

3rd Cycle Draft Nore Catchment Report (HA 15)



Catchment Science & Management Unit

Environmental Protection Agency

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Preface

This document provides a summary of the water quality assessment outcomes for the Nore Catchment, which have been compiled and assessed by the EPA, with the assistance of the Local Authority Waters Programme (LAWPRO), local authorities and RPS consultants to inform the draft 3rd Cycle River Basin Management Plan. The information presented includes status and risk categories of all waterbodies, details on protected areas, significant issues, significant pressures, source load apportionment modelling and load reduction assessments for nutrients where applicable, an overview of the 2nd Cycle Areas for Action and a list of proposed 3rd Cycle Areas for Action. These characterisation assessments are largely based on information available to the end of 2018, including the WFD Status Assessment for 2013-2018. Protected Area assessments are based on water quality information up to 2018 for Natura 2000 and Salmonid Waters; 2019 for Drinking Water; and 2020 for Nutrient Sensitive Areas and Bathing Waters.

The purpose of this draft report is to provide an overview of the situation in the catchment, draw comparison between Cycle 2 and Cycle 3, and help support the draft River Basin Management Plan 2022-2027 consultation process. Once the consultation process is completed the report will be finalised to reflect any changes and comments made as a result of the consultation process.

Water Framework Directive – key dates and terminology	
Cycle 2 – EPA Characterisation and Assessment	Characterisation and assessment to inform the Cycle 2 RBMP was largely based on 2010-2015 WFD monitoring data.
Cycle 2 Catchment Assessments	Catchment Assessments based on the Cycle 2 characterisation and assessment were published in September 2018.
2 nd Cycle River Basin Management Plan (RBMP) 2018-2021	This plan was for WFD Cycle 2 which runs from 2016-2021. This RBMP was published late, with this plan covering 2018-2021.
2 nd Cycle Areas for Action	These 189 Areas for Action were selected under the RBMP 2018-2021
Cycle 3 -EPA Characterisation and Assessment	Cycle 3 runs from 2022-2027. Assessments to inform the Cycle 3 RBMP is largely based on 2013-2018 WFD monitoring data. This is the latest WFD monitoring assessment period for which all data are available.
Cycle 3 Catchment Assessments	Catchment Assessments based on the Cycle 3 characterisation and assessment were published in August 2021.
3 rd Cycle River Basin Management Plan 2022-2027	This draft RBMP is for WFD Cycle 3 which runs from 2022-2027. Public consultation on this plan by the DHLGH and LAWPRO is taking place in late 2021 and early 2022.
3 rd Cycle Recommended Areas for Action – Protection/ Restoration/Projects	These recommended Areas for Action have been identified in the draft RBMP 2022-2027 and feedback can be given in the public consultation on this plan. They fall into 3 categories – Areas for Protection, Areas for Restoration and Catchment Projects.

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1 Introduction

This report aims to provide an overview of the water quality status, risk, key issues and significant pressures for all waterbodies in the catchment based on the Characterisation Assessment undertaken for the 3rd Cycle River Basin Management Plan. In addition, a comparative overview of the water quality in the Nore catchment between Cycle 2 and Cycle 3 characterisation is provided along with a summary of the progress made in the 2nd Cycle Areas for Action. The recommended list for the 3rd Cycle Areas for Action is also provided.

To provide context, the Nore catchment 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 (Figure 1). The largest urban centre in the catchment is Kilkenny. The other main urban centres in this catchment are Abbeylisc, Callan and Thomastown. The total population of the catchment is approximately 94,734 with a population density of 37 people per km².

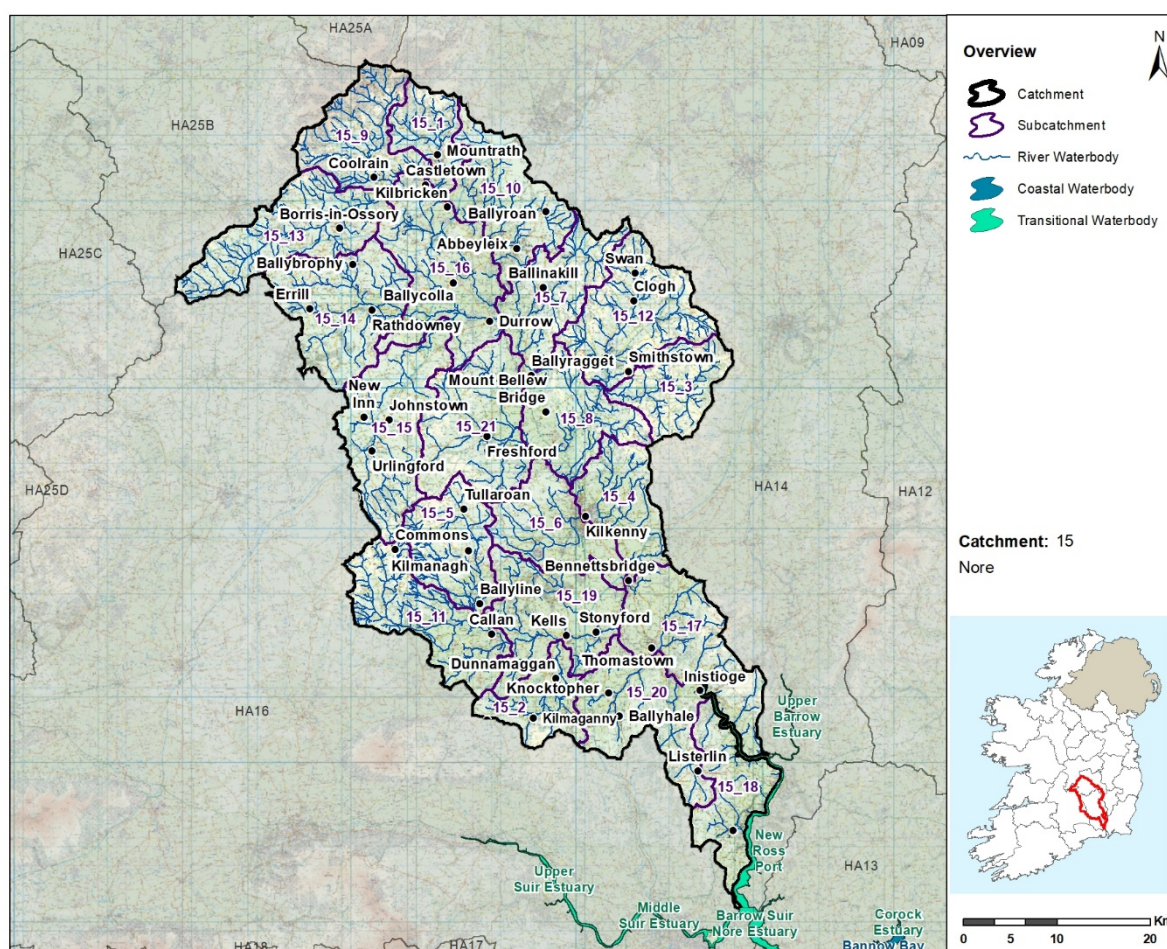


Figure 1: Overview of subcatchments in the Nore catchment

The Nore catchment is divided into 21 subcatchments (Figure 1) with 123 river waterbodies, five transitional waterbodies and 48 groundwater bodies. There are no lakes or coastal waterbodies in the catchment (Figure 2).

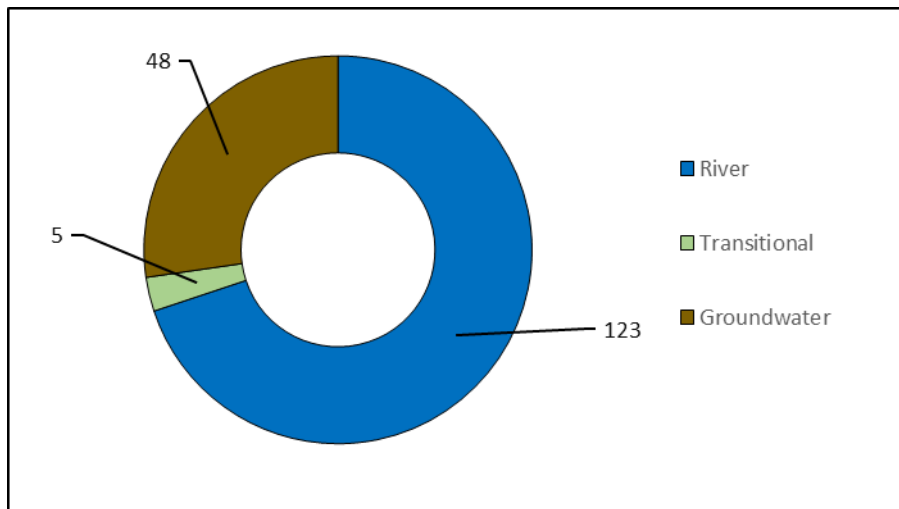


Figure 2: Waterbody types and numbers in the Nore Catchment.

