	Moderate	Moderate	Review				
IE_SE_15N010500	NORE_060	Laois County Council	Fish; SPA;	Good	Good	Good	Good	Not at risk				
IE_SE_15N010600	NORE_070	Laois County Council	SAC; Fish; SPA;	Unassigned	High	Good	High	Not at risk				
IE_SE_15N010700	NORE_080	Laois County Council	SAC; Fish; SPA;	Good	High	Good	Good	Not at risk				
IE_SE_15N010900	NORE_090	Laois County Council	SAC; Fish; SPA;	Good	High	High	Good	Not at risk				
IE_SE_15N011100	NORE_100	Laois County Council	SAC; Fish; SPA;	Good	High	Good	Good	Not at risk				
IE_SE_15N011300	NORE_110	Laois County Council	SAC; Fish; SPA;	Good	Good	Good	Good	Not at risk			Gully	LAWPRO, Restoration
IE_SE_15N011400	NORE_120	Kilkenny County Council	DWPA; SAC; Fish; SPA;	Unassigned	Good	Moderate	Moderate	At risk	Nutrients	Ag		
IE_SE_15N011500	NORE_130	Kilkenny County Council	SAC; Fish; SPA;	Good	Good	Good	Good	Not at risk				
IE_SE_15N011600	NORE_140	Kilkenny County Council	SAC; Fish; SPA;	Unassigned	Good	Good	Good	Not at risk				
IE_SE_15N011700	NORE_150	Kilkenny County Council	SAC; Fish; SPA;	Good	Good	Good	Moderate	Not at risk				
IE_SE_15N011750	NORE_160	Kilkenny County Council	DWPA; SAC; Fish; SPA;	Unassigned	Good	Good	Good	Not at risk				
IE_SE_15N011950	NORE_170	Kilkenny County Council	SAC; Fish; SPA;	Good	Good	Good	Moderate	Not at risk				
IE_SE_15N012000	NORE_180	Kilkenny County Council	SAC; Fish; SPA;	Good	Good	Good	Moderate	Not at risk			Maddoxtown GWS	NFGWS, Protection
IE_SE_15N012090	NORE_190	Kilkenny County Council	SAC; Fish; SPA; NSA;	Unassigned	Moderate	Moderate	Moderate	Review			Clifden - The Highrath GWS	NFGWS, Protection

Waterbody (WB) Code	WB Name	Local Authority	Protected Area	Status 10-15	Status 13-18	Status 16-21	Status 19-24	WFD Risk 16-21	Significant Issue(s)	Significant Pressure(s)	Area for Action (AFA)	AFA (lead, type)
IE_SE_15N012130	NORE_200	Kilkenny County Council	SAC; Fish; SPA; NSA;	Unassigned	Moderate	Good	Good	Review				
IE_SE_15N012200	NORE_210	Kilkenny County Council	SAC; Fish; SPA; NSA;	Moderate	Good	Good	Moderate	Review				
IE_SE_15N012310	NORE_220	Kilkenny County Council	DWPA; SAC; Fish; SPA; NSA;	Good	Moderate	Good	Moderate	Review				
IE_SE_15N012330	NORE_230	Kilkenny County Council	SAC; Fish; SPA;	Good	Moderate	Moderate	Moderate	At risk	Nutrients	UR		
IE_SE_15N012400	NORE_240	Kilkenny County Council	SAC; Fish; SPA; NSA;	Good	Moderate	Good	Moderate	Review				
IE_SE_15N012500	NORE_250	Kilkenny County Council	SAC; Fish; SPA; NSA;	Good	Good	Good	Good	Not at risk				
IE_SE_15N020100	NUENNA_010	Kilkenny County Council		Poor	Moderate	Moderate	Moderate	At risk	Nutrients	Ag	Nuenna	LAWPRO, Restoration
IE_SE_15N020400	NUENNA_020	Kilkenny County Council	SAC; SPA;	Poor	Moderate	Poor	Poor	At risk	Nutrients, Organic	Ag, UWW	Nuenna	LAWPRO, Restoration
IE_SE_15N040200	NEEDLEFORD STREAM_010	Laois County Council	SAC;	Good	High	Good	Good	At risk	Hydrological, Nutrients, Organic	Ab, Ag, Peat	Mountrath	LAWPRO, Restoration
IE_SE_15O010050	OWVEG (NORE)_010	Laois County Council		Good	Good	Good	Good	Not at risk				
IE_SE_15O010080	OWVEG (NORE)_020	Laois County Council	SAC;	Good	Good	Good	Good	Not at risk				
IE_SE_15O010160	OWVEG (NORE)_030	Laois County Council	SAC;	Moderate	Good	Good	Good	Not at risk			Ballypickas GWS	NFGWS, Protection
IE_SE_15O010280	OWVEG (NORE)_040	Kilkenny County Council	SAC; SPA;	Good	Good	Good	Good	Not at risk				
IE_SE_15O010400	OWVEG (NORE)_050	Laois County Council	SAC; SPA;	Good	Good	Good	Good	Not at risk			Attanagh GWS	NFGWS, Protection
IE_SE_15R031100	RATHDOWNEY STREAM_010	Laois County Council		Poor	Poor	Poor	Poor	At risk	Nutrients	Ag	Erkina	LAWPRO, Restoration
IE_SE_15R370950	RATHGARVAN_or_ CLIFDEN_010	Kilkenny County Council	SAC; SPA;	Unassigned	Moderate	Poor	Poor	Review			Brownstown (Pococke)	LAWPRO, Restoration
IE_SE_15S010100	STONYFORD STREAM (KILKENNY)_010	Kilkenny County Council		Unassigned	Moderate	Poor	Poor	At risk	Nutrients	Ag, DWTS	Stoneyford-Kells-Burnchurch	LAWPRO, Restoration
IE_SE_15T010200	TONET_010	Laois CC	SAC;	High	High	Good	Good	At risk	UnknownImpactType	For	Tonet	LAWPRO, Restoration
IE_SE_15T010400	TONET_020	Laois CC		Poor	Moderate	Moderate	Good	At risk	UnknownImpactType	For	Tonet	LAWPRO, Restoration
IE_SE_15T010600	TONET_030	Laois CC	SAC; SPA;	Moderate	Moderate	Moderate	Poor	At risk	UnknownImpactType	For	Tonet	LAWPRO, Restoration
IE_SE_15T020200	TULLAROAN STREAM_010	Kilkenny CC		Unassigned	Poor	Moderate	Moderate	Review			Tullaroan stream	Kilkenny CC Protection
IE_SE_15T020250	TULLAROAN STREAM_020	Kilkenny CC		Good	Good	Good	Good	Not at risk			Tullaroan stream	Kilkenny CC, Protection
IE_SE_15T020450	TULLAROAN STREAM_030	Kilkenny CC	SAC;	Good	Good	Good	Good	Review			Tullaroan stream	Kilkenny CC Protection
IE_SE_15T360920	TULLAGHER_010	Kilkenny CC	SAC;	Unassigned	Good	Good	Good	Review				

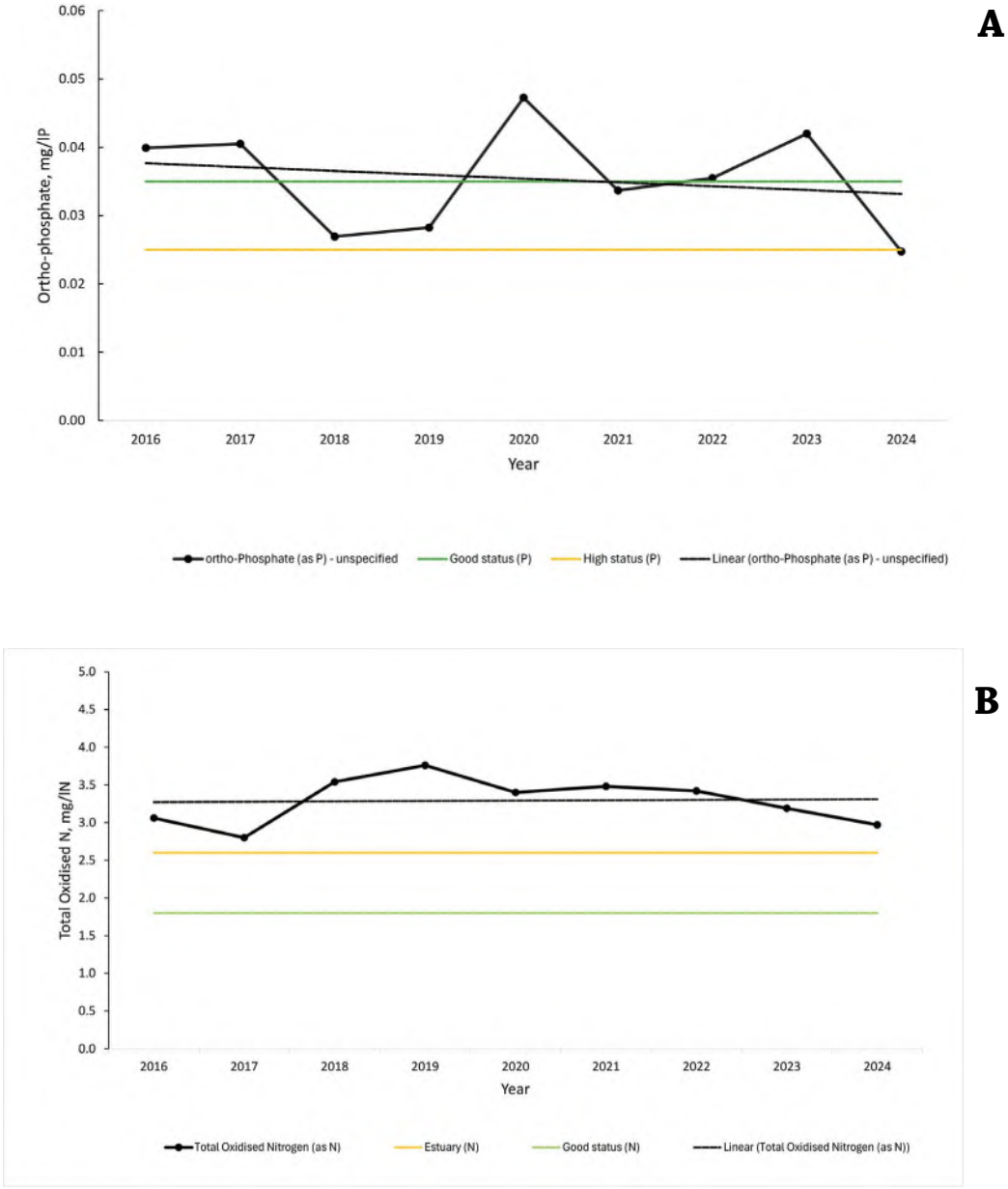

Figure 1: *Panel A) average ortho-phosphate (mg/l P) at Brownsbarn Bridge and B) average total oxidised nitrogen (mg/l N) at Brownsbarn Bridge from 2016 to 2024 (EPA Catchments, 2025). For panel A indicating phosphate concentrations, good river status is represented by the green line (<0.035 mg/l P) and high status by the yellow line (<0.025 mg/l P). For panel B indicating total oxidised nitrogen concentrations, the target for fresh waters that discharge from rivers into estuaries is represented by the yellow line (<2.6 mg/l N) and good river status by the green line (<1.8 mg/l N).*

Figure 1 shows the trends in both ortho-phosphate (mg/l P) and total oxidised nitrogen (mg/l N) for Nore from 2016 to 2024 at monitoring station RS15N012400 (Brownsbarn Bridge) which is the last monitoring point on the Nore river before it reaches the estuary. The trends indicate that ortho-phosphate levels showed a recent downward trend towards the European Communities Environmental Objectives (Surface Waters) Regulations 2009 environmental quality standard of 0.035 mg/l P.

The levels of total oxidised nitrogen (mg/l N) are higher than the target for fresh waters that discharge from rivers into estuaries (< 2.6 mg/l N) since a peak in 2019 (3.76 mg/l N); they have reduced to approximately 2.97 mg/l N in 2024.

Figure 2 shows the distributions of the flow weighted mean total oxidised nitrogen concentrations for the major catchments in the south-eastern half of the country from 2009 to 2024. The Nore Catchment has concentrations are higher than the standard of 2.6 mg/l as N (green dashed line). This assessment using data up to 2024 found that the nitrogen load reductions required to support good ecological condition has decreased in recent years compared with the previous assessment (Figure 2).

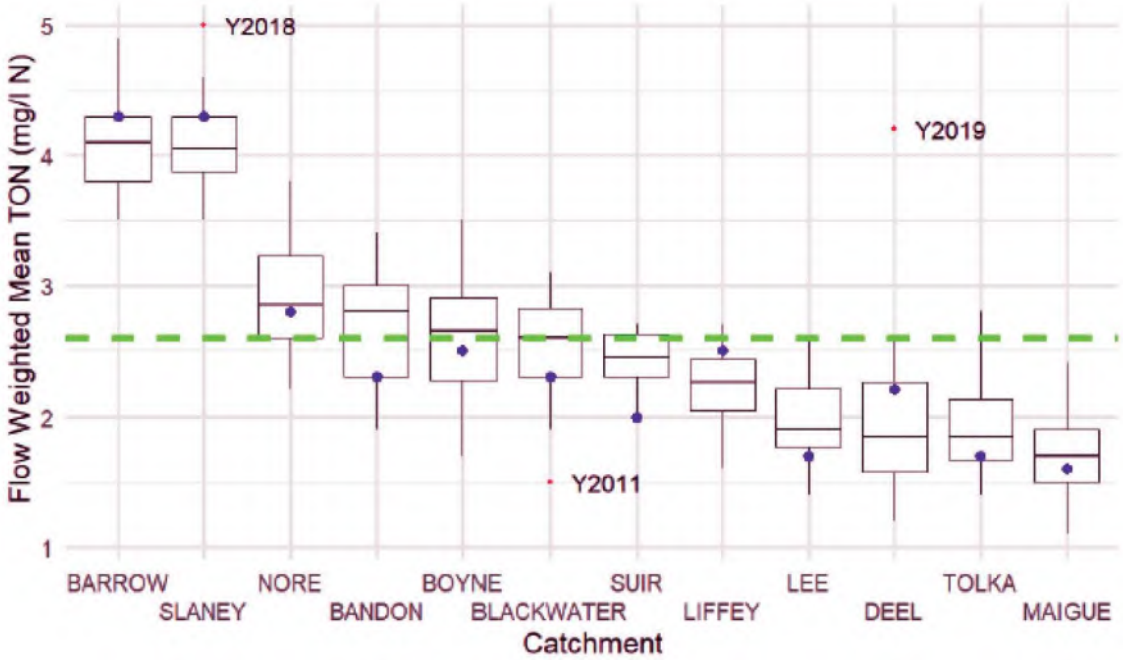

Figure 2: *Distribution of total oxidised nitrogen (TON) flow weighted mean concentrations for Catchments of Concern 2009-2024*

The blue dots represent the most recent concentration (2024). The red dots and associated year are outliers (unusual data). The green dashed line is the environmental quality standard for nitrogen to support good ecological status (2.6 mg/l as N, or 11.5 mg/l as NO_3). (*Source, Evidence-based targeting of agricultural measures to reduce nitrogen in catchments to achieve water quality objectives, EPA Publication 2025).*

Recent EPA data (Evidence based targeting of agricultural measures to reduce nitrogen in catchments to achieve water quality objectives August 2025) showed that the annual mean flow weighted total oxidised nitrogen concentration in the Nore Catchment was 3.1 mg/L over the period 2022 to 2024: greater than the standard 2.6 mg/L required for good estuarine water quality. The EPA estimate that a total oxidised nitrogen reduction of 691 tons of N (17.6 kg N/ha) or 16% is required in high PIP-N areas to support good ecological status.

The long-term dataset underscores the importance of targeted, catchment-specific strategies to achieve water quality targets. Understanding where and when these reductions are needed is essential for effective water policy and environmental protection.

Stakeholder Engagement Through a Multi-Actor Approach

Achieving sustained environmental improvements requires coordinated action at river catchment scale. The multi-actor approach is thus a fundamental pillar of Better Farming for Water campaign. Ensuring active engagement with farmers, industry, community, and government stakeholders is crucial for effectively tackling the needs and challenges of landowners in addressing water quality. By fostering collaboration among these key actors, we can help ensure that diverse perspectives and insights inform management decisions.