2 Waterbody Overview

2.1 Waterbody Status

- ◆ This assessment to inform the 3rd Cycle RBMP is largely based on WFD monitoring data for the period 2013-2018, which is the latest WFD monitoring assessment period for which all data are available.
- ◆ For this assessment to inform Cycle 3, there are nine waterbodies achieving High Status, 87 achieving Good Status, 29 achieving Moderate Status and 17 at Poor Status. There are 34 waterbodies that do not have status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.
- ◆ Seven river waterbodies that must achieve High Ecological Status (HES) in this catchment. These waterbodies are listed in Appendix 1. Of the seven HES Environmental Objective waterbodies, five are achieving High Status, while two (Killeen (Delour)_010 & Muckalee_010) are at Good Status.
- ◆ The overall number of waterbodies achieving High Status has increased by four, from five to nine, between Cycle 2 and Cycle 3 (Figure 3 & Table 1). The number of waterbodies at Moderate Status increased by five, from 24 to 29. There was a decrease in the number of Good Status waterbodies from 96 to 87.

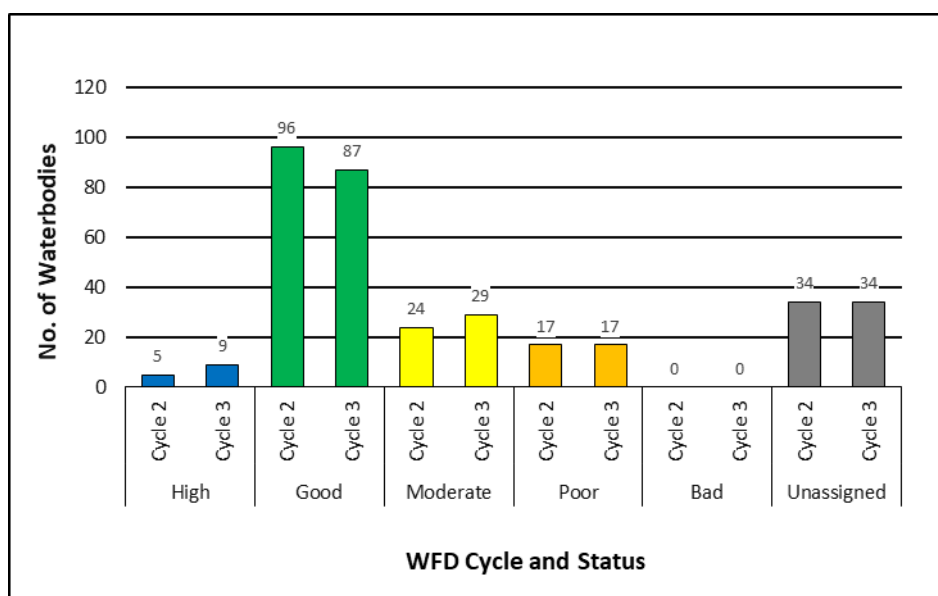


Figure 3: Waterbody Status Breakdown (All waterbodies)

Table 1: Waterbody Status Breakdown Table (All Waterbodies)

2013-2018 Status	River		Lake		Transitional		Coastal		Groundwater		Total	
	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3
High	5	9	0	0	0	0	0	0	0	0	5	9
Good	46	37	0	0	2	3	0	0	48	47	96	87
Moderate	21	27	0	0	3	2	0	0	0	0	24	29
Poor	17	16	0	0	0	0	0	0	0	1	17	17
Bad	0	0	0	0	0	0	0	0	0	0	0	0
Un-assigned	34	34	0	0	0	0	0	0	0	0	34	34
Total	123	123	0	0	5	5	0	0	48	48	176	176

- ◆ Figure 4 illustrates the change in status between Cycle 2 (assessment based largely on 2010-2015 WFD Monitoring data) and Cycle 3 (assessment largely based on 2013-2018 WFD monitoring data).
- ◆ Over this period 21 (15%) waterbodies have improved in status, 100 (70%) waterbodies have remained unchanged and 21 (15%) waterbodies have declined in status.¹
- ◆ There is no change in the overall status of waterbodies across the catchment since the Cycle 2 assessment.

¹ Unassigned waterbodies have not been considered in this Status class change assessment and therefore are not represented in Figure 5. Percentage displayed in Figure 4 are in relation to the total number of waterbodies with status assigned in both cycles, as opposed to total number of all waterbodies.

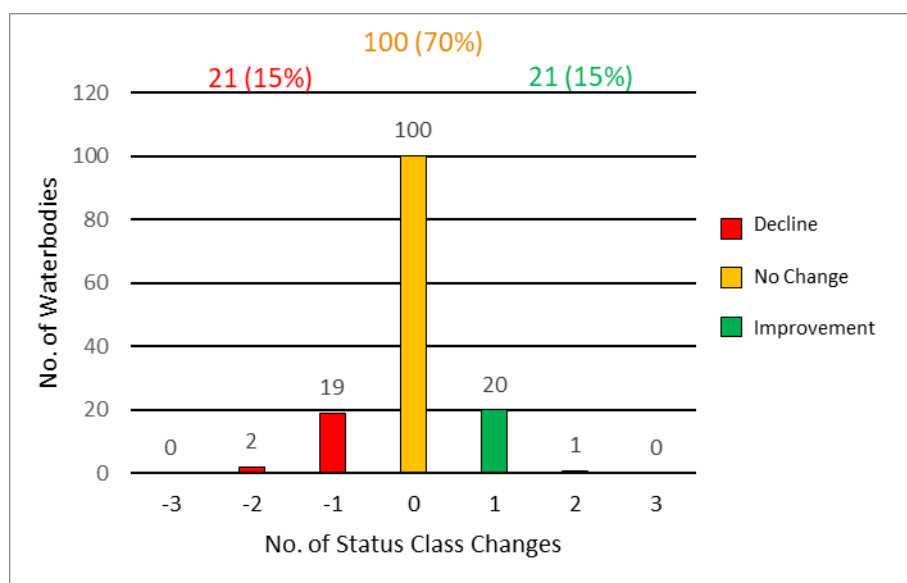


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- ◆ There are six surface waterbodies in the catchment identified as Drinking Water Protected Areas (DWPA) based on water abstraction data on the abstraction register and from other sources in 2018. All groundwater bodies nationally are identified as DWPA. DWPA layers can be viewed at <https://gis.epa.ie/EPAMaps/Water> - see *Protected Areas - Drinking Water*.
- ◆ Four groundwater bodies in the catchment did not meet the DWPA objective in 2019:
 - Ballingarry (IE_SE_G_009) groundwater body is the source for the Dunmore GWS private water supply (1500PRI3049) which had Nitrate exceedances;
 - Templemore (IE_SE_G_131) groundwater body is the source for the Templetuohy public water supply (2800PUB1013) which had Nitrate exceedances;
 - Durrrow (IE_SE_G_156) groundwater body is the source for the Cullahill PRI private water supply (1600PRI3001) which had Nitrate exceedances;
 - Killkenney-Ballynakill Gravels (IE_SE_G_163) groundwater body is the source for the Seskin Lisdowney GWS private water supply (1500PRI3078) which had Nitrate exceedances.
- ◆ For more detailed information please see the EPA reports on drinking water quality in 2019 for [Public Supplies](#)² and [Private Supplies](#)³.

2.2.2 Bathing Waters

- ◆ There are no bathing waters in or directly adjacent to the catchment identified under the Bathing Water Regulations 2008.

²<https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/drinking-water-quality-in-public-supplies-2019.php>

³<https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/focus-on-private-water-supplies-2019.php>

- ◆ For more detailed information please see the EPA report on [bathing water quality in 2020⁴](#).

2.2.3 Shellfish Areas

- ◆ There is one designated shellfish area in the catchment.
- ◆ The Marine Institute assessed the average dissolved concentrations for metals in shellfish waters for the period 2016-2019 and the microbial quality in shellfish flesh for 2018. This assessment was used to determine if the WFD protected area objective for shellfish areas was met.
- ◆ Details on the shellfish area and its associated waterbody is summarised in Table 2.

Table 2: Designated shellfish areas in the catchment

Shellfish area		Water body intersection		Objective met?	
Name	Code	Name	Code	Yes	No
Waterford Harbour (Cheekpoint/Arthurstown/Creadan)	IEPA2_0056	New Ross Port	IE_SE_100_0200	✓	

The locations of Protected Areas associated with Public Health (Drinking Water, Bathing Water and Shellfish Areas, where applicable) are illustrated in Figure 5 below.

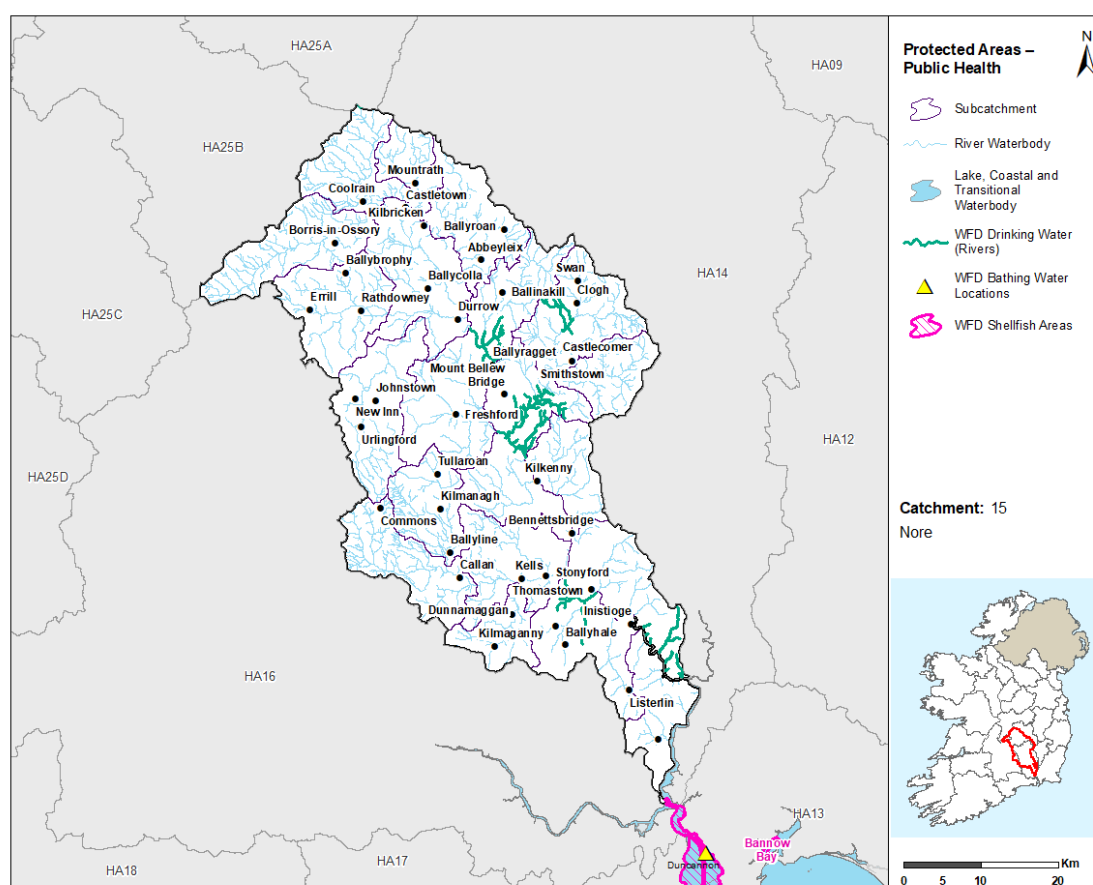


Figure 5: Protected Areas – Public Health

⁴<https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/bathing-water-quality-in-ireland-2020-.php>

2.2.4 Natura 2000 Sites and Salmonid Waters

- ◆ Many of the habitats and species listed for protection in the Birds and Habitats Directives are water dependent. The Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) with water dependent habitats or species in this catchment are presented in Figure 6, along with waterbodies designated as salmonid waters (S.I. No. 293 of 1988) and waterbodies with Fresh Water Pearl Mussel habitat, where identified.
- ◆ There are 12 SACs in this catchment, 10 of which have water dependent habitats or species. The waterbodies within these SACs were assessed for associated water dependent habitats and species and if they met the supporting requirements for habitats and species using their 2013-2018 WFD status. For the purposes of the assessment, it was assumed that Good ecological status is adequate to meet the supporting conditions of all habitats and species with the exception of the Freshwater Pearl Mussel, which has additional requirements for supporting conditions set out in the Freshwater Pearl Mussel Regulations (S.I. No 296 of 2009) for macroinvertebrates, filamentous algae, phytobenthos, macrophytes and siltation.
- ◆ Specific water supporting conditions have not been identified for the dependent bird species in the SPAs and so waterbodies associated with SPAs are not included in this assessment.

Results of the overall assessment for this catchment are outlined in Table 3 below, information at a waterbody level can be viewed at [Catchments.ie](https://www.catchments.ie).⁵

Table 3: Natura 2000 Network Assessment Summary

Water Body Type	Total No.	Meeting the Requirements	Did not meet the Requirements	Unknown*
Rivers	66	28	20	18
Transitional & Coastal	5	3	2	0

*As the waterbody status was unassigned.

- ◆ There are five river waterbodies with FWPM habitats, four of which had achieved the required macroinvertebrate standard as set out in the FWPM Regulations, one was not assessed.
- ◆ There is one groundwater body delineated and assessed as a Groundwater Dependent Terrestrial Ecosystem for this catchment. GWDTE-The Loughlans Turlough (SAC000407) achieved Good Status (2016-2018).
- ◆ Water dependent SACs/ SPAs (including FWPM SAC sub-catchments) and salmonid waters in the catchment are illustrated in Figure 6.

⁵<https://www.catchments.ie/download/catchments-assessments-protected-areas-supporting-documents/>