A key principle of the campaign is to collaborate closely with existing programmes such as ASSAP, ACP, and Farming for Water EIP, Waters of LIFE, Blue Dot Catchments and others. It will be particularly important that the Better Farming for Water campaign links closely with ASSAP and builds on its work.

a. The Better Farming for Water campaign will be overseen by a high-level **Steering Committee**, chaired by Jim Bergin, Chair of FBD Holdings Plc. The steering committee membership consists of senior representatives from the dairy, tillage and meat industries, farming organisations, regulatory bodies and government departments and Teagasc.

b. At river catchment level a lead industry / stakeholder has been identified for each catchment and will act as a champion for collective action and foster collaboration among stakeholders. A **Catchment Implementation Group** (CIG) composed of industry/stakeholders will lead the roll out catchment specific plan (Table 4). The group will consist of an independent chairperson, catchment-based industry representatives, farmers, regulators, and advisors. The catchment coordinator will act as secretary to the group. The purpose of the CIG is to develop, oversee and coordinate the implementation of the Catchment Management Plan, facilitate the campaign muti actor approach, monitor progress against plan targets and timeframes, identify and address barriers to implementation and encourage and support farmers to adopt the 8 Actions for Change.

Table 4: *Catchment Implementation Group - Oversight Committee composition*

Lead Industry / Stakeholder in the Catchment	
Role	**Organisation**
Chair	Independent farmer/industry/stakeholder
Secretariat	Catchment Co-ordinator
Lead industry/stakeholder representative	Sustainability manager or equivalent
Regulators	Local Authority/DAFM/etc.
Advisory	Teagasc RM, Lead advisor/specialist, ACA
Farmers	Dairy/Beef/Tillage/Pigs/Poultry
Agri-Food Industry stakeholders	Dairy/Meat/Tillage/Pigs/Poultry
Catchment Scientists	LAWPRO

c. A **Catchment Coordinator,** Ciaran Sheealn, has been appointed Catchment Coordinator to the Nore Catchment. This person will co-ordinate the Better Farming for Water campaign in the Nore catchment. This will include supporting all partners in promoting and supporting water quality improvement, ensure strong collaboration in the catchment with existing water quality programmes, co-ordinate the planning and organising of catchment public events to support the adoption of the 8-Action for Change to improve water quality.

Building Awareness by Acquisition and Utilisation of Water Quality Data

The Teagasc's "Better Farming for Water" campaign is focused on building awareness through the acquisition and use of water quality data. The aim is to empower farmers in the Nore Catchment with a clear understanding of local water quality challenges by providing access to relevant, high-resolution data. This includes Pollution Impact Potential (PIP) maps and other tools that help identify high-risk areas for nutrient, sediment, and pesticide loss. By making this data accessible and actionable, the campaign encourages farmers to adopt targeted measures that are tailored to their specific catchment conditions, ensuring that interventions are both effective and locally appropriate.

It also promotes collaboration between farmers, advisors, researchers, and government bodies to interpret and apply water quality data meaningfully. This shared understanding helps guide the selection of the "right measure in the right place," a core principle of the campaign. Ultimately, the goal is to foster informed decision-making at farm level, leading to improved environmental outcomes and supporting Ireland's compliance with water quality standards under the Water Framework Directive. This data-driven approach is essential for achieving sustained improvements in water quality across agricultural landscapes.

To date, Teagasc has progressed several actions to assist both advisors and farmers to access information on their local water quality information. The NMP Online tool has developed a 'Water Quality Pack' which provides an advisor and farmer with water quality information specific to their farm and includes the name and water quality status in the nearest stream, PIP maps and pathway maps. The Ag Planner tool for assessing farms will provide similar mapping information and will include additional information on the location of mitigation measures and reporting capabilities to capture the impact of farmer action on water quality.

Nore Catchment Water Quality Data

The Environmental Protection Agency (EPA) provides water monitoring data and Pollution Impact Potential (PIP) maps on the catchments.ie website, allowing users to view high-resolution data on N, P, and sediment losses from agricultural lands. PIP maps visually identify high-risk areas for nutrient and sediment runoff, helping farmers and other stakeholders to effectively target mitigation measures to improve water quality.

Facilitating farmers to access, navigate and interrogate these maps is key to building awareness amongst farmers and other stakeholders of their local water quality and specific local challenges facing agriculture to improve water quality.

Sharing tools and technologies with farmers to reduce nutrient loss (e.g. improved nitrogen use efficiency); coupled with identifying and demonstrating successful implementation of mitigation measures (for N, P and sediment), will help build farmer awareness of, and confidence in, the actions that can be undertaken on their own farm to improve their local water quality.

To facilitate this building awareness the following maps of the Nore Catchment include;

a) Pollution Impact Potential-Phosphorus (PIP-P) and Pollution Impact Potential-Nitrogen (PIP-N) maps.

b) Ortho-phosphate (mg/l P), total oxidised nitrogen (mg/l N) and overall ecological status.

c) Individual sub catchments.

d) Proportion of land cover that is cultivated as a proportion of agricultural land.

e) Organic N (kg N/ha) loading at the subcatchment and catchment level.

Figures 3 and 4 shows the Pollution Impact Potential-Phosphorus (PIP-P) and Pollution Impact Potential-Nitrogen (PIP-N) maps, respectively, for the Nore Catchment. The more intensive the colour the higher the risk of P or N loss in that area. The north-east and north-west of the catchment are areas at greater risk of P loss (Rank 1, 2 and 3) due to the presence of heavy poor draining soils (Figure 3). In these areas, P loss occurs where water flowing over land potentially carrying P or sediment is likely to enter a watercourse, like a stream, river or lake. In the majority of the catchment, the risk of N loss is high (Rank 1, 2 and 3) due to the presence of free draining soils (Figure 4) where water tends to drain away down through the soil.

Figures 5, 6 and 7 shows the average river ortho-phosphate (mg/l P), total oxidised nitrogen (mg/l N) and overall ecological status, respectively, in the main rivers of the Nore Catchment.

Figure 8 shows the 21 individual subcatchments within the Nore Catchment. Figures 9 shows the proportion of land cover that is cultivated as a proportion of agricultural land in the Nore River catchment. The average proportion of cultivated land in the Nore Catchment is 9.02%, ranging from 1.73% for subcatchment Dinin[South]_SC_010 to 15.98% for subcatchment Nore_SC_100.

Figure 10 shows the organic N (kg N/ha) loading at the subcatchment level in the Nore River catchment. Within the Nore Catchment, 21.66% of farm land had an organic loading > 170 kg N/ha; it ranged from 1.95% in subcatchment Nore_SC_030 to 34.29% for subcatchment King's[Kilkenny]_SC_010.

The average organic N load (kg N/ha) within the catchment was 113.68 kg N/ha; it ranged from 88.22 kg N/ha in sub catchment Nore_SC_030 to 139.83kg N/ha for subcatchment King's[Kilkenny]_SC_010.

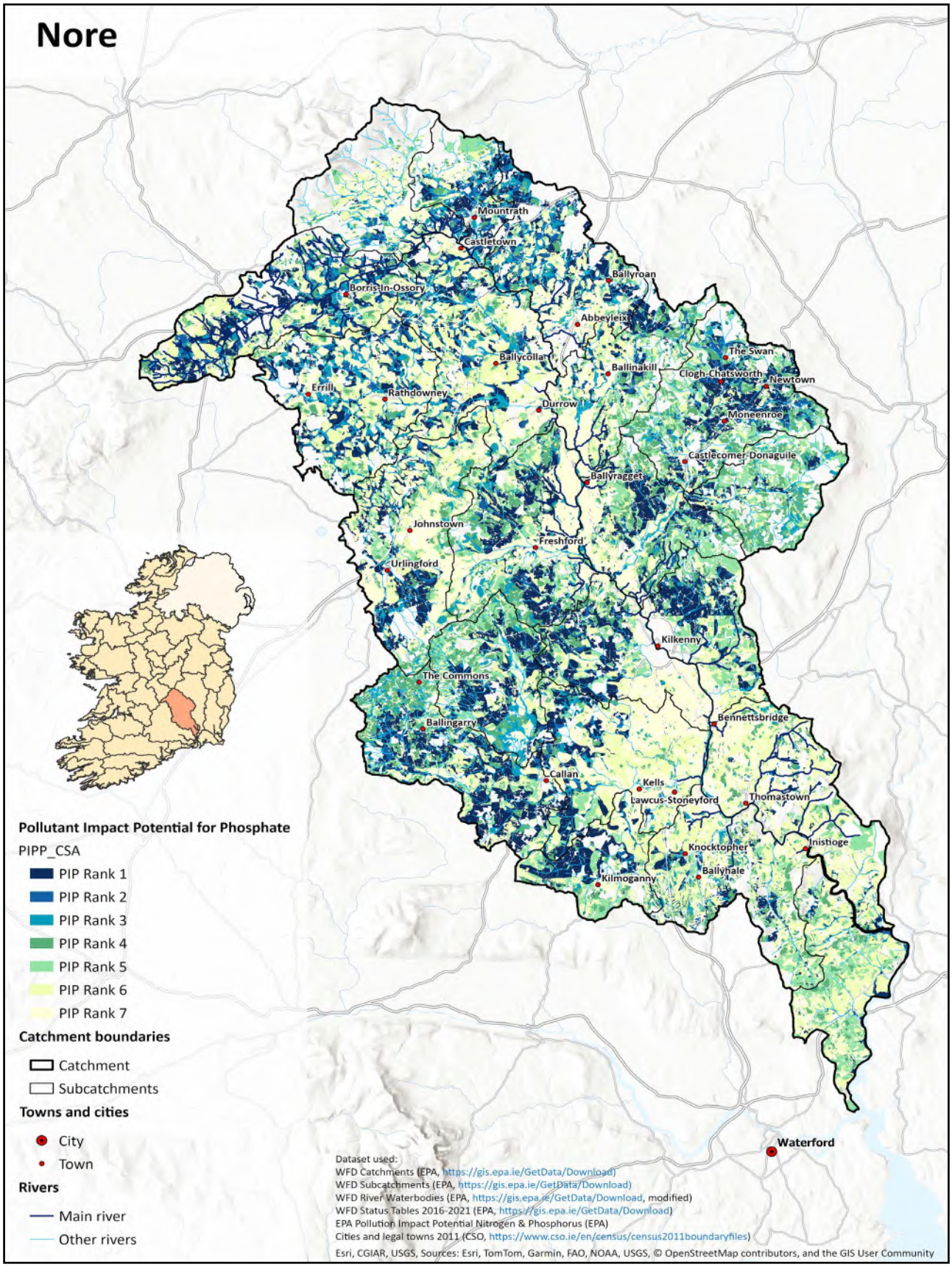

Figure 3: *Pollution Impact Potential for Phosphorus (PIP-P) map for the Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-P maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

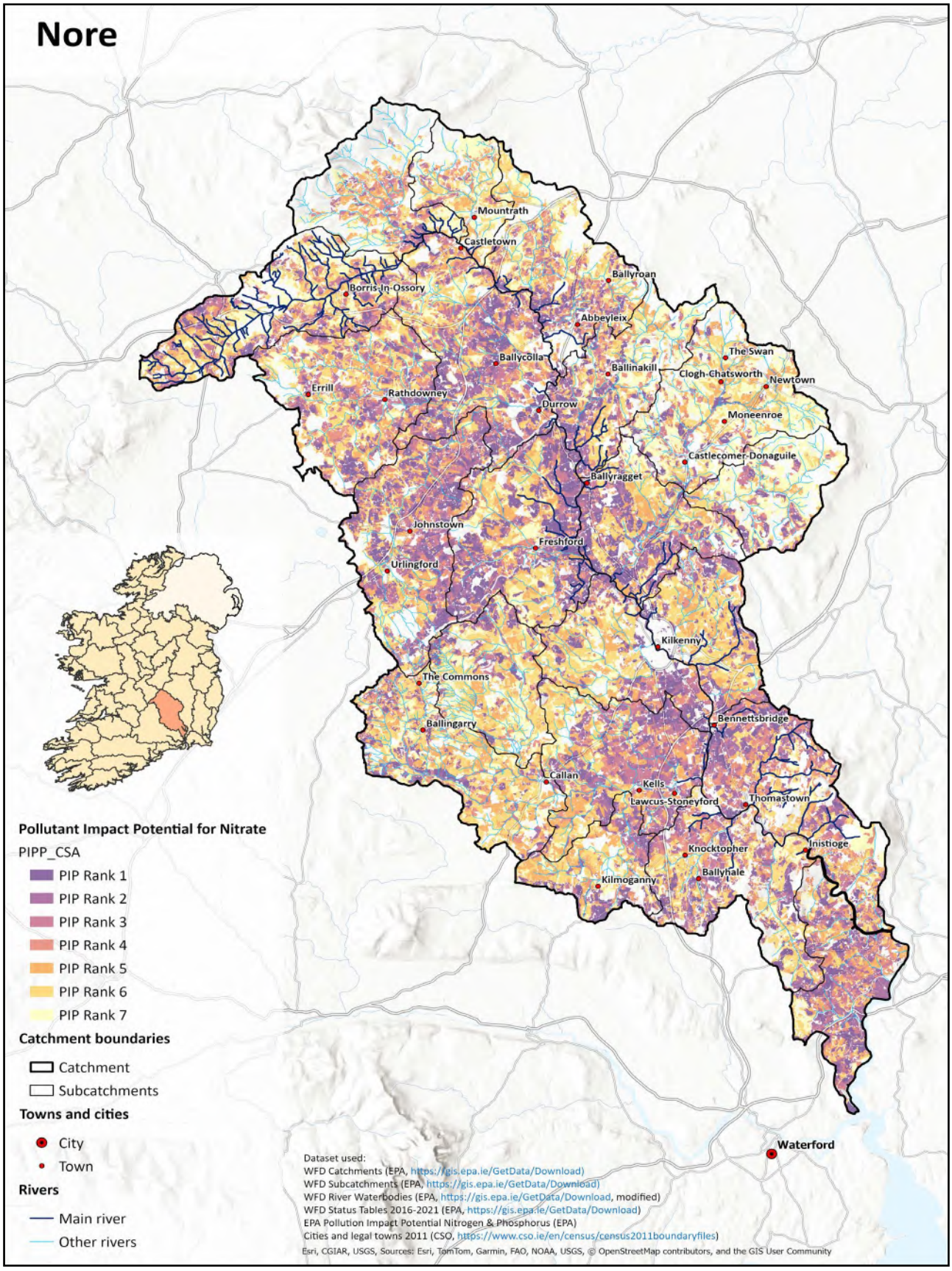

Figure 4: *Pollution Impact Potential for Nitrate (PIP-N) map for the Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-N maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