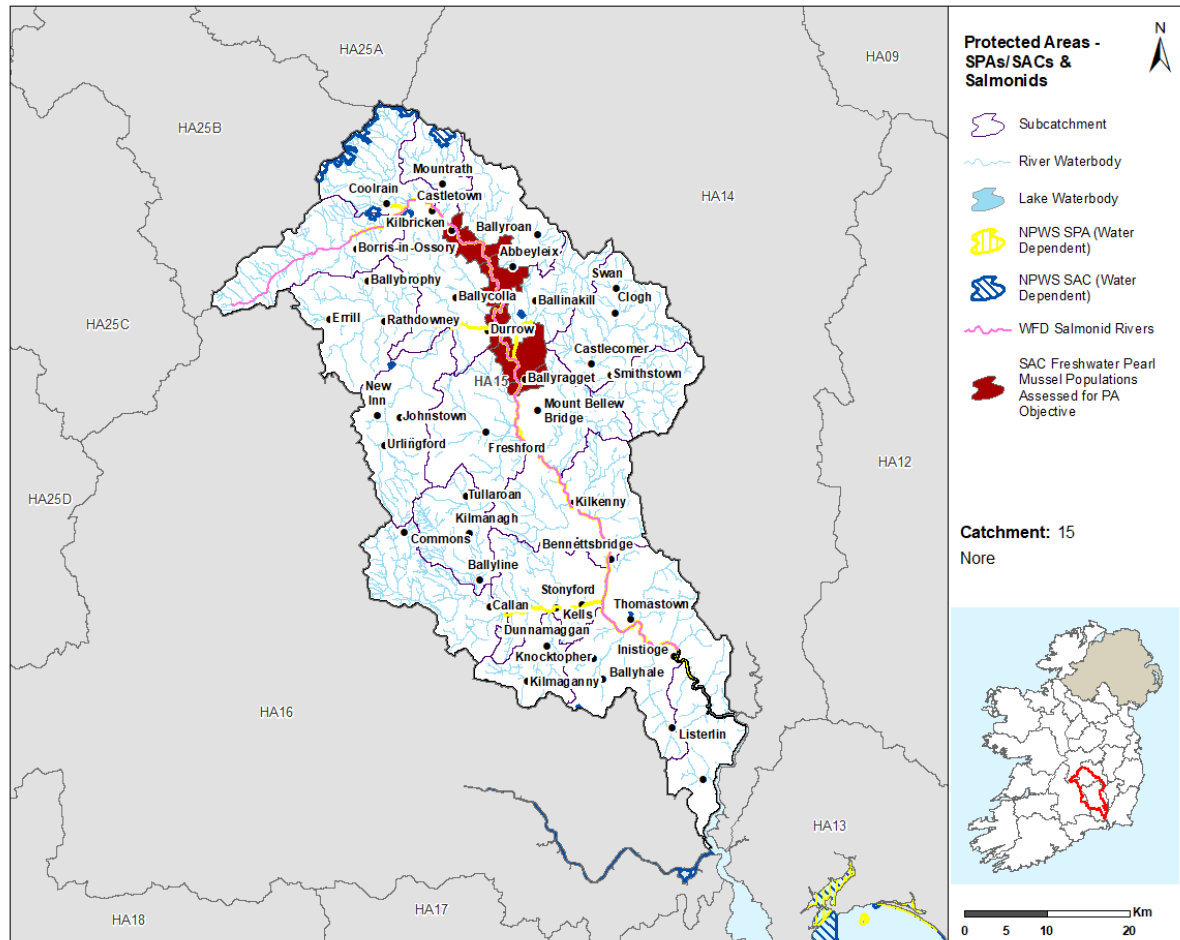


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

2.2.5 Nutrient Sensitive Areas

- ◆ The EPA carried out a review of Nutrient Sensitive Areas (NSAs) downstream of large urban waste water discharges in 2020. Once the regulations are in place, and nutrient sensitive areas have been identified, additional nutrient removal must be applied (if not already applied) to waste water treatment plants discharging to the sensitive area. If this treatment was in place the objective was deemed to have been met.
- ◆ There are four NSAs in the catchment and these are downstream of two urban wastewater agglomerations. The list of NSAs, associated agglomerations and intersecting water bodies are provided in Table 4.
- ◆ NSA objectives are being met in all of the NSAs in the catchment.

Table 4: Nutrient sensitive areas in the catchment

Nutrient Sensitive Area	Agglomeration		Water body		Objective met?		Comment
	Name	Code	Name	Code	Yes	No	
Nore River (180-250)	Kilkenny City	D0018-01	Nore_180	IE_SE_15N012000	✓	☐	Tertiary Treatment in place
			Nore_190	IE_SE_15N012090			
			Nore_200	IE_SE_15N012130			
			Nore_210	IE_SE_15N012200			
			Nore_220	IE_SE_15N012310			
			Nore_230	IE_SE_15N012330			
			Nore_240	IE_SE_15N012400			
			Nore_250	IE_SE_15N012500			
Nore Estuary	Kilkenny City	D0018-01	Nore Estuary	IE_SE_100_0400	✓	☐	Tertiary Treatment in place
Barrow-Nore Estuary	New Ross	D0036-01	Barrow Suir Nore Estuary	IE_SE_100_0100	✓	☐	Tertiary Treatment in place
New Ross Port	New Ross	D0036-01	New Ross Port	IE_SE_100_0200	✓	☐	Tertiary Treatment in place

2.3 Heavily Modified Waterbodies

- ◆ Based on the 1st and 2nd RBMPs there are currently three designated heavily modified water bodies (HMWB) in the catchment (Bregagh (Kilkenny)_030, Lower Suir Estuary (Little Island-Cheekpoint) and New Ross Port) due to port facilities. Bregagh (Kilkenny)_030 was classified as having Poor Ecological Potential in 2013-15, while the other two HMWBs were of Moderate Ecological Potential. Bregagh (Kilkenny)_030 remains at Poor Ecological Status, New Ross Port remains at Moderate Ecological Potential whereas Lower Suir Estuary (Little Island – Cheekpoint) has improved to Good Ecological Potential. There will be a consultation period on HMWBs for the 3rd Cycle RBMP and this will be completed for inclusion in the 3rd Cycle Final RBMP.

2.4 Artificial Waterbodies

- ◆ There are no artificial waterbodies (AWBs) present in the Nore Catchment.

3 Waterbody Risk

3.1 Overview of Risk

- ◆ A waterbody that is *At Risk* means that either the waterbody is currently not achieving its Water Framework Directive (WFD) environmental objective of Good or High Ecological Status or that there is an upward trend in nutrients or ammonia and if this trend continues the waterbody Status will decline by the end of Cycle 3 and will fail to meet its environmental objective.
- ◆ A waterbody can be considered as *Review* for the following three reasons:
 - The waterbody does not have status assigned to it yet, it is referred to as an unassigned waterbody, and therefore there is not enough evidence to determine if it is *At Risk* or *Not At Risk*.

- The waterbody has shown some slight evidence or improvement, but more evidence is needed before it can be considered as *Not At Risk*.
- Measures are planned or have already been implemented for the waterbody and no further measures should be applied until there is enough time to assess if these measures are working.
- ◆ A waterbody is *Not At Risk* when it is achieving its environmental objective of either High or Good Status and that there is no evidence indicating that there is a trend towards status decline.

In total there are 176 waterbodies in the Nore Catchment and 64 (36%) of these are currently *At Risk*, 50 (28%) in *Review* and 62 (35%) are *Not At Risk*.

3.2 Surface Waters

- ◆ For the 123 river waterbodies, 53 (43%) are *At Risk*, 29 (24%) are in *Review* and 41 (33%) are *Not At Risk*.
- ◆ For the five transitional waterbodies, one (Upper Barrow Estuary) is in *Review* and four (New Ross Port, Barrow Nore, Estuary Upper, Nore Estuary & Lower Suir Estuary) are *At Risk*.
- ◆ The largest proportion of *At Risk* waterbodies are found in rivers, accounting for 53 (83%) of 64 *At Risk* waterbodies. Figure 7 gives an overview of the breakdown of risk across waterbody types for both Cycle 2 and Cycle 3.
- ◆ Overall there is an increase in eight *At Risk* waterbodies, a reduction of six *Not At Risk* waterbodies and two *Review* waterbodies between Cycle 2 and Cycle 3.

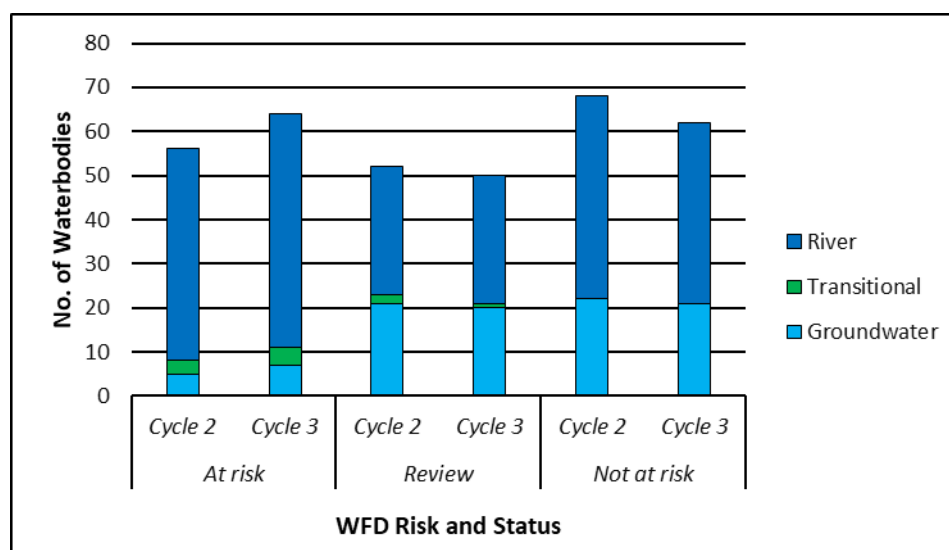


Figure 7: Number of waterbodies in each risk category

- ◆ The location of the *At Risk*, *Review* and *Not At Risk* surface waterbodies for Cycle 3 are shown in Figure 8 while the surface waterbodies that have experienced a change in risk between Cycle 2 and Cycle 3 are shown in Figure 9.

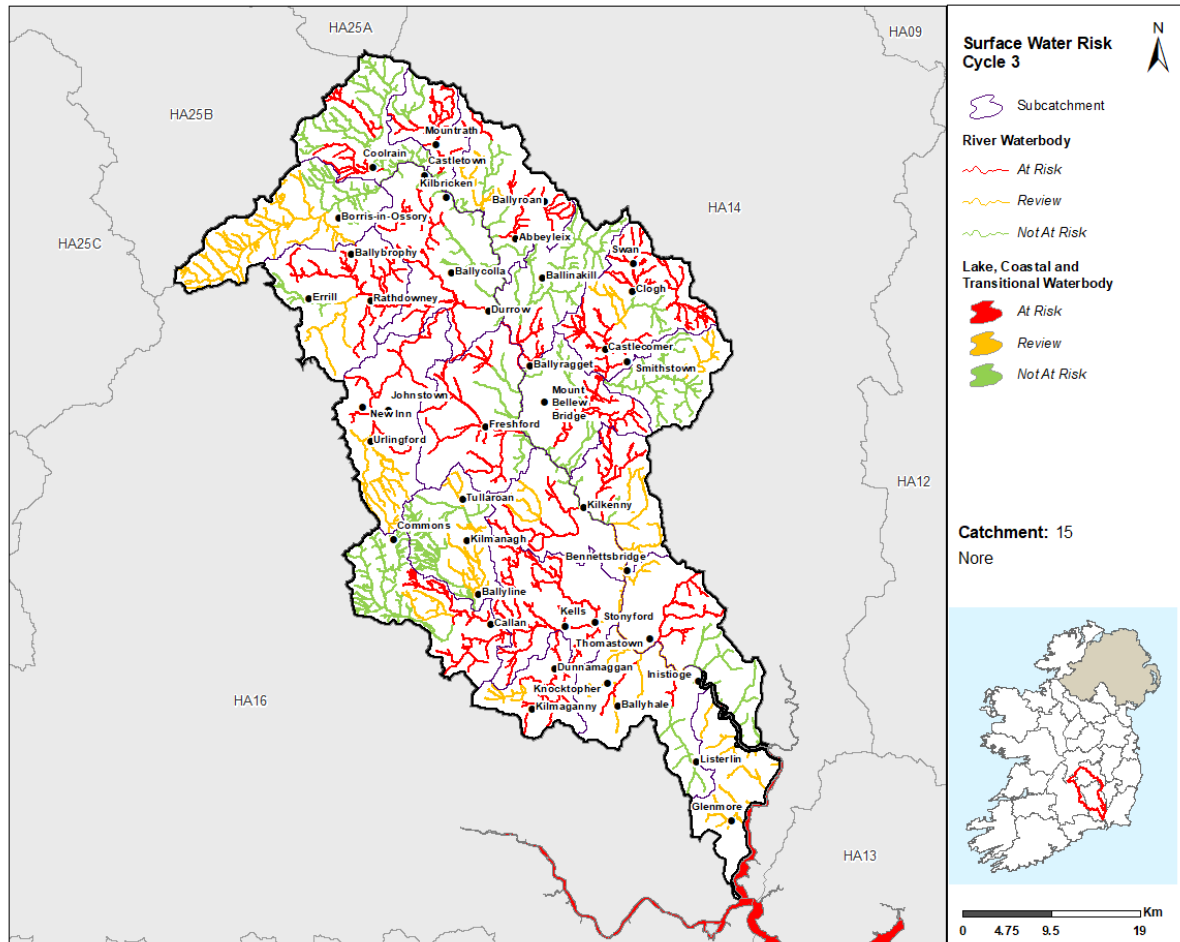


Figure 8: Surface Water Risk Cycle 3

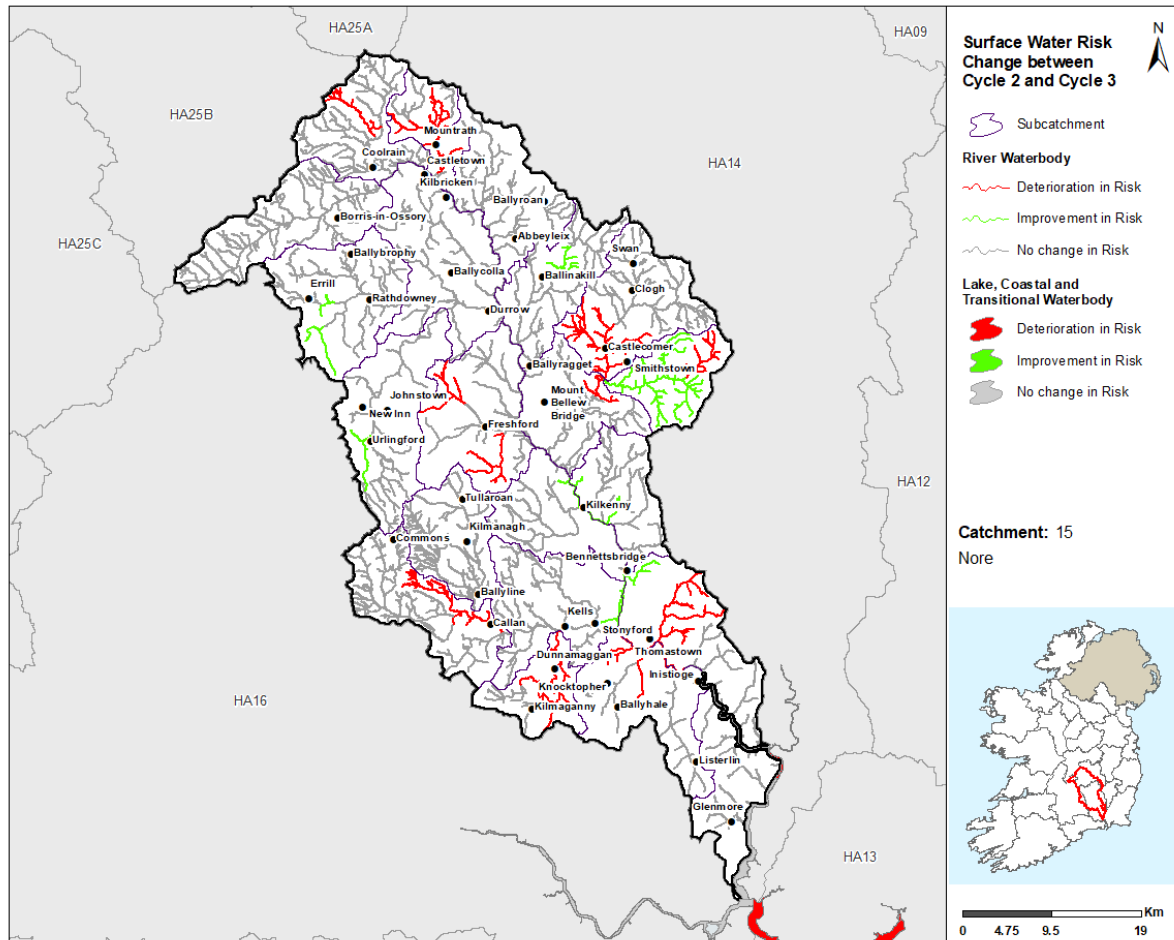


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- ◆ For the 48 groundwater bodies, seven (15%) are *At Risk*, 20 (42%) are in *Review* and 21 (44%) are *Not At Risk*.
- ◆ In Cycle 2, there were five groundwater bodies *At Risk* in this catchment, 21 in *Review* and 22 *Not At Risk*.
- ◆ The location of the *At Risk*, *Review* and *Not At Risk* groundwater bodies for Cycle 3 are shown in Figure 10 while the groundwater bodies that have experienced a change in risk between Cycle 2 and 3 are shown in Figure 11.