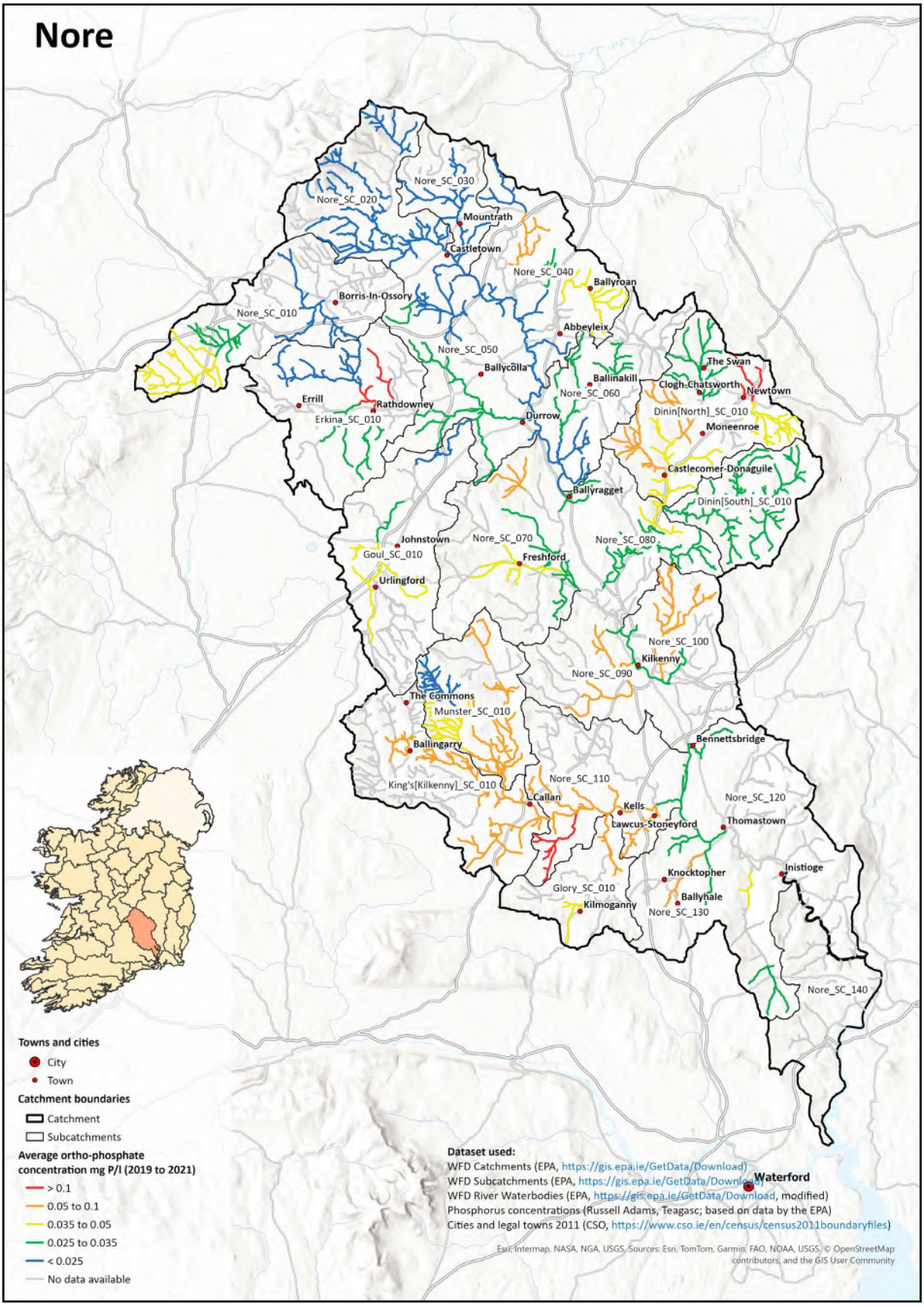

Figure 5: *Ortho-phosphate (mg/l P) for the main rivers in Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-N maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

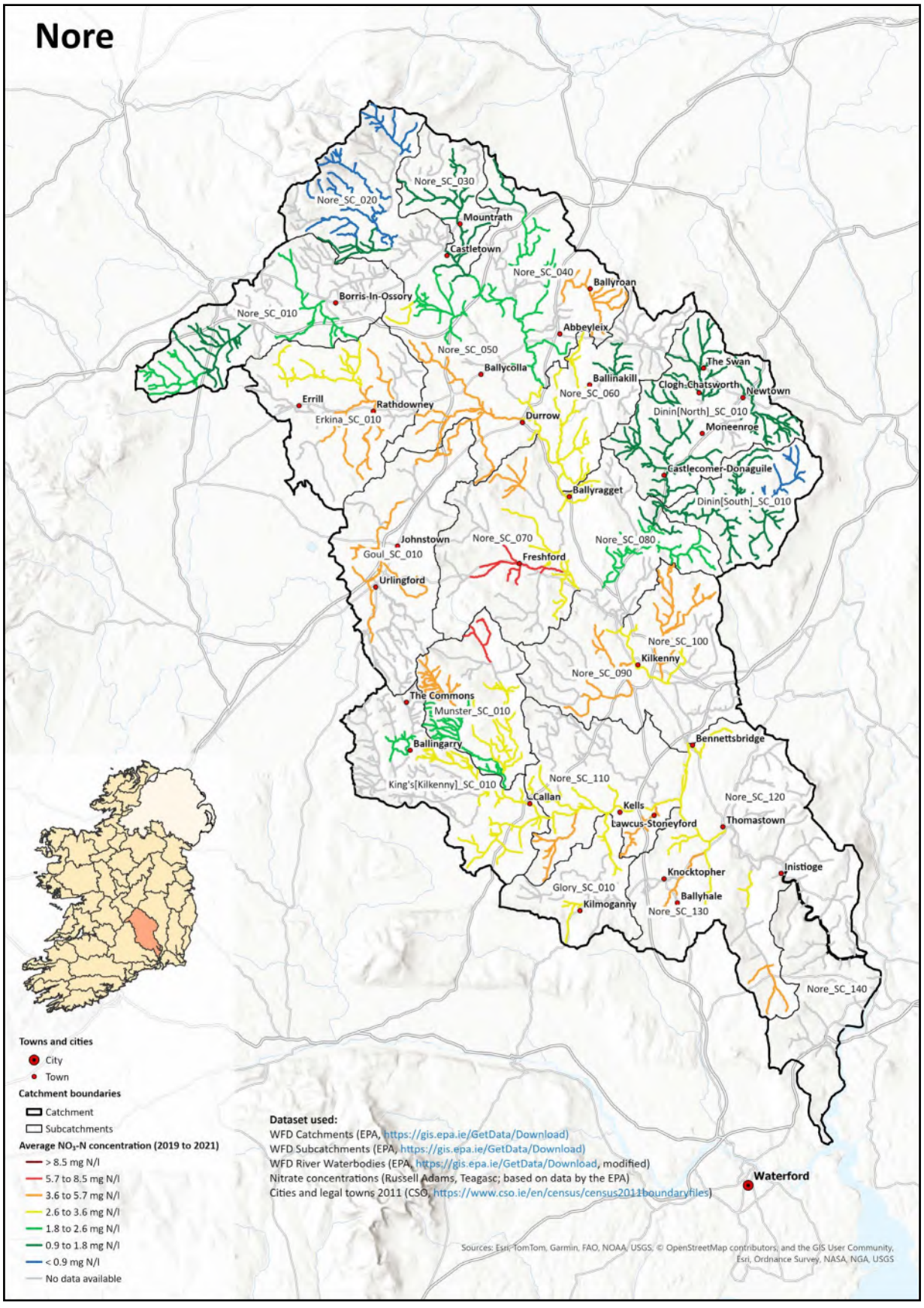

Figure 6: *Total oxidised nitrogen (mg/l N) for the main rivers in Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-N maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

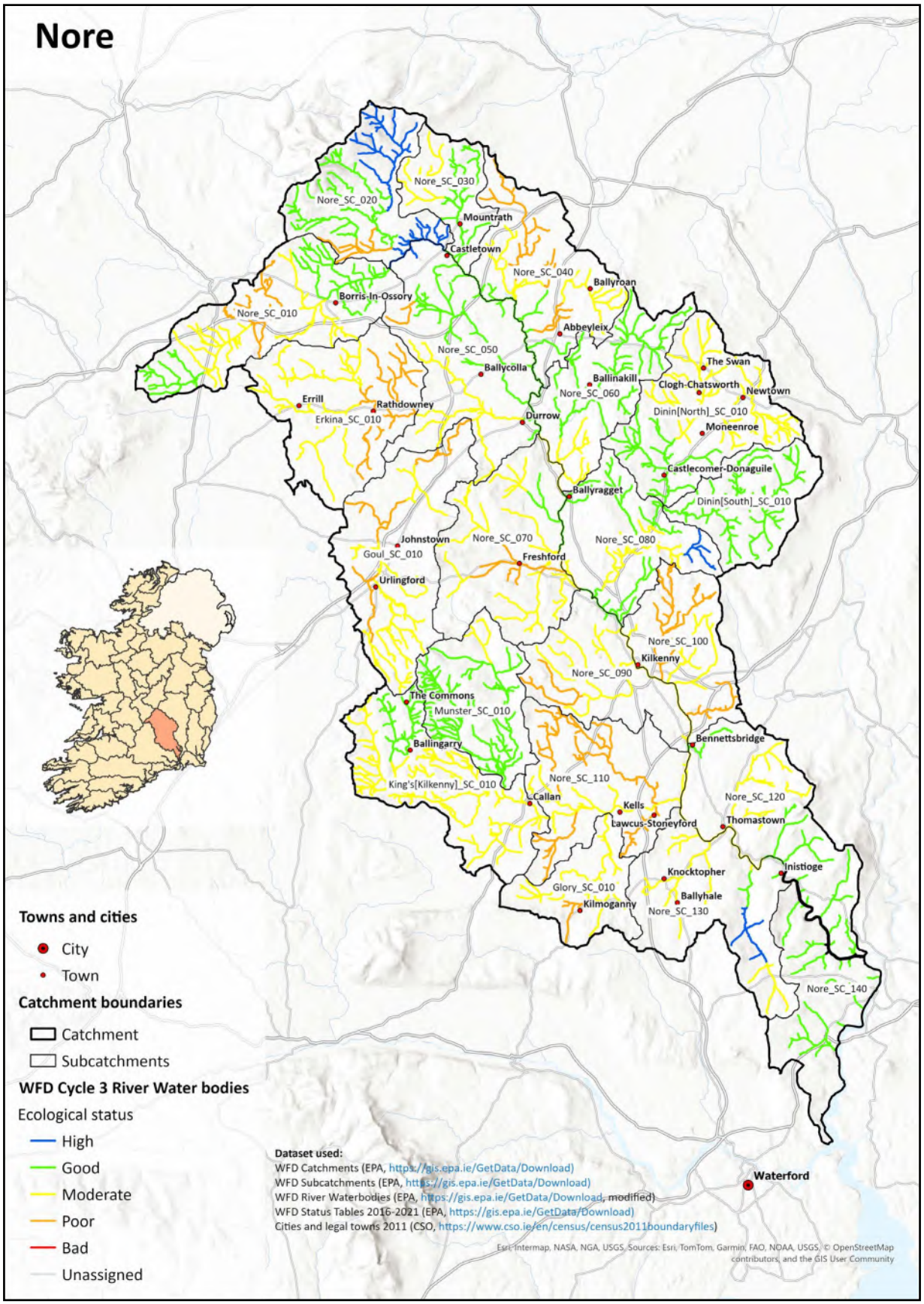

Figure 7: *Ecological Status for the main rivers in the Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-N maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

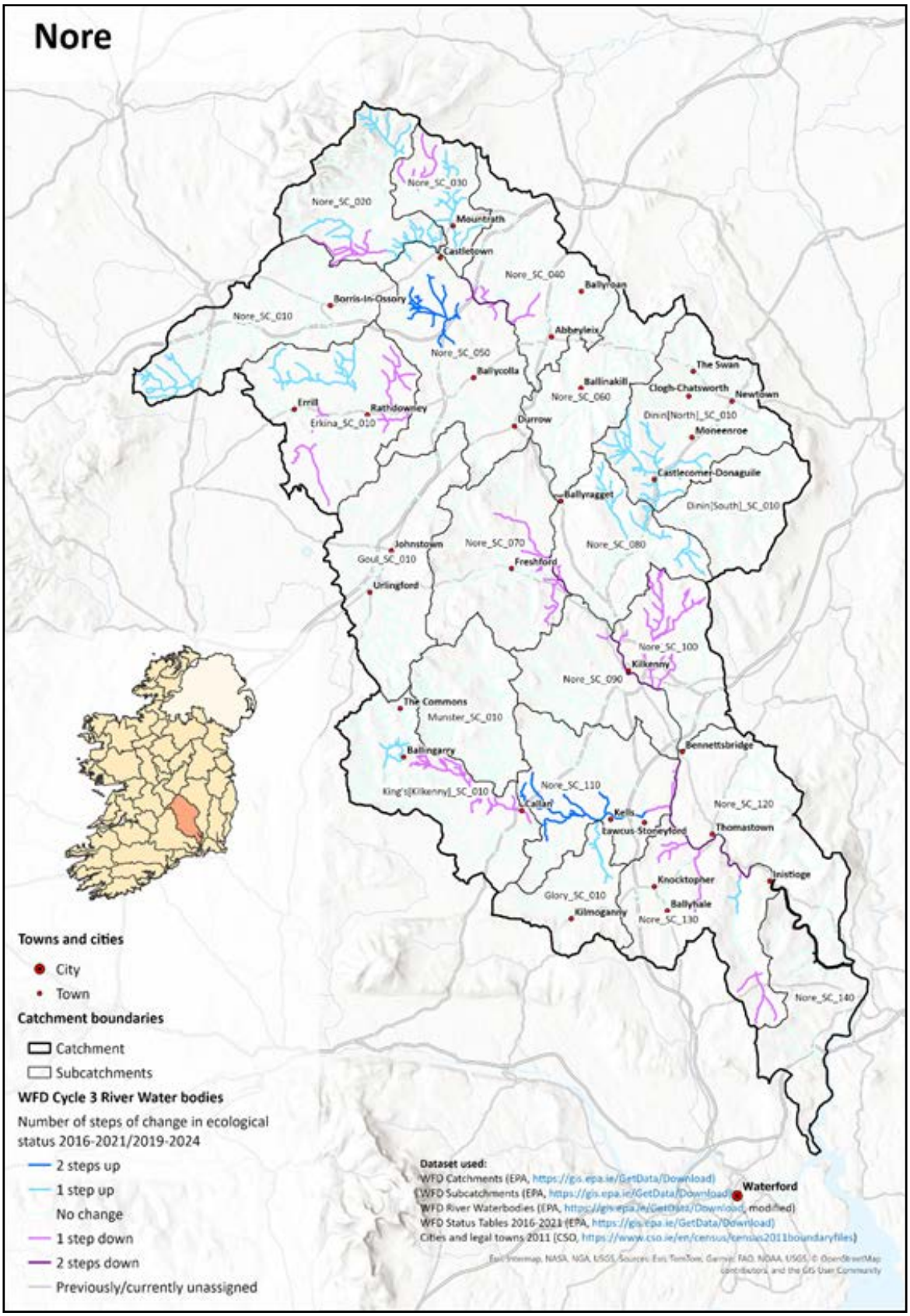

Figure 8: *Identifies main rivers in the Nore Catchment that have either improved or reduced their ecological status between monitoring period 2016 to 2021 compared to monitoring period 2019 to 2024. Data sources: WFD catchments, WFD Sub catchments, WDF River Waterbodies, PIP-N maps (EPA, 2024d). Towns and cities (adapted from CSO, 2016)*

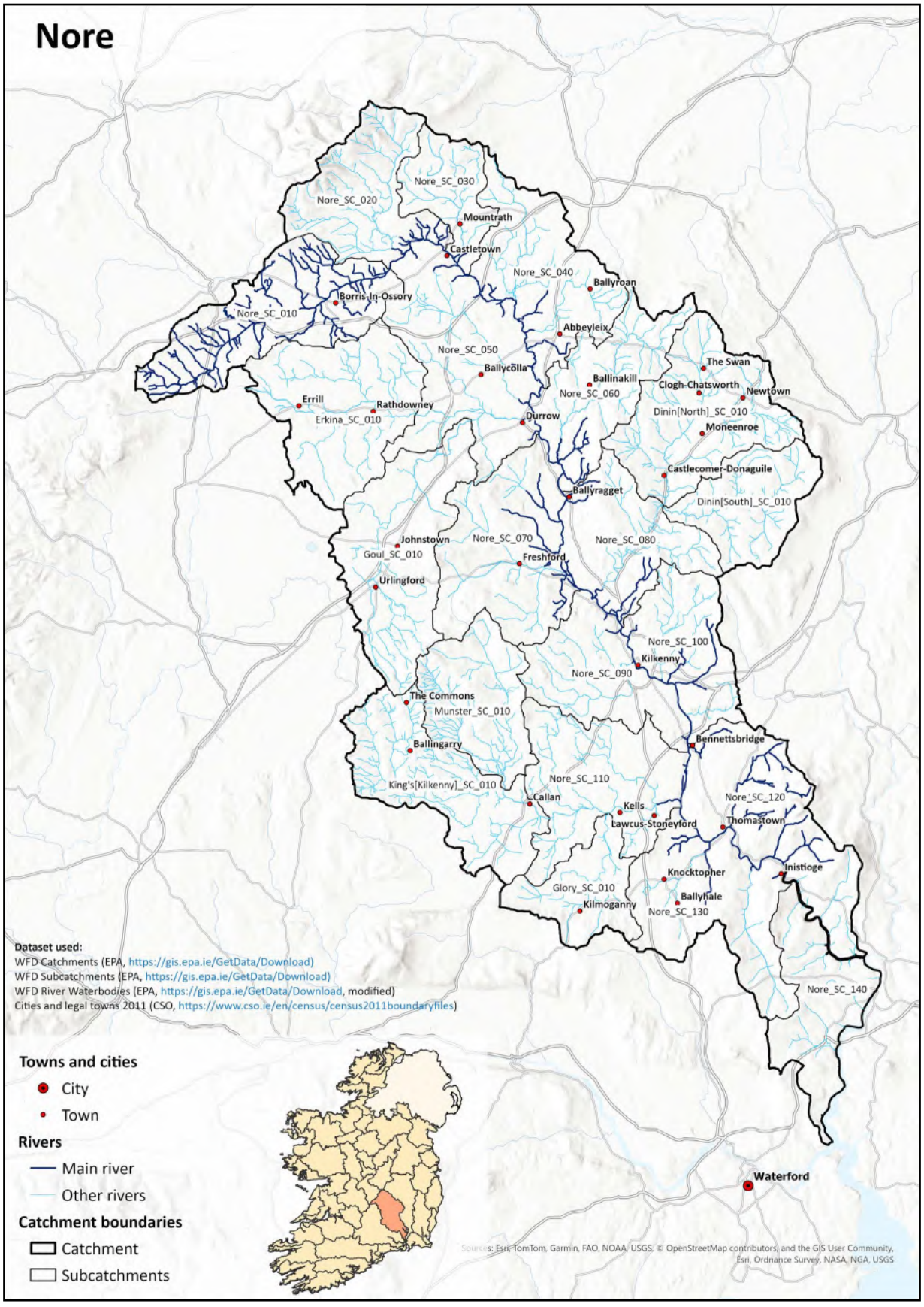

Figure 9: *The 21 individual sub catchments within the Nore Catchment. Data sources: WFD catchments, WFD Sub catchments (EPA, 2024d)*

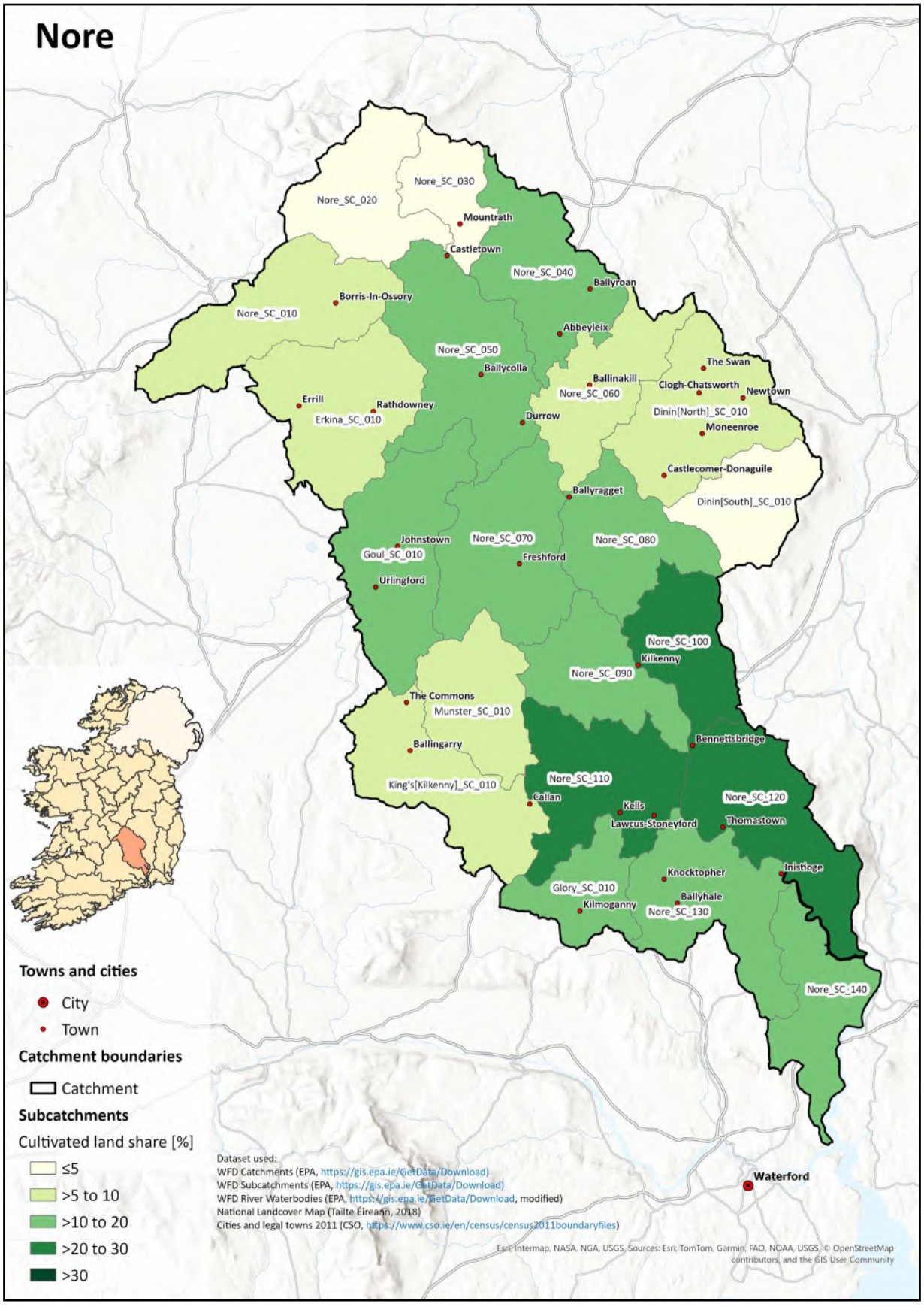

Figure 10 *Proportion of cultivated land share (agricultural land) in each of the individual Nore Sub catchments. Data sources: WFD catchments, WFD Sub catchments (EPA, 2024d); National Land cover map (Lydon & Smith, 2018)*

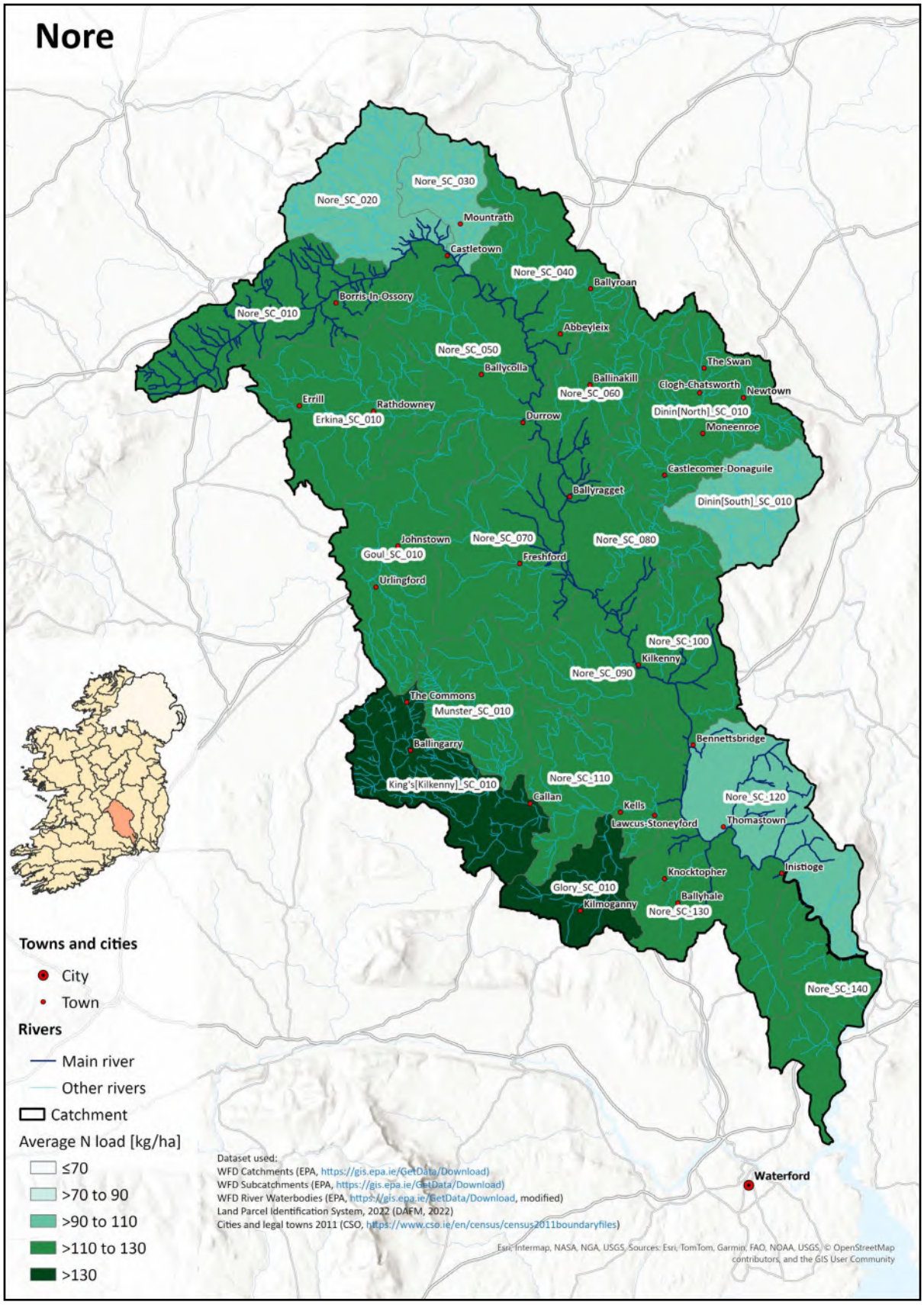

Figure 11: *Sub catchment organic N (kg N/ha) loading in the Nore Catchment. Data sources: WFD catchments, WFD Sub catchments, WFD River Waterbodies (EPA, 2024d); Towns and cities (adapted from CSO, 2016); Nitrogen loads (DAFM, 2023)*

Table 5: *Individual Nore sub catchment proportion of cultivated land, proportion of farms ≤170 kg organic N/ha and proportion of farms > 170 kg organic N/ha (adapted from DAFM LPIS Data, 2024)*

Nore - Subcatchment ID	Cultivated Land	<170kg/ha	> 170 kg N/ha
Dinin[North]_SC_010	3.64	80.9	19.1
Dinin[South]_SC_010	1.73	93.68	6.32
Erkina_SC_010	6.64	75.27	24.73
Glory_SC_010	11.6	64	36
Goul_SC_010	11.12	76.24	23.76
King's[Kilkenny]_SC_010	5.92	65.71	34.29
Munster_SC_010	5.04	80.65	19.35
Nore_SC_010	3.62	81.9	18.1
Nore_SC_020	1.24	91.96	8.04
Nore_SC_030	1.43	98.05	1.95
Nore_SC_040	7.9	75.59	24.41
Nore_SC_050	12.45	71.77	28.23
Nore_SC_060	5.5	74.71	25.29
Nore_SC_070	9.01	73.72	26.28
Nore_SC_080	10.49	82.51	17.49
Nore_SC_090	14.92	75.76	24.24
Nore_SC_100	15.98	72.44	27.56
Nore_SC_110	22.4	70.59	29.41
Nore_SC_120	15.13	88.36	11.64
Nore_SC_130	9.3	79.49	20.51
Nore_SC_140	14.37	71.86	28.14
Average	9.02	78.34	21.66

Table 5 shows the individual Nore sub catchment proportion of cultivated land, proportion of farms ≤170 kg organic N/ha and proportion of farms > 170 kg organic N/ha.

Upskilling Farmers, Advisors, Teachers, Industry Professionals and Students

The primary objective of this pillar is to upskill farmers, advisors, teachers, industry professionals, and students. This will be achieved through the provision of targeted training using a toolbox of tailored solutions and the revision of curricula.

Improving water quality is not a new concept, and considerable knowledge already exists; therefore, the campaign will build on existing skills while focusing on enhancing the knowledge and capacity of all stakeholders.

Upskilling will include

a) Training of advisors

I. Teagasc Advisors – existing training plan currently being rolled out to all advisors covering all aspects of water quality including, catchment science principles, farmyard assessment and planning, nutrient management and land management.

II. Private agricultural consultants – the 6th NAP[3] includes provision for both mandatory training for FAS approved advisors and additional voluntary water quality training for advisors wishing to provide water quality advice and plans in the future. Teagasc will assist in the collaborative delivery of this training during 2026.

III. Industry advisors – the voluntary water quality training referred to at II above will also be made available to this cohort of advisors.

IV. Farmers – training of derogation farmers is also provided for in the 6th NAP. Teagasc will assist in the development of content and in the delivery of these courses as required.

V. Education – Teagasc is in the process of revising the agricultural training curricula for students attending training colleges and this will include revised water quality content.

b) Provide training material

I. Teagasc, in collaboration with relevant agencies, will develop training programmes for use in the training courses.

II. This will include the development of content for the courses.

III. Teagasc will develop 8 Fact Sheets for each of the 8-actions for change as well as videos providing information on the installation of actions to prevent nutrient loss from farms.

c) Water quality manual

I. Develop a water quality best practice manual to be available for farmers to assist in manging their farms to improve water quality.

3 *https://www.gov.ie/en/department-of-housing-local-government-and-heritage/press-releases/sixth-nitrates-action-programme-2026-2028-published/*

An Impactful Knowledge Transfer Programme

Knowledge transfer between advisors and farmers is a core element in improving water quality. All drystock, dairy and tillage advisors will engage in the delivery of information and advice to farmers. Information sharing will include discussion groups, regional events and one to one consultation, to focus on the most relevant mitigation measures from the 8-Actions for Change. In leading this campaign, Teagasc will seek to coordinate the Knowledge Transfer campaign with other stakeholders to the maximum extent. It will build on the excellent work currently ongoing in the ASSAP programme and link out to other initiatives such as ACP, ACRES and Farming for Water EIP. Teagasc will also integrate water quality messaging into the Signpost Programme and AgNav will be developed to estimate purchased N (and P) balance and N use efficiency for a farmer, and its decision support function will allow a plan to be developed to help reduce any surpluses. Farm plans supported through the Signpost Climate and Sustainability programme will include targeted measures to reduce nitrogen (and phosphorus) surplus.

The KT programme will include.

1. Continued collaboration and strengthening of links between ASSAP and LAWPRO.
2. Develop strong links with Teagasc advisors and private agricultural consultants.
3. Disseminate water quality advice and information through the KT network.
4. Select demonstration farms and build robust connections with discussion groups.

The Knowledge Transfer Programme will be delivered at three levels.

- **Level 1 - Nore Catchment**

At Level 1 – catchment events, with meetings open to all farmers will be held at 4 locations across the catchment each year.

One event will be dedicated to water quality and will involve all stakeholders. The remaining events will be in collaboration with other programmes and industry partners.

Responsible: Catchment Coordinator

- **Level 2 – Nore Sub catchment**

At Level 2 – sub catchment events, meetings will be held at sub catchment scale with a similar geographical area, exhibiting common characteristics (e.g. soil type), or be affected by similar pressures (e.g. enterprise type). The meetings will focus on a particular issue affecting these sub catchments and actions that can mitigate the impact.

Responsible: Catchment Coordinator

- **Level 3 – Nore Catchment water body (individual farmer)**

At Level 3 – water body, with specific individual farm will be the focus. ASSAP advisors, on referral from LAWPRO, will visit individual farms and support the implementation of actions to overcome particular pressures.

Responsible: ASSAP Manager

Table 6 outlines the KT water quality advice and messaging plan for the Nore River catchment.