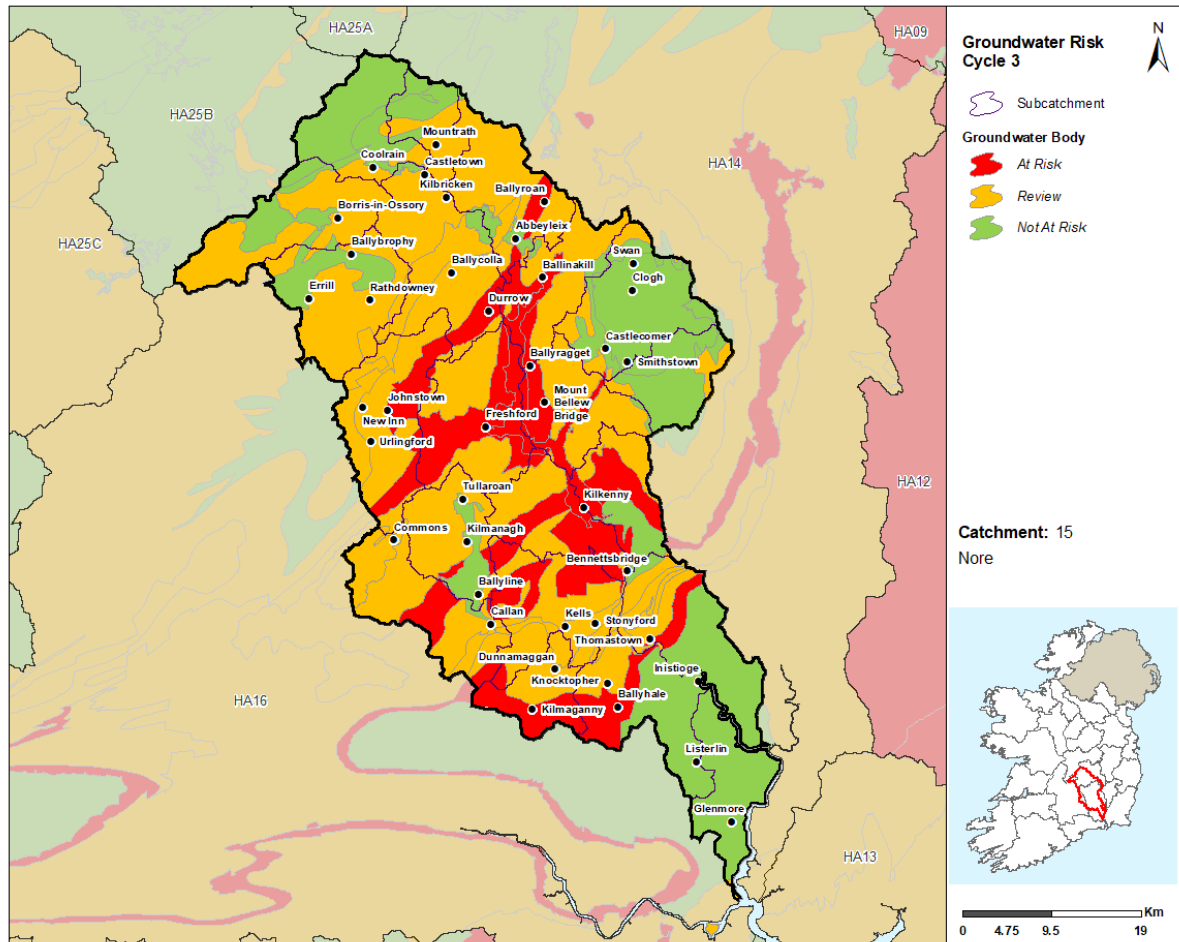


Figure 10: Cycle 3 Groundwater Body Risk

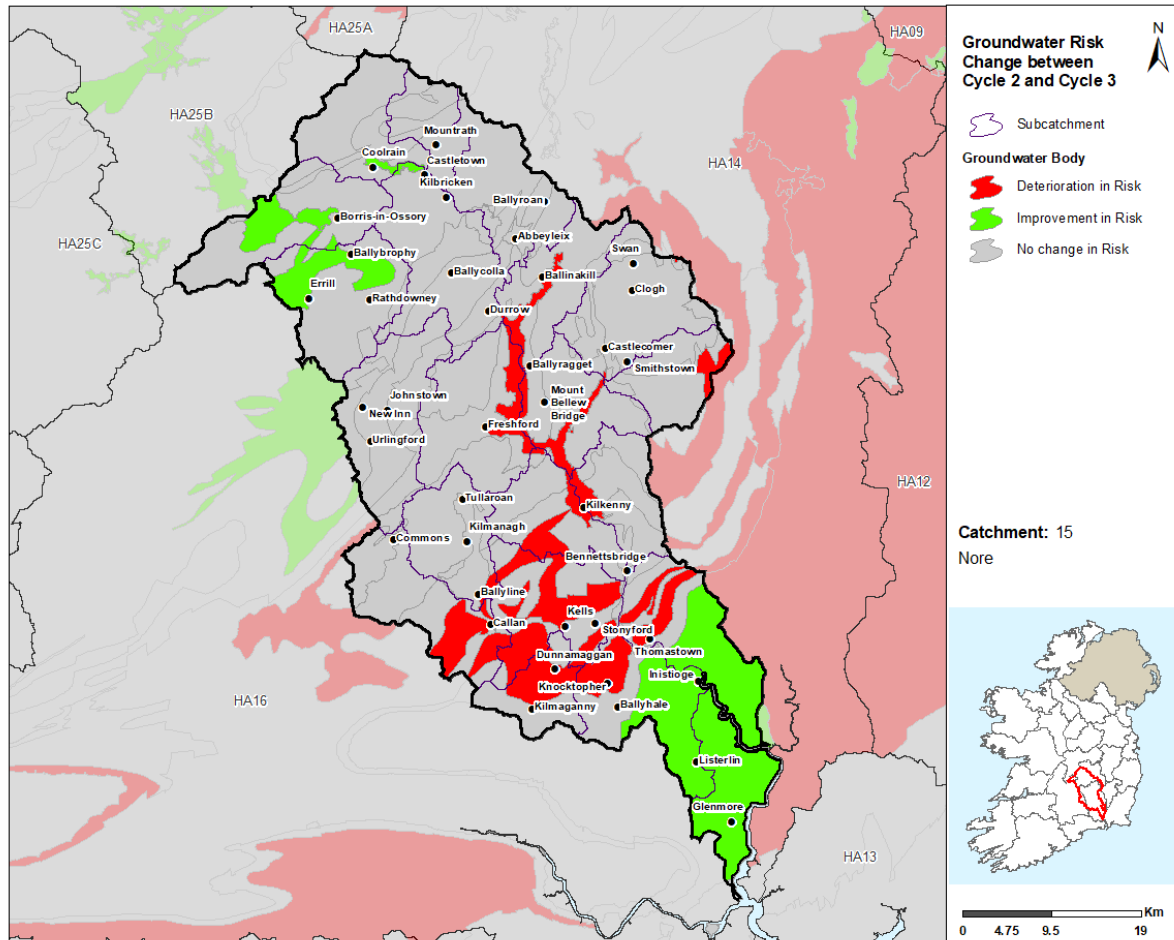


Figure 11: Groundwater Body Risk Change between Cycle 2 & Cycle 3

3.4 Heavily Modified Waterbodies

- ◆ The three designated heavily modified water bodies (HMWB) in the catchment (Bregagh (Kilkenny)_030, Lower Suir Estuary (Little Island-Cheekpoint) and New Ross Port) are all *At Risk* of not meeting their Environmental Objectives. There may be changes to HMWB designation once the Cycle 3 HMWB assessment has been completed and consulted on for the 3rd Cycle Final RBMP.

3.5 Artificial Waterbodies

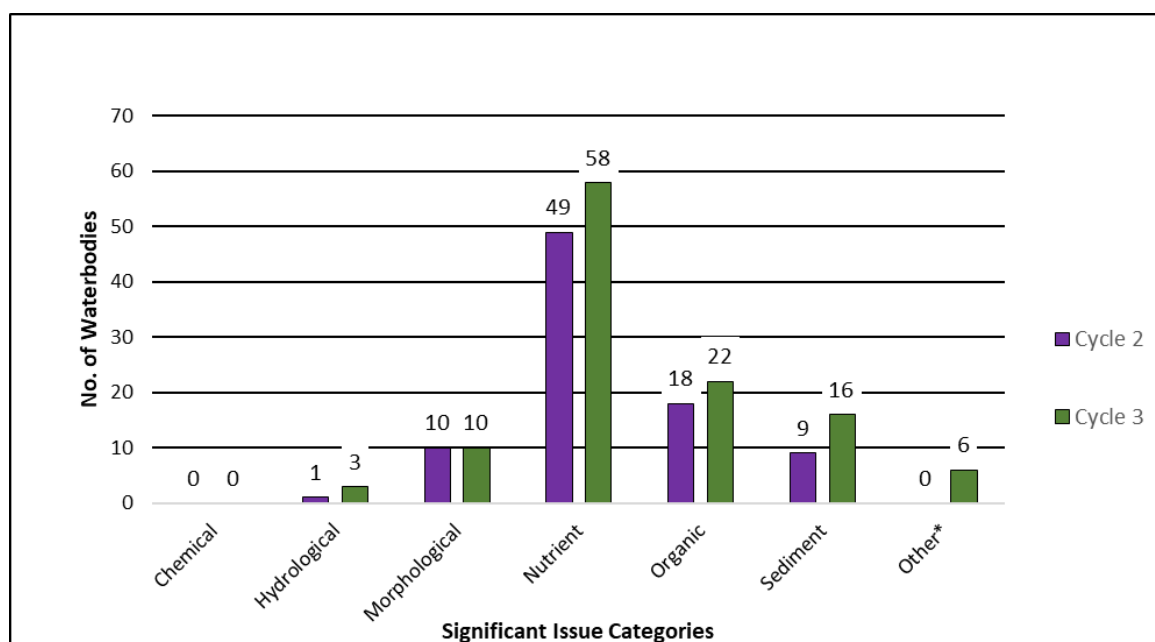
- ◆ There are no artificial waterbodies (AWBs) present in the Nore Catchment.