Table 6. *The Nore Catchment Better Farming for Water Planner for 2026*

Month	Actions
Jan	**Reduce purchased nitrogen (N) and phosphorus (P) surplus per hectare (Action 1)**
	Launch of BFFW Action Plans including Profiles on Teagasc website and YouTube channel
	Promote the use of the AgNav application to determine nutrient balances
	Launch NMP factsheet
Feb	**Ensure application of fertiliser and organic manure at appropriate rates, times and conditions (Action 3)**
	Launch video highlighting best farm practise
	Encourage the practise of slurry nutrient analysis
	Promote weekly management guidelines through the Grass10 newsletter
March	**Ensure the use of buffer strips during nutrient application (Action 7)**
	Launch video highlighting best farm practise
	Launch buffer strip factsheet
Apr	**Promote the use of organic manures on tillage farms (Action 3)**
	Hold events in catchments with a large proportion of tillage
	Demonstrate at farm-level the benefits of incorporating organic manures on tillage farms
	Promote greater integration of pigs and poultry farms with tillage farms
May	**Fence off watercourses to prevent livestock access (Action 6)**
	Hold events on dry stock farms demonstrating feasibility
	Highlight EIP financial support mechanisms
	Launch fencing of watercourses factsheet
Jun	**Ensure sufficient slurry and soiled water storage capacity on-farm (Action 4)**
	Hold events on dairy farms highlighting the benefits of sufficient storage
	Demonstrate available construction options to consider
	Highlight financial support mechanisms in place
Jul	**Sow over-winter green cover to reduce nutrient leaching from tillage soils (Action 8)**
	Hold events in catchments with a large proportion of tillage
	Demonstrate crop options available and latest research
	Highlight importance of sowing time and subsequent management

Month	Actions
Aug	**Manage and minimise point source nutrient loss from farmyards (Action 5)**
	Highlight the importance of diverting clean rain water away from yard/concrete areas and ensuring gutters and downpipes are in good working order
	Demonstrate best practise for ensuring silage slabs and silage effluent collection infrastructure are maintained properly
	Promote the practises for reducing soiled yard area by regularly cleaning dirty areas and restricting farm 'traffic' to certain parts of the yard
Sept	**Manage and minimise point source nutrient loss from roadways (Action 5)**
	Highlight the importance of identifying the connectivity (direct or indirect) between roadway runoff and waters
	Highlight the importance of examining the structure and configuration of the entire roadway network and evaluate its pollution risk potential
	Promote the implementation of mitigation strategies that reduce run-off from roadways to water (i.e. EIP initiatives)
Oct	**Promote targeted use of mitigation actions such as riparian margins and sediment traps to mitigate nutrient and sediment loss to water (Action 7)**
	Hold events on high-risk farms highlighting the benefits of riparian margins and sediment traps
	Demonstrate options available to optimise effectiveness
	Highlight financial support mechanisms in place (i.e. EIP initiatives)
Nov	**Ensure soil fertility is optimum to increase N and P use efficiency (Action 2)**
	Drive campaign to increase lime application
	Promote soil sampling best practise
	Launch soil fertility factsheet
Dec	**Review 2026 achievements and plan for 2027**
	Using SWOT analysis, analyse the action plans of each of the 7 catchments with the catchment oversight committee.
	Develop strategy and action plan for 2027

A Supporting Research Programme

A robust scientific research programme is essential to underpin the science, improve water quality, and identify effective mitigation actions for farmers. Research efforts should be aligned to investigate nutrient loss processes and develop suitable mitigation strategies.

Key Actions

- Enhanced Teagasc capabilities in water quality environmental modelling at field, farm and catchment level.
- Environment proof all major farm system research projects/farms with the inclusion of ceramic cups and drainage lysimeters to evaluate the impact of soil type, farming system (cropping/grassland) and pasture/crop composition on nutrient loses.
- Assess water quality data in all major river catchments to identify where knowledge transfer campaigns need to focus.
- Assess the cost effectiveness of nature-based solutions (constructed wetlands, riparian margins, buffer strips and sediments traps) to reduce the loss of N, P and sediment from Irish farming systems.
- Investigate animal nutrition and management strategies to increase N use efficiency and reduce nutrient losses to water bodies.
- Design and evaluate new farm infrastructures that mitigate nutrient loss to water.
- Integrate learnings from socio-economic and biophysical research to improve the understanding of barriers to the implementation of measures.
- Build on ACP learnings to evaluate and demonstrate the cost-effectiveness of water quality mitigation measures.

Communication Plan

The Better Farming for Water (BFFW) communications plan serves as a strategic framework designed to guide the coordination and delivery of communication activities that support the ongoing efforts to improve water quality within the agricultural sector. As part of a national initiative promoting sustainable farming practices, the plan ensures that communications remain consistent, cohesive and aligned with the programme's core objectives.

Branding and Strategic Alignment

A central principle of the communication plan is to promote the BFFW campaign identity. All communication materials associated with the campaign are expected to align with the BFFW brand, reinforcing recognition and credibility across platforms. The Teagasc BFFW campaign webpage is designated as the primary online information hub, ensuring that stakeholders have a clear and reliable point of reference for updates, resources, and educational content.

Structure and Scope of Communication Activities

The media campaign plan organises its communication activities across multiple channels to ensure comprehensive outreach. These channels include:

- **Digital communications**, such as webpages, online updates, and electronic materials.
- **Public information outputs**, including brochures, fact sheets, and other resources.
- **Farmer Events & Engagement Activities** aimed at supporting behavioural change and increasing farmer awareness.
- **Event-related communications**, designed to reinforce key messages during national or regional events.

The campaign will feature stand-alone, catchment-specific events, as well as events delivered in collaboration with other programmes and stakeholder organisations. To maximise the reach of its messages, the communication plan will draw on a wide range of farmer engagement activities, including discussion groups, farm walks, seminars, conferences, joint programme initiatives, Signpost Programme and sustainability awards.

Roles and Responsibilities

The catchment coordinator will have primary responsibility of ensuring consistency and relevance of the messaging throughout the campaign. They will also ensure that other stakeholders in the catchment have access to relevant material to reinforce these messages through their individual communications strategies. The catchment coordinator will leverage the involvement of all stakeholders in each catchment to ensure alignment of messaging, coordinating of activities and consistent public presence across the area.

Work Programme and Key Strategic Focus Areas

The EPA has developed the FLAG (Farm Level Actions for Water Quality) Map to help identify where additional agricultural measures are required to improve water quality national. This map brings together several types of scientific evidence to show where agriculture is contributing to water quality problems, what the specific issue is, and which types of measures are most suitable (such as source control, pathway interception, or farmyard management).

To build the map the EPA combined information on ecological status, nutrient and pollution trends, landscape features like soil type and nutrient retention and assessments of all pressures affecting each waterbody—including source apportionment and details on current measures already in place. Using a catchment-wide approach, the map includes entire upstream areas that drain into waterbodies needing nutrient reductions. Both monitoring data and modelling outputs were used to ensure the map reflects the best available science.

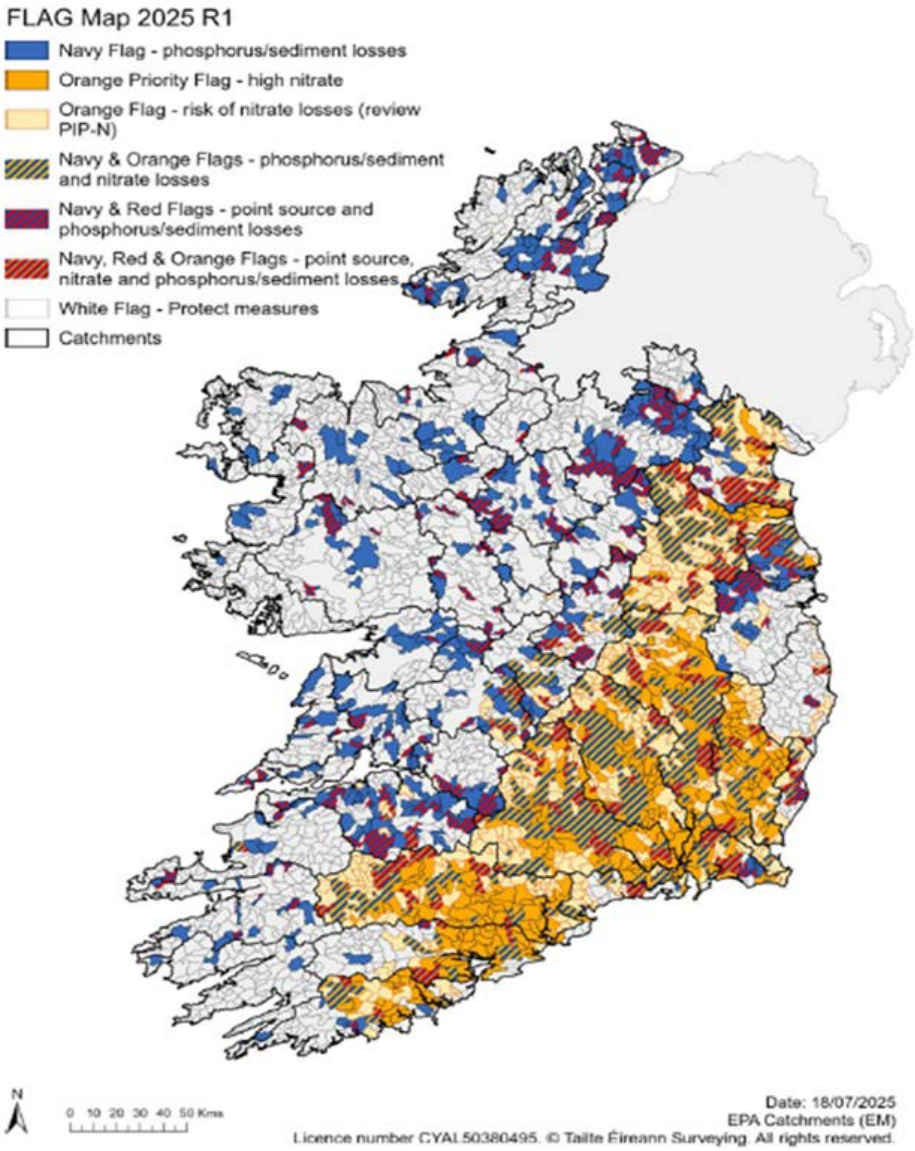

Figure 12: *FLAG map, EPA Catchments 2025*

The FLAG map is designed to direct actions that will help meet the water quality objectives for each waterbody. It identifies four primary categories of areas; each marked with a different flag:

Orange Flag – Nitrogen Issues

- Problem: Excess nitrogen leaching
- Best measures: **Source control** (reduce N losses at farm level)

This category is subsequently broken down into two subcategories – High Nitrate and Risk of Nitrate (Review PIP_N) areas.

Navy Flag – Phosphorus & Sediment Issues

- Problem: Surface runoff carrying P and sediment
- Best measures: **Pathway interception**, e.g., buffer strips

Red Flag – Ammonium Issues

- Problem: High ammonium, often from manure or fertiliser sources
- Best measures: **Farmyard management** and compliance with Good Agricultural Practice (GAP) Regulations

White Flag – No Agricultural Issues or Objectives Met

- Either water quality objectives are achieved, or remaining issues come from **non-agricultural pressures**
- Best measures: Maintain strong compliance with basic measures

In many catchments there are multiple issues and these are reflected with a combination of the primary flag colours.

Flag Map Issues in the Nore Catchment

An overview of Flag map issues and the number of river waterbodies in the Nore Catchment in each category is given below (Table 7).

Table 7: *Overview of assigned Flag map issues and estimated farmyard numbers in the Nore Catchment, EPA 2025 & DAFM 2024*

Flag Map Issue Nore Catchment	Total	Est. No. of Farmyards
High nitrate	34	1039
Risk of nitrate losses (review PIP-N)	42	1172
Phosphorus/sediment and nitrate losses	37	1234
Point source, nitrate and Phosphorus/sediment losses	10	272
Total	123	3,717

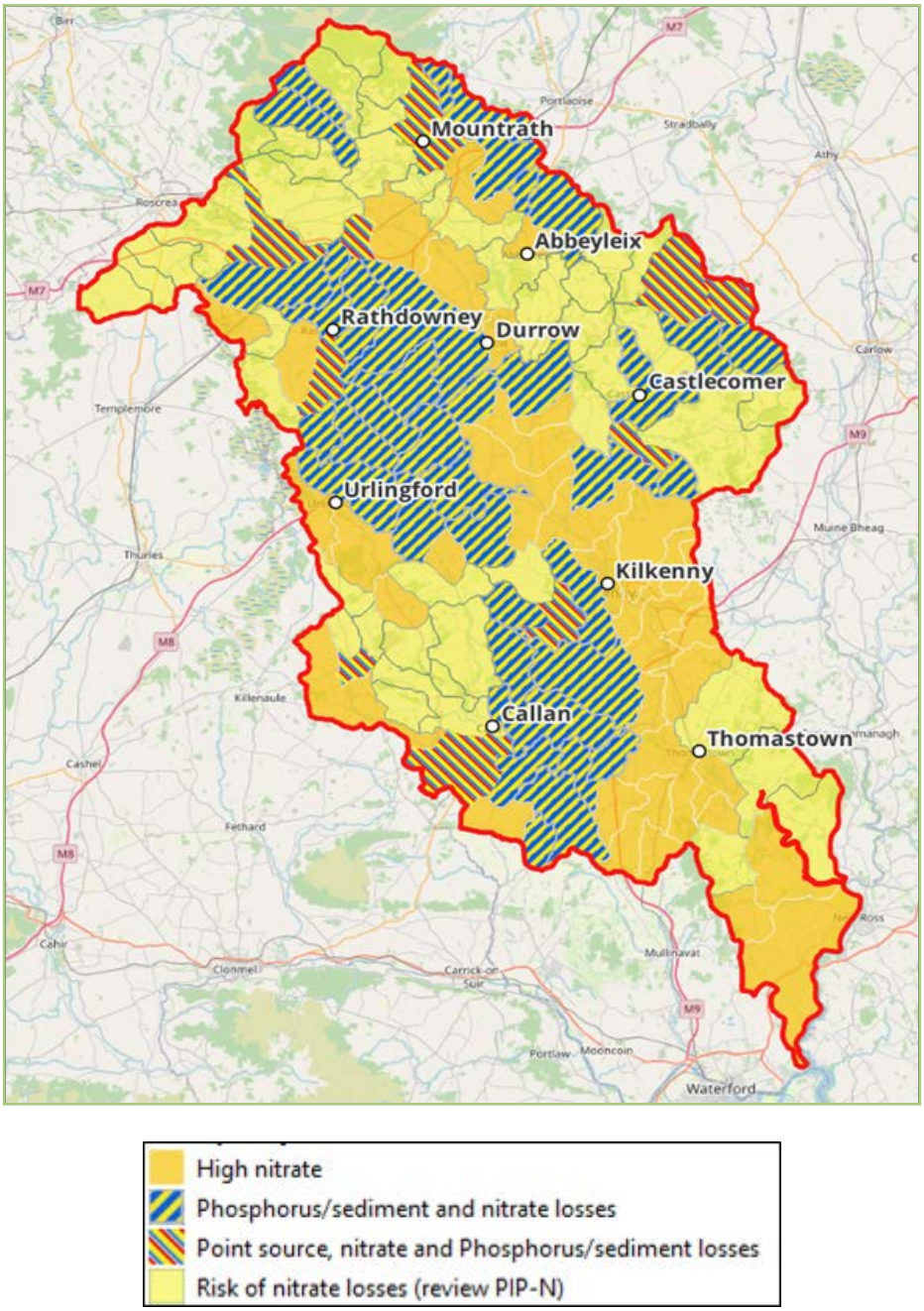

Figure 13: *FLAG map, EPA Catchments 2025*

High Nitrate Flag Waterbodies

There are 34 waterbodies in the Nore River catchment identified as High Nitrate waterbodies on the EPA Flag map, shown in Figure 13 below. Table 8 below shows the ecological status of these waterbodies over the last two monitoring cycles. 8 have disimproved, one has improved and 23 have not changed in the last monitoring cycle. Lead organisations associated with each waterbody are indicated; however, 12 areas currently have no designated lead organisation. Where the EPA characterisation process has identifed a significant pressure(s) in the waterbody this is also shown. An estimate of the number of farmyards in each waterbody is given.

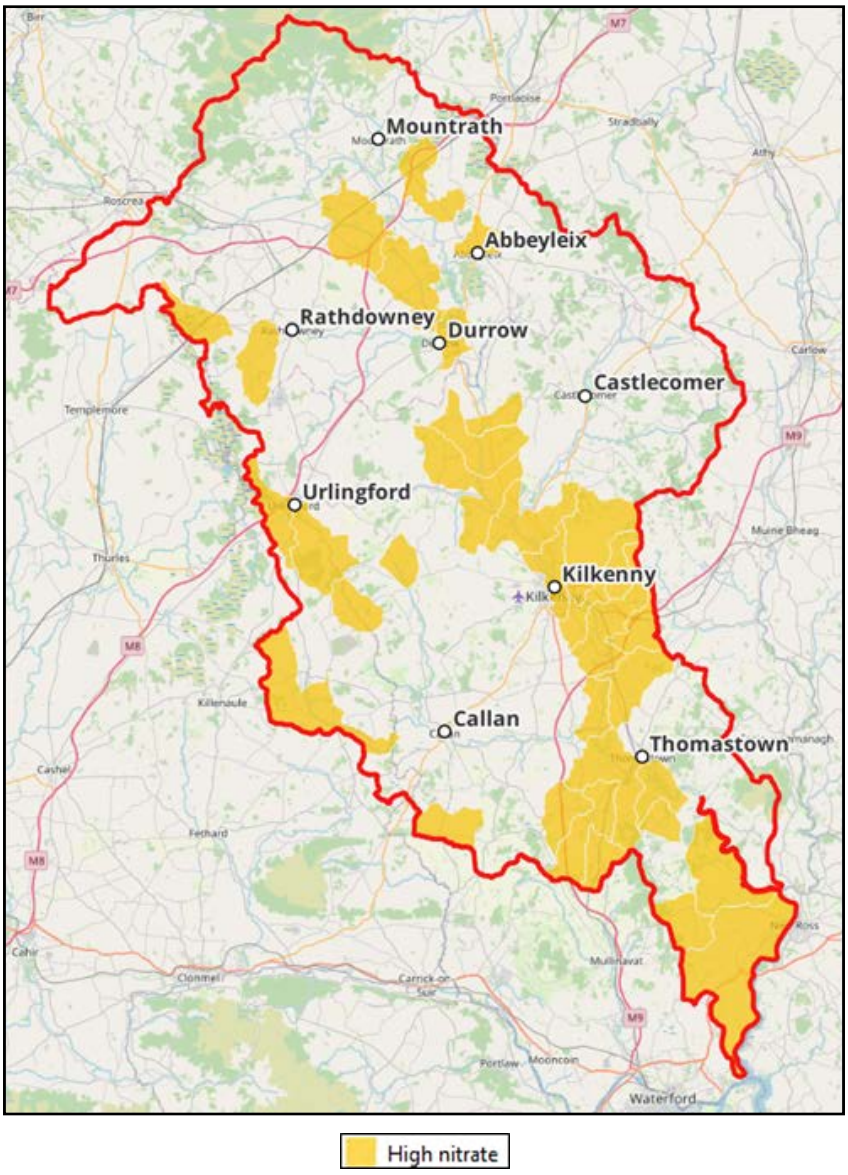

Figure 14: *Flag map, High Nitrate waterbodies, Nore Catchment, EPA 2025*

Table 8: *High Nitrate Flag waterbodies in Nore Catchment with water quality status, pressures, lead organisation and estimated farmyards in each, EPA 2025/ DAFM 2024*

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
ARDREAGH_010	From Moderate to Moderate	LAWPRO	No data	30
ARRIGLE_010	From Good to Moderate	No Lead Org	No data	23
ARRIGLE_030	From Moderate to Good	IFI	----------Aquaculture-----	17
BALLYROAN_020	From Poor to Poor	LAWPRO	----------Hymo------ Anthropogenic	17
BROWNSTOWN (POCOCKE)_010	From Moderate to Poor	LAWPRO	--UrbRunOff----------	47

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
CAPPANACLOGHY_030	From Moderate to Moderate	LAWPRO	No data	42
ERKINA_020	From Moderate to Moderate	LAWPRO	No data	32
ERRILL_010	From Moderate to Moderate	LAWPRO	No data	20
GLEBE_010	From Moderate to Moderate	No Lead Org	No data	29
Glory River_010	From Moderate to Moderate	LAWPRO	No data	21
GOUL_020	From Poor to Poor	LAWPRO	No data	19
GULLY_020	From Poor to Good	LAWPRO	----------Hymo------	50
GULLY_030	From Good to Good	LAWPRO	No data	52
KILDERRY_010	From Moderate to Moderate	LAWPRO	No data	11
KING'S (KILKENNY)_020	From Moderate to Moderate	No Lead Org	No data	58
Knockwilliam_010	From Moderate to Moderate	No Lead Org	No data	14
LITTLE ARRIGLE_010	From Moderate to Moderate	No Lead Org	-UWW----Industry---------- Anthropogenic	37
MUNSTER_010	From Good to Good	IFI	No data	25
NORE_110	From Good to Good	LAWPRO	No data	26
NORE_130	From Good to Good	No Lead Org	No data	11
NORE_140	From Good to Good	No Lead Org	No data	37
NORE_150	From Good to Moderate	IFI	No data	49
NORE_160	From Good to Good	IFI	No data	35
NORE_170	From Good to Moderate	No Lead Org	No data	9
NORE_180	From Good to Moderate	NFGWS	No data	14
NORE_190	From Moderate to Moderate	NFGWS	No data	36
NORE_200	From Good to Good	No Lead Org	No data	28
NORE_210	From Good to Moderate	IFI	No data	7
NORE_220	From Good to Moderate	No Lead Org	No data	29
NORE_240	From Good to Moderate	IFI	No data	14
OAKLANDS_010	From Good to Good	No Lead Org	No data	122
RATHGARVAN_or_ CLIFDEN_010	From Poor to Poor	LAWPRO	No data	19
TULLAGHER_010	From Good to Good	No Lead Org	No data	48
TULLAROAN STREAM_010	From Moderate to Moderate	Kilkenny County Council	No data	11
UWW - Urban Wastewater, Hymo-Hydromorphology, Ag- Agriculture, DWW-Domestic Wastewater				

Risk of Nitrate (Review PIP-N) Flag Waterbodies

Below are the 42 waterbodies that are Nitrate Risk review priority, below shows the ecological status of these waterbodies over the last two monitoring cycles. Six have deteriorated, six have improved, and 30 have maintained their status from 2016-2021. 13 of these waterbodies have no lead organization. In these Nitrate Risk review waterbodies it is estimated to be 1172 farms.

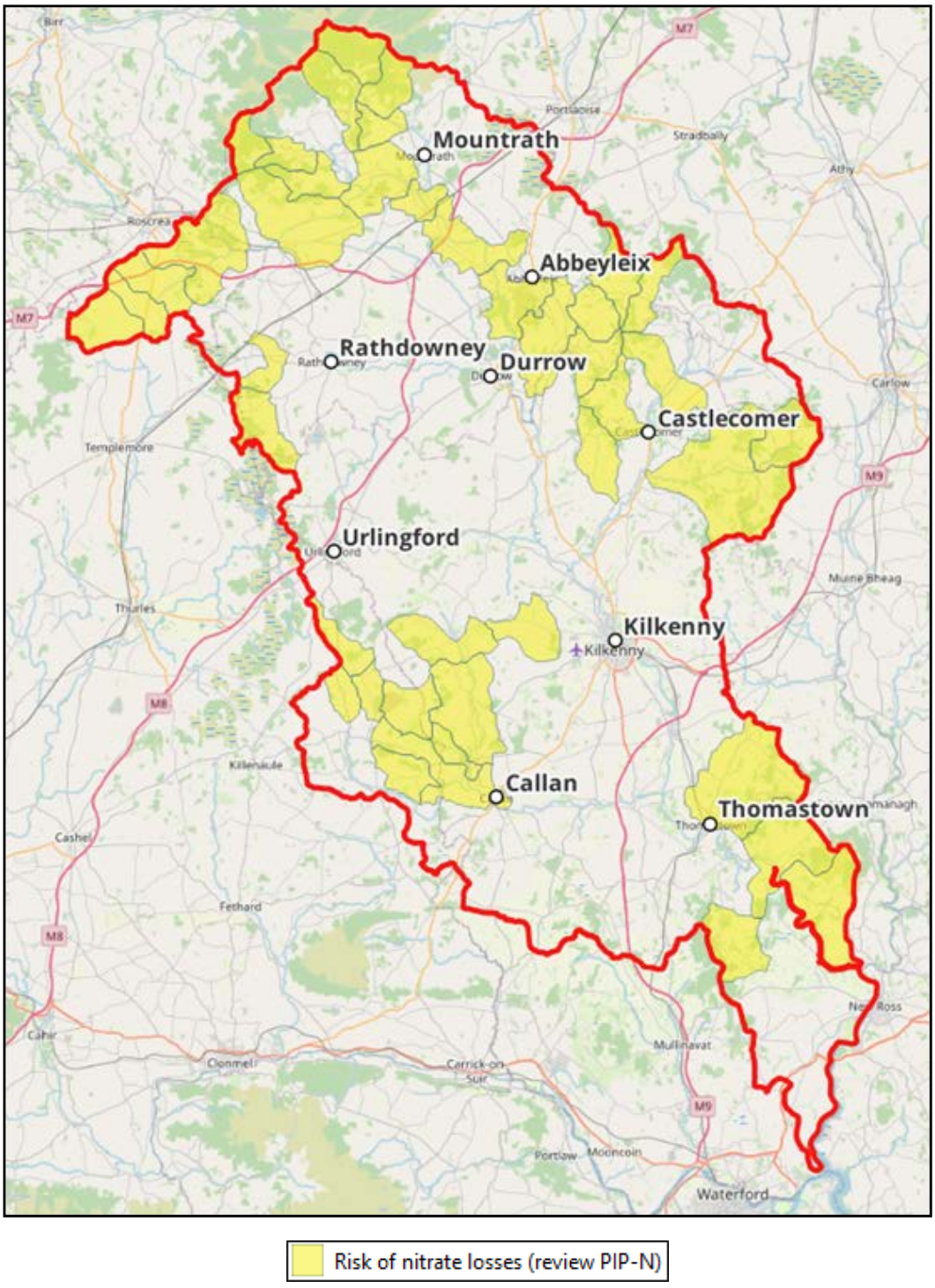

Figure 15: *Flag map, Risk of Nitrate loss (Review PIP_N) waterbodies Nore Catchment EPA 2025*

Table 9: *Risk of Nitrate (Review PIP-N) Flag waterbodies in Nore River catchment with water quality status, pressures, lead organisation and estimated farmyard numbers in each, EPA 2025 & DAFM 2024.*

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
ARRIGLE_020	From High to High	No Lead Org	No data	30
CASTLECOMER STREAM_010	From Moderate to Good	LAWPRO	--UrbRunOff--Forestry----------	12
Clodiagh_010	From Good to Good	No Lead Org	No data	52
CLOGHNAGH_010	From Moderate to Good	No Lead Org	No data	30
COALBROOK STREAM_010	From Good to Good	IFI	No data	16
DELOUR_010	From Good to High	LAWPRO	No data	4
DELOUR_020	From High to High	LAWPRO	No data	19
DININ (NORTH)_030	From Moderate to Moderate	LAWPRO	No data	33
DININ (SOUTH)_010	From Good to Good	LAWPRO	No data	25
DININ (SOUTH)_020	From Good to Good	LAWPRO	No data	93
DREELINGSTOWN_010	From Moderate to Moderate	LAWPRO	No data	22
ERKINA_010	From Good to Moderate	LAWPRO	No data	22
ERRILL_020	From Good to Moderate	LAWPRO	No data	14
GARRANACOOL STREAM_010	From Good to Good	No Lead Org	No data	13
GOUL_010	From Moderate to Moderate	LAWPRO	No data	22
KING'S (KILKENNY)_030	From Good to Moderate	IFI	No data	33
MODESHIL_010	From Moderate to Moderate	No Lead Org	No data	19
MOUNTRATH_010	From Good to Moderate	LAWPRO	No data	16
MOUNTRATH_020	From Moderate to Moderate	LAWPRO	----Forestry----------	21
MUNSTER_020	From Good to Good	IFI	No data	25
MUNSTER_030	From Good to Good	No Lead Org	No data	9
NORE_010	From Moderate to Good	IFI	No data	42
NORE_020	From Moderate to Moderate	NFGWS	No data	24
NORE_030	From Moderate to Moderate	IFI	No data	29
NORE_040	From Poor to Poor	No Lead Org	--------Peat---------	40

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
NORE_060	From Good to Good	IFI	No data	50
NORE_070	From Good to High	No Lead Org	No data	35
NORE_080	From Good to Good	IFI	No data	13
NORE_090	From High to Good	No Lead Org	No data	35
NORE_100	From Good to Good	No Lead Org	No data	17
NORE_230	From Moderate to Moderate	IFI	--UrbRunOff----------	64
NORE_250	From Good to Good	No Lead Org	No data	56
OWVEG (NORE)_010	From Good to Good	No Lead Org	No data	11
OWVEG (NORE)_020	From Good to Good	IFI	No data	15
OWVEG (NORE)_030	From Good to Good	NFGWS	No data	20
OWVEG (NORE)_040	From Good to Good	No Lead Org	No data	25
OWVEG (NORE)_050	From Good to Good	NFGWS	No data	61
TONET_010	From Good to Good	LAWPRO	----Forestry----------	5
TONET_020	From Moderate to Good	LAWPRO	----Forestry----------	20
TONET_030	From Moderate to Poor	LAWPRO	----Forestry----------	13
TULLAROAN STREAM_020	From Good to Good	Kilkenny County Council	No data	24
TULLAROAN STREAM_030	From Good to Good	Kilkenny County Council	No data	43
UWW - Urban Wastewater, Hymo-Hydromorphology, Ag- Agriculture, DWW-Domestic Wastewater				

Phosphorus/sediment and nitrate loss Flag Waterbodies

A total of 37 waterbodies have been identified on the FLAG map as being at risk of Phosphorus / sediment and nitrate losses. Lead organisations are present in 36 of these waterbodies. One has deteriorated, five have improved, and 31 have not changed their status between the last two cycles. It is estimated to be 1234 farms in these waterbodies.

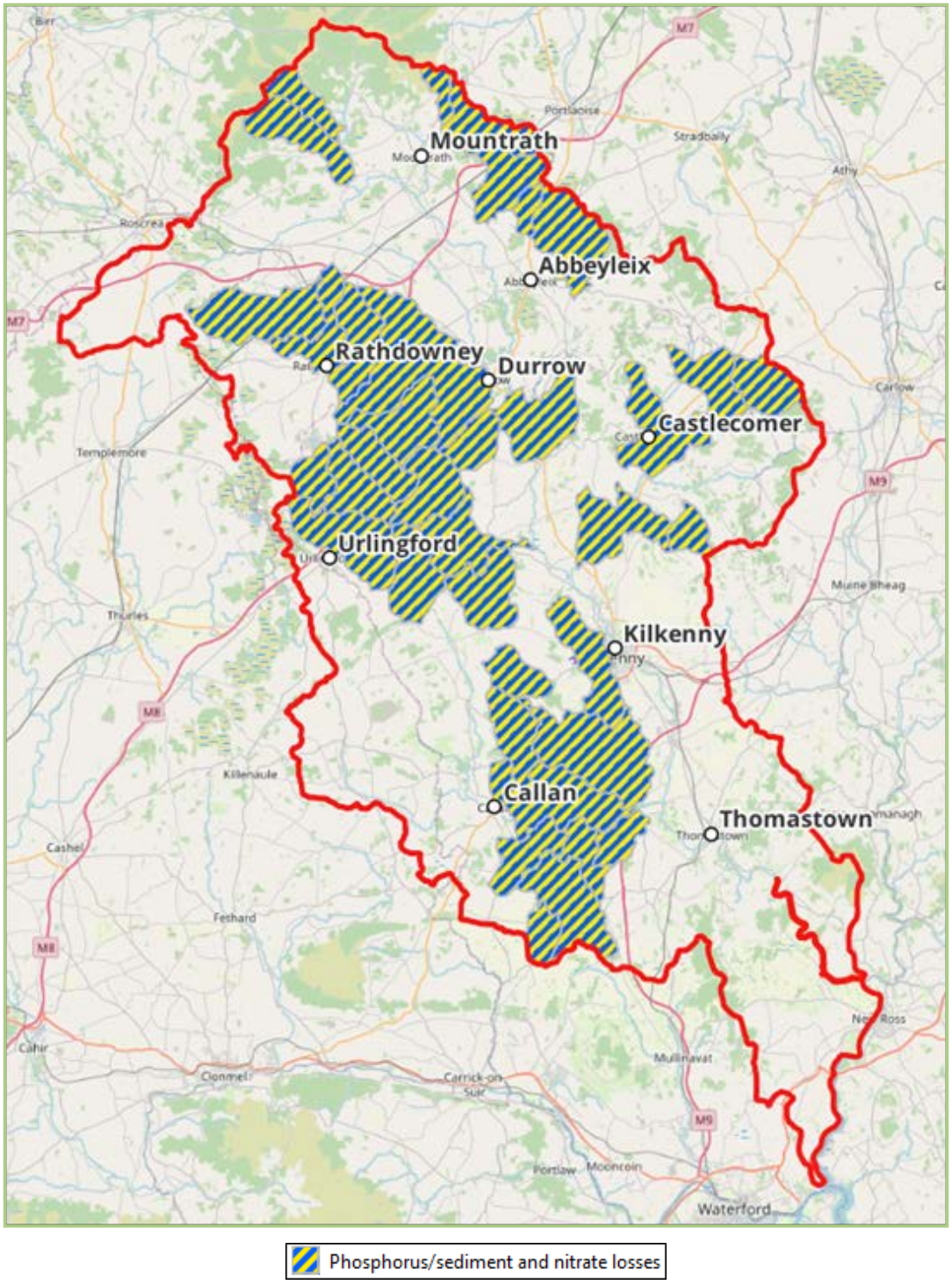

Figure 15: *Flag map, Phosphorus/sediment and nitrate loss waterbodies, Nore Catchment EPA 2025*