4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

- ◆ Excess nutrients remain the most prevalent issue in the Nore Catchment (Figure 12) impacting 58 waterbodies in Cycle 3. Organic pollution is impacting 22 waterbodies and sediment, morphological impacts and hydrological impacts are affecting 16, 10 and three waterbodies, respectively.

- For rivers, the main significant issues are nutrient pollution (47), organic pollution (19), sediment (16) and morphological impacts (10).
 - For transitional waterbodies the significant issues are nutrient (impacting all four At Risk transitional waterbodies) and organic pollution impacting three transitional waterbodies (New Ross Port, Nore estuary & Lower Suir Estuary (Little Island - Cheekpoint)).
 - Nutrient pollution is the issue in all seven *At Risk* groundwater with additional unknown impacts in five of these.
- ◆ Between Cycle 2 and Cycle 3 the number of waterbodies impacted by each significant issue type increased (except morphological issues which remained at 10) with nutrients issues the most notable increase, from 49 to 58. The number of waterbodies impacted by sediment increased by seven, from nine to 16. Organic pollution has increased by five, from 18 to 23. The number of waterbodies impacted by hydrological issues and unknown impacts have increased from one to three and from zero to six respectively.



*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 12: Significant Issues across all *At Risk* WBs between Cycle 2 and Cycle 3

4.2 High Status Objective Waterbodies

- ◆ In Cycle 3 there are three High Status Objective waterbodies that are currently *At Risk*. Needleford Stream_010 is impacted by nutrient pollution, organic pollution and hydrological issues. Muckalee_010 is impacted by nutrient pollution and sediment and Killeen (Delour)_010 is impacted by sediment.
- ◆ Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues and sediment issues have each increased by one from one to two. Hydrological issues have increased by one waterbody (from zero to one).

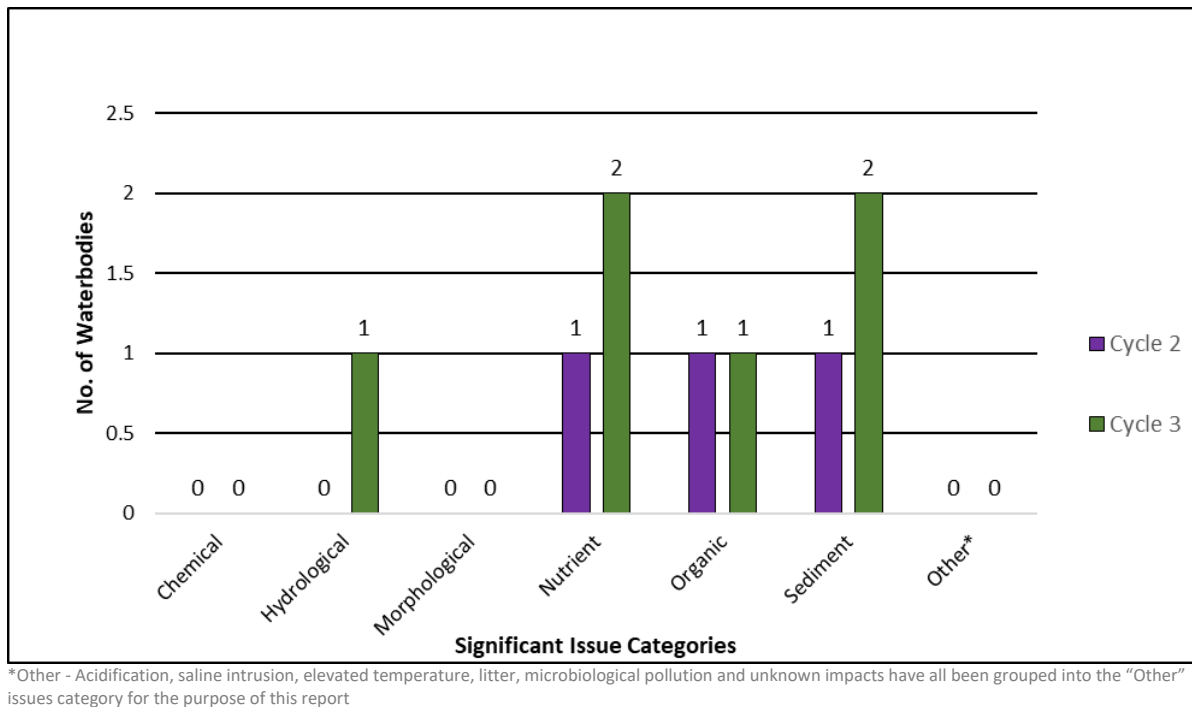
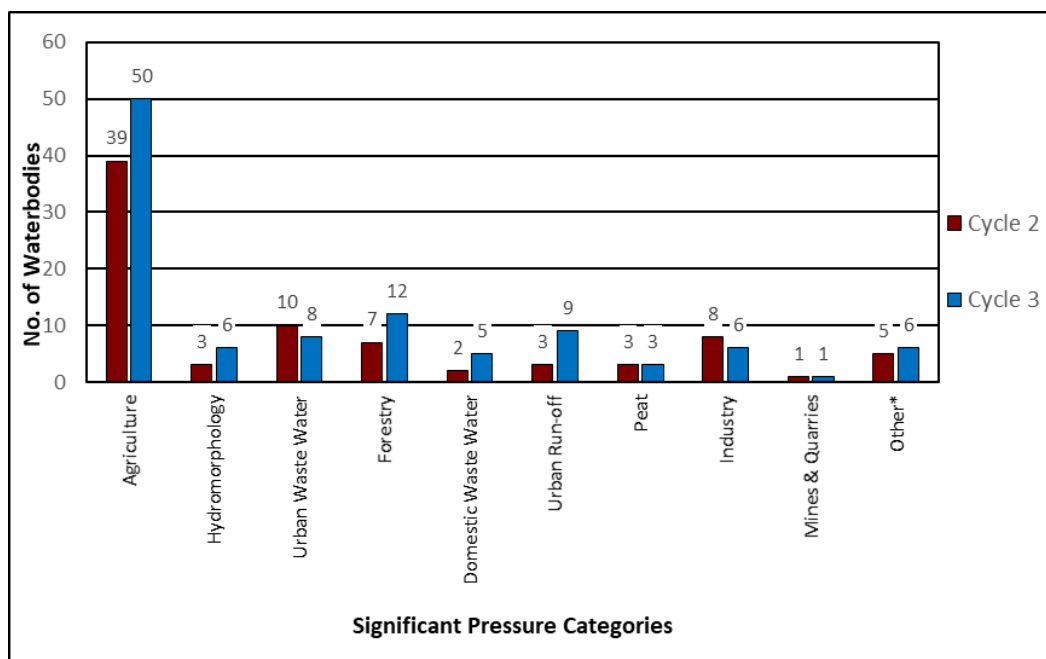


Figure 13: Significant Issues in *At Risk* High Status Objective Waterbodies

5 Significant pressures in *At Risk* Waterbodies

5.1 All Waterbodies

- ◆ Where waterbodies have been classed as *At Risk*, significant pressures have been identified.
- ◆ Figure 14 shows a breakdown of the number of *At Risk* waterbodies in each significant pressure category.
- ◆ The significant pressure affecting the greatest number of waterbodies is agriculture, followed by forestry, urban run-off, urban waste water, hydromorphology, industry, domestic waste water, peat, abstractions (other), golf courses (other) and mines & quarries. There are also three waterbodies impacted by unknown pressure types.
- ◆ When comparing Cycle 2 and Cycle 3 the biggest change is an increase of 11 waterbodies where agriculture is a significant pressure from 39 waterbodies in Cycle 2 to 50 waterbodies in Cycle 3. This suggests that agricultural pressures are the major contributors to the overall decline in status of 21 waterbodies since Cycle 2.



*Other – abstractions, aquaculture, atmospheric, anthropogenic pressures, historically polluted sites, waste, water treatment and invasive species have all been grouped into the “Other” pressure category for the purpose of this report

Figure 14: Significant Pressure (All At Risk Waterbodies)

5.1.1 Pressure Type

5.1.1.1 Agriculture

- ◆ Agriculture is a significant pressure in 39 river waterbodies, four transitional waterbodies and seven groundwater bodies in Cycle 3. Phosphorus loss to surface waters from, for example, direct discharges; or runoff from yards, roadways or other compacted surfaces, or runoff from poorly draining soils remains an issue since Cycle 2. High nitrates concentrations have been identified many in waterbodies across the catchment in Cycle 3, which has contributed to an increase in the number of waterbodies impacted by nutrient pollution from agricultural sources. Sediment can also be a problem from land drainage works, bank erosion from animal access or stream crossings.