Table 10: *Phosphorus/ sediment and Nitrate loss Flag waterbodies in Nore Catchment with water quality status, pressures, lead organisation and estimated farmyard numbers in each, EPA 2025 & DAFM 2024*

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
ARIGNA (KILKENNY)_010	From Moderate to Moderate	LAWPRO	Ag----------	25
BALLYROAN_010	From Moderate to Moderate	LAWPRO	Ag-UWW----------	50
BAUNBALLINLOUGH STREAM_010	From Poor to Poor	LAWPRO	Ag----------	26
BREGAGH (KILKENNY)_010	From Poor to Poor	LAWPRO	Ag----------	24
BREGAGH (KILKENNY)_030	From Moderate to Moderate	LAWPRO	Ag-----Industry------ Hymo------	25
CAHERLESK STREAM_010	From Poor to Poor	LAWPRO	Ag----------	26
CAPPANACLOGHY _010	From Poor to Poor	LAWPRO	Ag--------Peat---------	20
CAPPANACLOGHY _010	From Poor to Poor	LAWPRO	Ag--------Peat---------	27
CLONAWOOLAN STREAM_010	From Poor to Poor	LAWPRO	Ag--------Peat--------- Anthropogenic	6
DELOUR_030	From Good to Good	LAWPRO	Ag----------	34
DESART STREAM_010	From Poor to Poor	LAWPRO	Ag----Forestry----------	22
DININ (MAIN CHANNEL)_020	From Moderate to Moderate	LAWPRO	Ag-------MinesQuarries--- Abstrations-------	47
DININ (NORTH)_010	From Moderate to Moderate	LAWPRO	Ag----------	24
DININ (NORTH)_020	From Moderate to Moderate	LAWPRO	Ag----------	26
DININ (NORTH)_040	From Moderate to Good	LAWPRO	Ag-UWW-UrbRunOff-DWW----------	45
DONAGHMORE STREAM_010	From Poor to Moderate	LAWPRO	Ag----------	75
ENNISNAG STREAM_010	From Poor to Poor	LAWPRO	Ag---DWW----------	67
ERKINA_030	From Poor to Poor	LAWPRO	Ag-UWW----------	41
ERKINA_040	From Moderate to Poor	LAWPRO	Ag----------	26
ERKINA_050	From Moderate to Moderate	LAWPRO	Ag----------	108
GLORY_010	From Poor to Poor	LAWPRO	Ag-UWW---------- Hymo------	20
GLORY_020	From Moderate to Moderate	LAWPRO	Ag----Forestry----------	32

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	AtRisk Sig Pressure	Farmyard Estimate
GLORY_030	From Poor to Moderate	LAWPRO	Ag--UrbRunOff----------	15
GORTEENAHILL _010	From Moderate to Moderate	LAWPRO	Ag----Forestry----------	23
GOUL_030	From Moderate to Moderate	LAWPRO	Ag----------	64
GOUL_040	From Poor to Poor	LAWPRO	Ag----Forestry----------	34
GOUL_050	From Moderate to Moderate	LAWPRO	Ag----------	30
GOUL_060	From Poor to Poor	LAWPRO	Ag----------Hymo------	49
KILLEEN (DELOUR)_010	From Good to Good	LAWPRO	Ag---DWW-Forestry----------	19
KING'S (KILKENNY)_050	From Bad to Moderate	LAWPRO	Ag----------	58
LISDOWNEY_010	From Moderate to Moderate	LAWPRO	Ag----------	18
MUCKALEE_010	From Good to High	LAWPRO	Ag----Forestry----------	8
NEEDLEFORD STREAM_010	From Good to Good	LAWPRO	Ag----------Abstrations-------	10
NORE_120	From Moderate to Moderate	No Lead Org	Ag----------	41
NUENNA_010	From Moderate to Moderate	LAWPRO	Ag----------	20
NUENNA_020	From Poor to Poor	LAWPRO	Ag-UWW----------	28
STONYFORD STREAM (KILKENNY)_010	From Poor to Poor	LAWPRO	Ag---DWW----------	21
UWW - Urban Wastewater, Hymo-Hydromorphology, Ag-Agriculture, DWW-Domestic Wastewater				

Point Source, phosphorus, sediment, and nitrate Flag Waterbodies

There are 10 waterbodies in the Nore catchment which have been identified on the FLAG map as having issues with point source, nitrate and phosphorus/sediment losses. Three of these waterbodies improved in ecological status in the most recent monitoring results. It is estimated to be 272 farms in these waterbodies.

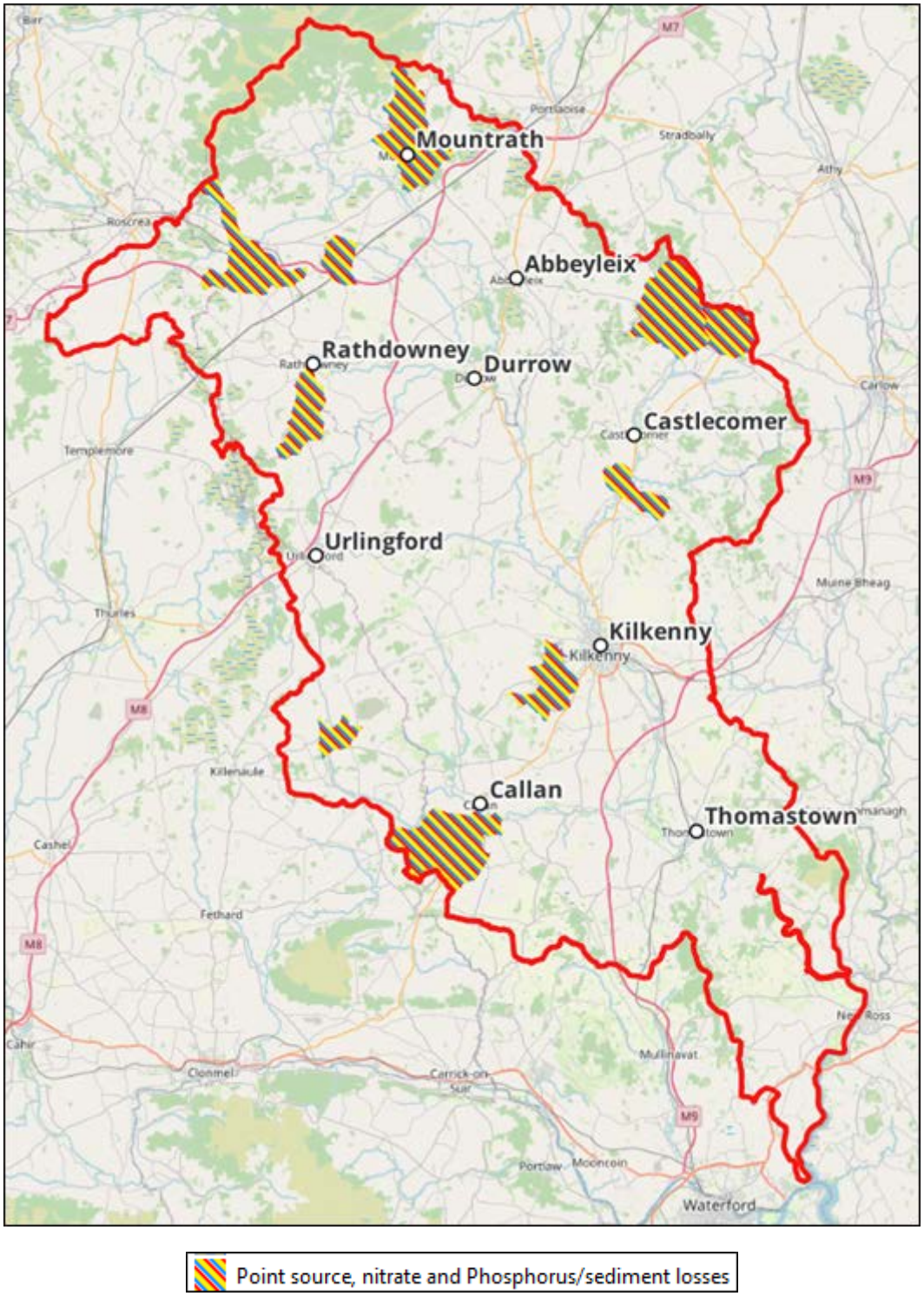

Figure 16: *Flag map, Point Source, phosphorous, sediment and nitrate loss waterbodies, Nore Catchment, EPA 2025*

Table 11: *Point source, phosphorus/sediment and nitrate Flag waterbodies in Nore Catchment with water quality status, pressures, lead organisation and estimated farmyard numbers in each, EPA 2025 & DAFM 2024*

Waterbody Name	Last cycle to current EcoStatus	Cyc3 AFA LeadOrg	At Risk Sig Pressure	Farmyard Estimate
BREGAGH (KILKENNY)_020	From Moderate to Moderate	LAWPRO	Ag----Forestry----------	*17*
CLOGH_010	From Moderate to Moderate	LAWPRO	Ag--UrbRunOff----------	*37*
DININ (MAIN CHANNEL)_010	From Moderate to Good	LAWPRO	Ag---DWW----------	*15*
GULLY_010	From Poor to Poor	LAWPRO	Ag----------	*12*
HOLLY PARK STREAM_010	From Moderate to Moderate	LAWPRO	Ag----------	*13*
KING'S (KILKENNY)_010	From Moderate to Good	Tipperary County Council	Ag----------	*14*
KING'S (KILKENNY)_040	From Moderate to Moderate	NFGWS	Ag----------Hymo-----OtherAnthro-	*51*
MOUNTRATH_030	From Moderate to Good	LAWPRO	Ag----------	*51*
NORE_050	From Moderate to Moderate	No Lead Org	Ag----------	*35*
RATHDOWNEY STREAM_010	From Poor to Poor	LAWPRO	Ag----------	*27*
UWW - Urban Wastewater, Hymo-Hydromorphology, Ag- Agriculture, DWW- Domestic Wastewater				

A comprehensive workplan will be developed annually by the Catchment Coordinator in collaboration with the Catchment Implementation Group Oversight Committee. This plan will outline the identification of catchments and farms to be assessed in the coming year, taking into account key factors such as the number of farms to be evaluated, the resources available for on-site visits, and the time required to complete each assessment. Based on these assessments, farmers will be provided with actions to implement that will help improve water quality. Progress on the implementation of this workplan will be closely monitored by the committee, with a detailed report prepared at the end of each year to track outcomes and inform future actions.

Nore Catchment – Key Performance Indicators

Key Performance Indicators (KPIs) will be used to assess and monitor the progress and effectiveness of the Better Farming for Water (BFFW) campaign in the Nore River catchment. These KPIs are closely aligned with the eight "Actions for Change" identified within the campaign, ensuring that monitoring is directly linked to the programme's strategic objectives.

Table 12 below presents the primary KPI's for the Nore Catchment. These indicators provide a framework for measuring progress across multiple dimensions, including farmer engagement, adoption of mitigation practices, improvements in water quality, and broader environmental outcomes. The list of KPIs is not exhaustive and will be reviewed and updated over time as the campaign evolves and additional data and insights become available.

Table 12: *Key Performance Indicators*

River waterbody Status	Improving Trends
Catchment Events	Four per Catchment
Nitrogen Balance	Decreasing trend
Nitrogen Use Efficiency	Increasing trend
Per cent soils optimal for Lime, P & K	Increasing trend
NAIP Inspections - % of non-compliance	Decreasing trend
Watercourses fenced off	Metres
Nature Based Solutions installed	Number
Catch crops planted	Hectares

Appendix 1

The table below lists all 123 river waterbodies in the Nore Catchment. It indicates waterbodies within priority areas for water quality protection or restoration (AFA ID and category), identifies the lead organisation where applicable, and shows the ecological status for each monitoring cycle since 2007, including changes over the last two cycles. Significant pressures identified by the EPA are also noted.

River Waterbodies in the Nore Catchment

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15A030960	ARDREAGH_010	Goul	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15A010400	ARIGNA (KILKENNY)_010	Nuenna	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Good-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15A020100	ARRIGLE_010	No data	No data	No Lead Org	High nitrate	No	Moderate-Good-Good-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15A020250	ARRIGLE_020	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Unassigned-High-Good-High-High-High	From High to High	No data
IE_SE_15A020300	ARRIGLE_030	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Good-High-Moderate-Moderate-Moderate-Good	From Moderate to Good	---------- Aquaculture-----
IE_SE_15B010100	BALLYROAN_010	Ballyroan	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Moderate-Moderate-Poor-Moderate-Moderate	From Moderate to Moderate	Ag-UWW----------
IE_SE_15B010200	BALLYROAN_020	Ballyroan	Restoration	LAWPRO	High nitrate	No	Poor-Poor-Poor-Moderate-Poor-Poor	From Poor to Poor	----------Hymo------ Anthropogenic
IE_SE_15B120080	BAUNBALLINLOUGH STREAM_010	Goul	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Poor-Poor-Poor-Poor-Poor	From Poor to Poor	Ag----------
IE_SE_15B020080	BREGAGH (KILKENNY)_010	Bregagh (Kilkenny)	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Moderate-Moderate-Poor-Poor-Poor	From Poor to Poor	Ag----------
IE_SE_15B020100	BREGAGH (KILKENNY)_020	Bregagh (Kilkenny)	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----Forestry----------
IE_SE_15B020350	BREGAGH (KILKENNY)_030	Bregagh (Kilkenny)	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Poor-Poor-Poor-Moderate-Moderate	From Moderate to Moderate	Ag-----Industry ------Hymo------
IE_SE_15B041100	BROWNSTOWN (POCOCKE)_010	Brownstown (Pococke)	Restoration	LAWPRO	High nitrate	No	Good-Moderate-Poor-Poor-Moderate-Poor	From Moderate to Poor	--UrbRunOff ----------
IE_SE_15C120400	CAHERLESK STREAM_010	Stoneyford-Kells-Burnchurch	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Poor-Poor-Poor-Poor-Poor	From Poor to Poor	Ag----------
IE_SE_15C060600	CAPPANACLOGHY_010	Ballyroan	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Poor-Poor-Poor-Poor-Poor	From Poor to Poor	Ag--------Peat---------
IE_SE_15C060900	CAPPANACLOGHY_020	Ballyroan	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Unassigned-Good-Good-Poor-Poor	From Poor to Poor	Ag--------Peat---------

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15C060990	CAPPANACLOGHY_030	Ballyroan	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15C010100	CASTLECOMER STREAM_010	Dinin	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Moderate-Moderate-Good	From Moderate to Good	--UrbRunOff--Forestry----------
IE_SE_15C050100	Clodiagh_010	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data
IE_SE_15C030300	CLOGH_010	Dinin	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Good-Moderate-Moderate-Good-Moderate-Moderate	From Moderate to Moderate	Ag--Urb RunOff----------
IE_SE_15C040400	CLOGHNAGH_010	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Moderate-Good	From Moderate to Good	No data
IE_SE_15C191100	CLONAWOOLAN STREAM_010	Ballyroan	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Poor-Poor-Poor-Poor-Poor	From Poor to Poor	Ag--------Peat--------- Anthropogenic
IE_SE_15C200040	COALBROOK STREAM_010	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15D010060	DELOUR_010	Delour - Blue Dot	Protection	LAWPRO	Risk of nitrate losses (review PIP-N)	Yes	Good-High-High-High-Good-High	From Good to High	No data
IE_SE_15D010150	DELOUR_020	Delour - Blue Dot	Protection	LAWPRO	Risk of nitrate losses (review PIP-N)	Yes	High-High-High-High-High-High	From High to High	No data
IE_SE_15D010400	DELOUR_030	Delour - Blue Dot	Protection	LAWPRO	Phosphorus/ sediment and nitrate losses	Yes	High-High-High-High-Good-Good	From Good to Good	Ag----------
IE_SE_15D040500	DESART STREAM_010	Stoneyford-Kells-Burnchurch	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Moderate-Poor-Poor-Poor-Poor	From Poor to Poor	Ag----Forestry----------
IE_SE_15D020700	DININ (MAIN CHANNEL)_010	Dinin	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Good-Good-Good-Moderate-Moderate-Good	From Moderate to Good	Ag---DWW----------
IE_SE_15D020800	DININ (MAIN CHANNEL)_020	Dinin	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Moderate-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag-------Mines Quarries ---Abstrations-------
IE_SE_15D070080	DININ (NORTH)_010	Dinin	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Moderate-Poor-Good-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15D070200	DININ (NORTH)_020	Dinin	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Good-Good-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15D070250	DININ (NORTH)_030	Dinin	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15D070400	DININ (NORTH)_040	Dinin	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Good-Moderate-Moderate-Good	From Moderate to Good	Ag-UWW-UrbRunOff-DWW ----------
IE_SE_15D080450	DININ (SOUTH)_010	Dinin	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-High-Good-Moderate-Good-Good	From Good to Good	No data
IE_SE_15D080600	DININ (SOUTH)_020	Dinin	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-Good-Moderate-Good-Good-Good	From Good to Good	No data
IE_SE_15D030700	DONAGHMORE STREAM_010	Erkina	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Moderate-Moderate-Poor-Moderate	From Poor to Moderate	Ag----------

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15D420500	DREELINGSTOWN_010	Bregagh (Kilkenny)	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15E020700	ENNISNAG STREAM_010	Stoneyford-Kells-Burnchurch	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Poor-Poor-Poor-Poor	From Poor to Poor	Ag---DWW----------
IE_SE_15E010040	ERKINA_010	Erkina	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Moderate-Moderate-Moderate-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15E010100	ERKINA_020	Erkina	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15E010200	ERKINA_030	Erkina	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Poor-Moderate-Poor-Poor	From Poor to Poor	Ag-UWW----------
IE_SE_15E010300	ERKINA_040	Erkina	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Moderate-Poor-Moderate-Poor	From Moderate to Poor	Ag----------
IE_SE_15E010550	ERKINA_050	Erkina	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Good-Moderate-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15E030400	ERRILL_010	Erkina	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15E030500	ERRILL_020	Erkina	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Moderate-Moderate-Moderate-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15G100060	GARRANACOOL STREAM_010	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15G720980	GLEBE_010	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15G820400	Glory River_010	Glory Kilkenny	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15G010045	GLORY_010	Glory Kilkenny	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Poor-Moderate-Poor-Poor-Poor	From Poor to Poor	Ag-UWW---------- Hymo------
IE_SE_15G010190	GLORY_020	Glory Kilkenny	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----Forestry----------
IE_SE_15G010300	GLORY_030	Glory Kilkenny	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Good-Moderate-Poor-Moderate	From Poor to Moderate	Ag-- UrbRunOff----------
IE_SE_15G080300	GORTEENAHILLA_010	Nuenna	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Good-Poor-Moderate-Moderate	From Moderate to Moderate	Ag----Forestry----------
IE_SE_15G020060	GOUL_010	Goul	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15G020110	GOUL_020	Goul	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Poor-Poor	From Poor to Poor	No data
IE_SE_15G020200	GOUL_030	Goul	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15G020300	GOUL_040	Goul	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Poor-Moderate-Moderate-Poor-Poor	From Poor to Poor	Ag----Forestry----------
IE_SE_15G020360	GOUL_050	Goul	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Moderate-Moderate-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15G020500	GOUL_060	Goul	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Moderate-Poor-Poor-Poor	From Poor to Poor	Ag----------Hymo------
IE_SE_15G030060	GULLY_010	Gully	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Poor-Poor-Poor-Poor-Poor-Poor	From Poor to Poor	Ag----------
IE_SE_15G030100	GULLY_020	Gully	Restoration	LAWPRO	High nitrate	No	Good-Good-Poor-Moderate-Poor-Good	From Poor to Good	----------Hymo------
IE_SE_15G030300	GULLY_030	Gully	Restoration	LAWPRO	High nitrate	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15H010300	HOLLY PARK STREAM_010	Dinin	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15K540650	KILDERRY_010	Brownstown (Pococke)	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15K010400	KILLEEN (DELOUR)_010	Delour - Blue Dot	Protection	LAWPRO	Phosphorus/ sediment and nitrate losses	Yes	Good-High-High-Good-Good-Good	From Good to Good	Ag---DWW-Forestry----------
IE_SE_15K020200	KING'S (KILKENNY)_010	King's (Kilkenny) Tipperary	Protection	Tipperary County Council	Point source, nitrate and Phosphorus/ sediment losses	No	Good-Good-Good-Good-Moderate-Good	From Moderate to Good	Ag----------
IE_SE_15K020400	KING'S (KILKENNY)_020	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15K020560	KING'S (KILKENNY)_030	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Moderate-Moderate-Good-Moderate-Good-Moderate	From Good to Moderate	No data
IE_SE_15K020600	KING'S (KILKENNY)_040	Caherleske GWS	Restoration	NFGWS	Point source, nitrate and Phosphorus/ sediment losses	No	Good-Good-Moderate-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag----------Hymo-----OtherAnthro-
IE_SE_15K020910	KING'S (KILKENNY)_050	Stoneyford-Kells-Burnchurch	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Moderate-Moderate-Bad-Moderate	From Bad to Moderate	Ag----------
IE_SE_15K750910	Knockwilliam_010	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15L020100	LISDOWNEY_010	Nuenna	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Good-Good-Moderate-Good-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15L010200	LITTLE ARRIGLE_010	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	-UWW----Industry----------Anthropogenic

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15M340730	MODESHIL_010	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15M010080	MOUNTRATH_010	Mountrath	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-High-Good-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15M010100	MOUNTRATH_020	Mountrath	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Moderate-Moderate-Moderate	From Moderate to Moderate	----Forestry----------
IE_SE_15M010300	MOUNTRATH_030	Mountrath	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Moderate-Good-Good-Moderate-Moderate-Good	From Moderate to Good	Ag----------
IE_SE_15M020100	MUCKALEE_010	Dinin	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	Yes	High-High-Good-Good-Good-High	From Good to High	Ag----Forestry----------
IE_SE_15M030540	MUNSTER_010	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15M030600	MUNSTER_020	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	High-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15M030700	MUNSTER_030	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15N040200	NEEDLEFORD STREAM_010	Mountrath	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	Yes	High-High-Good-High-Good-Good	From Good to Good	Ag---------- Abstrations-------
IE_SE_15N010080	NORE_010	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Moderate-Good	From Moderate to Good	No data
IE_SE_15N010100	NORE_020	Couraguneen GWS	Protection	NFGWS	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15N010200	NORE_030	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15N010300	NORE_040	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Moderate-Moderate-Good-Moderate-Poor-Poor	From Poor to Poor	--------Peat---------
IE_SE_15N010400	NORE_050	No data	No data	No Lead Org	Point source, nitrate and Phosphorus/ sediment losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15N010500	NORE_060	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15N010600	NORE_070	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-High	From Good to High	No data
IE_SE_15N010700	NORE_080	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Good-High-Good-Good	From Good to Good	No data
IE_SE_15N010900	NORE_090	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-High-High-Good	From High to Good	No data

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15N011100	NORE_100	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-High-Good-Good	From Good to Good	No data
IE_SE_15N011300	NORE_110	Gully	Restoration	LAWPRO	High nitrate	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15N011400	NORE_120	No data	No data	No Lead Org	Phosphorus/ sediment and nitrate losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15N011500	NORE_130	No data	No data	No Lead Org	High nitrate	No	Moderate-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15N011600	NORE_140	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data
IE_SE_15N011700	NORE_150	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Good-Good-Good-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15N011750	NORE_160	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data
IE_SE_15N011950	NORE_170	No data	No data	No Lead Org	High nitrate	No	Moderate-Good-Good-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15N012000	NORE_180	Maddoxtown GWS	Protection	NFGWS	High nitrate	No	Poor-Moderate-Good-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15N012090	NORE_190	Clifden - The Highrath GWS	Protection	NFGWS	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15N012130	NORE_200	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data
IE_SE_15N012200	NORE_210	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Good-Moderate-Moderate-Good-Good-Moderate	From Good to Moderate	No data
IE_SE_15N012310	NORE_220	No data	No data	No Lead Org	High nitrate	No	Poor-Moderate-Good-Moderate-Good-Moderate	From Good to Moderate	No data
IE_SE_15N012330	NORE_230	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Poor-Poor-Good-Moderate-Moderate-Moderate	From Moderate to Moderate	--UrbRunOff ----------
IE_SE_15N012400	NORE_240	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	High nitrate	No	Moderate-Moderate-Good-Moderate-Good-Moderate	From Good to Moderate	No data
IE_SE_15N012500	NORE_250	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Unassigned-Unassigned-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15N020100	NUENNA_010	Nuenna	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Moderate-Moderate-Poor-Moderate-Moderate-Moderate	From Moderate to Moderate	Ag----------
IE_SE_15N020400	NUENNA_020	Nuenna	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Poor-Moderate-Poor-Moderate-Poor-Poor	From Poor to Poor	Ag-UWW----------
IE_SE_14O130860	OAKLANDS_010	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data

Waterbody Code	Waterbody Name	AFA ID	AFA Category	Cyc3 AFA Lead Org	FLAG Map Issue ID	HSO WB	EcoStatus Cycle Pattern 2007to2024	Last cycle to current EcoStatus	At Risk Sig Pressure
IE_SE_15O010050	OWVEG (NORE)_010	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15O010080	OWVEG (NORE)_020	IFI National Climate Change Mitigation Research	Catchment Projects	IFI	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15O010160	OWVEG (NORE)_030	Ballypickas GWS	Protection	NFGWS	Risk of nitrate losses (review PIP-N)	No	Good-Good-Moderate-Good-Good-Good	From Good to Good	No data
IE_SE_15O010280	OWVEG (NORE)_040	No data	No data	No Lead Org	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15O010400	OWVEG (NORE)_050	Attanagh GWS	Protection	NFGWS	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15R031100	RATHDOWNEY STREAM_010	Erkina	Restoration	LAWPRO	Point source, nitrate and Phosphorus/ sediment losses	No	Moderate-Moderate-Poor-Poor-Poor-Poor	From Poor to Poor	Ag----------
IE_SE_15R370950	RATHGARVAN_or_ CLIFDEN_010	Brownstown (Pococke)	Restoration	LAWPRO	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Poor-Poor	From Poor to Poor	No data
IE_SE_15S010100	STONYFORD STREAM (KILKENNY)_010	Stoneyford-Kells-Burnchurch	Restoration	LAWPRO	Phosphorus/ sediment and nitrate losses	No	Unassigned-Unassigned-Unassigned-Unassigned-Poor-Poor	From Poor to Poor	Ag---DWW----------
IE_SE_15T010200	TONET_010	Tonet	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	Yes	High-High-High-High-Good-Good	From Good to Good	----Forestry----------
IE_SE_15T010400	TONET_020	Tonet	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Moderate-Good-Poor-Moderate-Moderate-Good	From Moderate to Good	----Forestry----------
IE_SE_15T010600	TONET_030	Tonet	Restoration	LAWPRO	Risk of nitrate losses (review PIP-N)	No	Good-Good-Moderate-Moderate-Moderate-Poor	From Moderate to Poor	----Forestry----------
IE_SE_15T360920	TULLAGHER_010	No data	No data	No Lead Org	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Good-Good	From Good to Good	No data
IE_SE_15T020200	TULLAROAN STREAM_010	Tullaroan stream	Protection	Kilkenny County Council	High nitrate	No	Unassigned-Unassigned-Unassigned-Unassigned-Moderate-Moderate	From Moderate to Moderate	No data
IE_SE_15T020250	TULLAROAN STREAM_020	Tullaroan stream	Protection	Kilkenny County Council	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
IE_SE_15T020450	TULLAROAN STREAM_030	Tullaroan stream	Protection	Kilkenny County Council	Risk of nitrate losses (review PIP-N)	No	Good-Good-Good-Good-Good-Good	From Good to Good	No data
UWW - Urban Wastewater, Hymo-Hydromorphology, Ag- Agriculture, DWW- Domestic Wastewater									

Glossary of Terms

Catchment

In the context of the Water Framework Directive (WFD) a "catchment" refers to one of the 46 major River Basin Districts (RBD) used for water management and planning at EU member state level. Each RBD is an isolated hydrological unit e.g. the Nore. These catchments form the basis for; River Basin Management Plans (RBMPs) every 6 years; monitoring and classification of water bodies (rivers, lakes, estuaries, coastal waters, groundwater); Pressures and measures reporting to the European Commission[4].

Sub-catchments

A sub-catchment is a smaller unit within the Nore catchment, but it is not the smallest unit. A sub-catchment is made of a small group or cluster of waterways/waterbodies. This cluster may not always be an isolated hydrological unit i.e. a sub-catchment boundary may exclude waterbodies that flow in to and out of the where the boundary is drawn. They are fully contained within a "catchment" for example, there are 20 sub-catchments within the Nore catchment boundary.

Sub-basins (waterbodies)

A sub-basin or waterbody is the smallest delineation of a waterway that is used for targeted monitoring and water quality management. A waterbody is an individual subsection of river system. The sub basin boundary represents the topographical and landscape area that drains into that particular sub-section of the river. There are 114 river waterbodies i.e. sub-basins within the Nore catchment boundary.

Monitoring points

Monitoring points or monitoring "stations" for surface waterways (stream, river, lake) are sites that are accessible for carrying out environmental monitoring procedures such as water sampling and ecological assessment. The information collected at monitoring points is used to track progress towards the achievement of the environmental objectives in Ireland's (RBMP) and to assess change in the quality of Ireland's aquatic environment over time[5]. Irelands monitoring programme carried out by the EPA is comprised of 2,422 river sub-basins, 224 lakes, 84 transitional water bodies, 47 coastal waters and 392 groundwater bodies. Monitoring points can vary in the quantity and resolution of data that is collected at each. The two main types of monitoring points are "surveillance" and "operational".

Ecological Status distribution and nutrient losses

Ecological status is the environmental state or condition of the rivers, lakes, canals, estuaries, coastal waters and groundwaters assigned by the EPA and reported to the Water Framework Directive[6,7]. The WFD and national aim for water quality is to achieve good or high ecological status in all waterbodies. Waterbodies that are assigned as status less than good status (moderate, poor or bad)

4 https://www.catchments.ie/guide-water-framework-directive/

5 Ireland's National Water Framework Directive Monitoring Programme, 2019-2021 | Environmental Protection Agency

6 Conditions of our Water | EPA – *EPA publication*

7 *Ireland's National Water Quality Monitoring Programme 2022–2027 | EPA – EPA publication*

are expected to be moderately to severely degraded by a pollutant and/or the habitat is degraded. The biological elements that determine status (e.g. fish, algae, plants) are monitored once every three years. Chemical elements e.g. nutrients such as nitrogen, phosphorus, and ammonium are monitored between 3 and 12 times a year depending on the waterbody type[8]

Nitrate concentrations in many rivers and groundwaters decreased in the period 1990 to 2000, reaching their lowest concentrations in 2009/2010. Currently, nitrate concentrations are elevated in 44% of rivers.[9] The catchments with the highest concentrations of nitrate are spread across the south and southeast of Ireland and the BFFW campaign is working within these catchment areas specifically.

Phosphorus concentrations in rivers are also elevated but generally have been stabilising. Notably a decreasing trend in P concentrations has been observed in Priority Areas for Action. Average levels of river phosphorus are too high in 27% rivers and 32% of lakes.

When these nutrients are considered elevated, it means the recorded level is above the ecological threshold for rivers which are phosphorus limited (greater than 0.035 mg/l P or 0.025 mg / l P for high status waterbodies) and the ecological threshold for marine/estuarine waterways which are nitrogen limited (11.5 mg/l as NO^3 (or 2.6 mg/l as N or 1.8mg / l N for high status waterbodies)[10]). High and good limits

8 Water Quality in 2023 | EPA

9 **https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/EPA-Water-Quality-in-Ireland-Report.pdf**

10 Statutory limit to support Good Ecological Status based on SI No 77 2019 in coastal waters with low salinity, but 1.8 mg/l NO3 as N is also used as guideline value to support Good Ecological Status in rivers ("Evidence based targeting of agricultural measures to reduce nitrogen in catchments to achieve water quality objectives - August 2025").

Notes

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