5.1.1.2 Forestry

- ◆ Forestry is a significant pressure in 12 river waterbodies in Cycle 3, an increase by five since Cycle 2. The issues are a range of forestry activities taking place that include clearfelling and drainage, which have resulted in heavy siltation and excess nutrients in surface water bodies.

5.1.1.3 Urban run-off

- ◆ Diffuse urban pressures, caused by misconnections, leaking sewers and runoff from paved and unpaved areas, have been identified as a significant pressure in eight river waterbodies as well as Barrow Nore Estuary Upper are impacted by Kilkenny, Castlecomer, Clogh, Dunnamaggan, Callan, Ballyhale/ Knocktopher, Ballyragget, Thomastown and New Ross urban areas. Nutrient and organic pollution are the significant issues.

5.1.1.4 Urban waste water

- ◆ Urban waste water agglomerations have been identified as a significant pressure in eight *At Risk* river waterbodies (
- ◆
- ◆ Table 5). Of the eight agglomerations identified as pressures, none are scheduled for upgrade under Irish Water's Capital Investment Programme (2020-2024). However, Castlecomer, Rathdowney, Stonyford and Freshford were upgraded prior to 2020.

Table 5: Waste Water Treatment Agglomerations identified as significant pressures in *At Risk* waterbodies in Cycle 3

Facility name	Facility Type	Waterbody	2013-18 Ecological Status	Irish Water's Expected CIP Completion Date ⁶
Ballyroan D0385	Agglomeration PE of 500 to 1,000	BALLYROAN_010	Poor	N/A
Castlecomer D0149	Agglomeration PE of 2,001 to 10,000	DININ (NORTH)_040	Moderate	N/A
Rathdowney D0288	Agglomeration PE of 2,001 to 10,000	ERKINA_030	Moderate	N/A
Kilmaganny A0155	Agglomeration PE < 500	GLORY_010	Poor	N/A
Callan D0159	Agglomeration PE of 2,001 to 10,000	KING'S (KILKENNY)_030	Moderate	N/A
Stonyford D0338	Agglomeration PE < 500	KING'S (KILKENNY)_050	Moderate	N/A
Ballyhale-Knocktopher D0530	Agglomeration PE of 500 to 1,000	LITTLE ARRIGLE_010	Unassigned	N/A
Freshford D0526	Agglomeration PE of 1,001 to 2,000	NUENNA_020	Moderate	N/A

- ◆ Urban waste water significant pressures are impacting two less waterbodies than in Cycle 2 (a decrease from 10 to eight waterbodies impacted). The following Agglomerations were listed as pressures in Cycle 2 but are not significant pressures in Cycle 3.
 - Gortnahoe (A0423)
 - Urlingford (D0336)
 - Bennettbridge (D0400)
 - Johnstown D0401
 - Kells A0161
- ◆ Castlecomer (D0149) was added as significant pressures in Cycle 3.

5.1.1.5 Hydromorphology

- ◆ Hydromorphology is a significant pressure in six river waterbodies. Channelisation is the dominant hydromorphology subcategory in the catchment with five river waterbodies (Ballyroan_020, Bregagh (Kilkenny)_030, Glory_010, Goul_060 & Gully_020) within the catchment subject to extensive modification mainly due to drainage schemes. Land drainage was identified as an impact

⁶ Based on Irish Water's Capital Investment Programme (2020-2024) as of February 2021 and may be subject to change.

on King's (Kilkenny)_040 river waterbody. In addition to channelization, an embankment scheme is impacting Bregagh (Kilkenny)_030 river waterbody.

5.1.1.6 Industry

- ◆ Industry has been identified as a significant pressure in six river waterbodies in Cycle 3. These point source discharges, causing nutrient and organic issues, arise from industrial discharges (Table 6).

Table 6: Breakdown of Cycle 3 Industry Significant Pressures in the Nore Catchment

Waterbody Code	Waterbody Name	Waterbody Type	Emission Type	Name	Impact
IE_SE_15A020300	ARRIGLE_030	River	Section 4	N/A*	Nutrient & Organic
IE_SE_15B020350	BREGAGH (KILKENNY)_030	River	Section 4	N/A*	Nutrient
IE_SE_15E010200	ERKINA_030	River	IE	Dawn Meats Ireland t/a Meadow Meats	Nutrient
IE_SE_15E010300	ERKINA_040	River	IE	Dawn Meats Ireland t/a Meadow Meats	Nutrient
IE_SE_15L010200	LITTLE ARRIGLE_010	River	Section 4	N/A*	Nutrient
IE_SE_15N011400	NORE_120	River	IPC	Glanbia Ireland (Ballyragget)	Nutrient

*Name of facility not provided during characterisation

5.1.1.7 Domestic waste water

- ◆ Domestic waste water has been identified as a significant pressure in five river waterbodies. This is due to a concentration of domestic waste water treatment systems in close proximity to the water bodies. The significant issue is excess nutrients entering surface waters. Furthermore, some of these locations are located on areas of high susceptibility to phosphate transport via near surface pathways and areas of high susceptibility to nitrate transport via sub-surface pathways. Oxygen conditions are impacted by sewage in the Killeen (Delour)_010 river waterbody which is believed to be from domestic waste water however Laois County Council have not yet carried out septic inspections in the area.

5.1.1.8 Extractive industry

- ◆ *Peat*
Peat drainage and extraction remains a significant pressure in three river waterbodies (Cappanacloghy_010, Clonawoolan Stream_010 & Needleford Stream_010. Elevated ammonia concentrations, increased sedimentation and nutrient impacts are the significant issues.

5.1.1.9 Other significant pressures

- ◆ *Abstraction*
Abstraction for public water supply was identified as a significant pressure in Dinin (Main Channel)_020 from Kilkenny City (Radestown) PWS and Needleford Stream_010 from Mountrath No 1 PWS. Altered habitat due to hydrological changes identified as the issue impacting these waterbodies.

Golf Courses

A Golf course is located directly adjacent to the King's (Kilkenny)_040 waterbody and has been identified as a pressure causing nutrient and organic pollution in the river.

◆ *Unknown anthropogenic*

The significant pressures impacting two river waterbodies (Ballyroan_020 & King's (Kilkenny)_030) and one groundwater body (Kilkenny) are unknown.

5.1.1.10 Mines & Quarries

- ◆ A quarry has been identified as a potential significant pressure in Dinin (Main Channel)_020 river waterbody, however the impact type is unknown.

Figure 15a –Figure 20 illustrates the locations of waterbodies for the six most common pressures in order of prevalence (agriculture, forestry, urban run-off, urban waste water, hydromorphology & industry) within the catchment in Cycle 3.

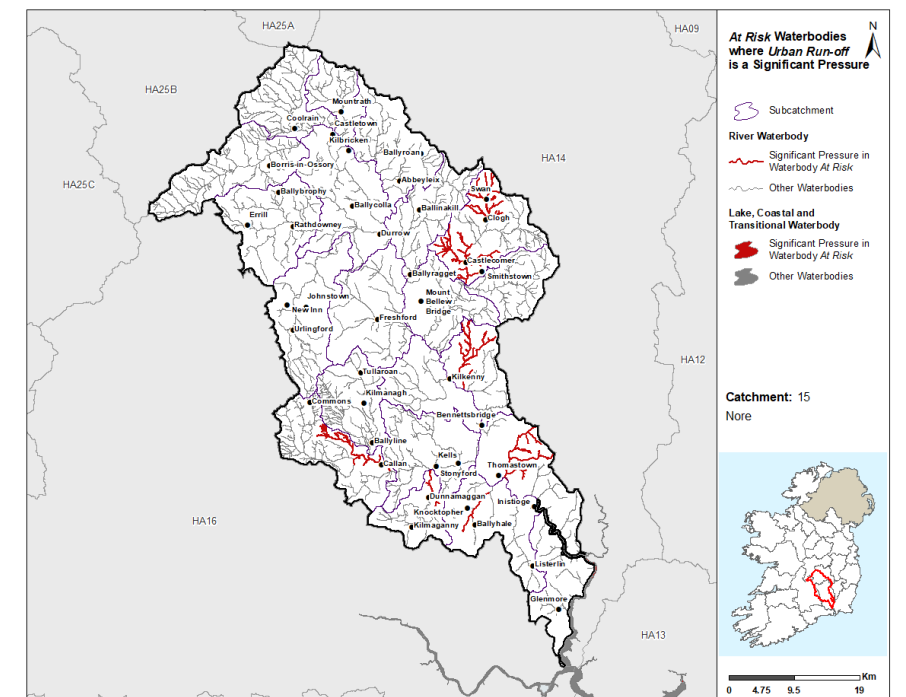
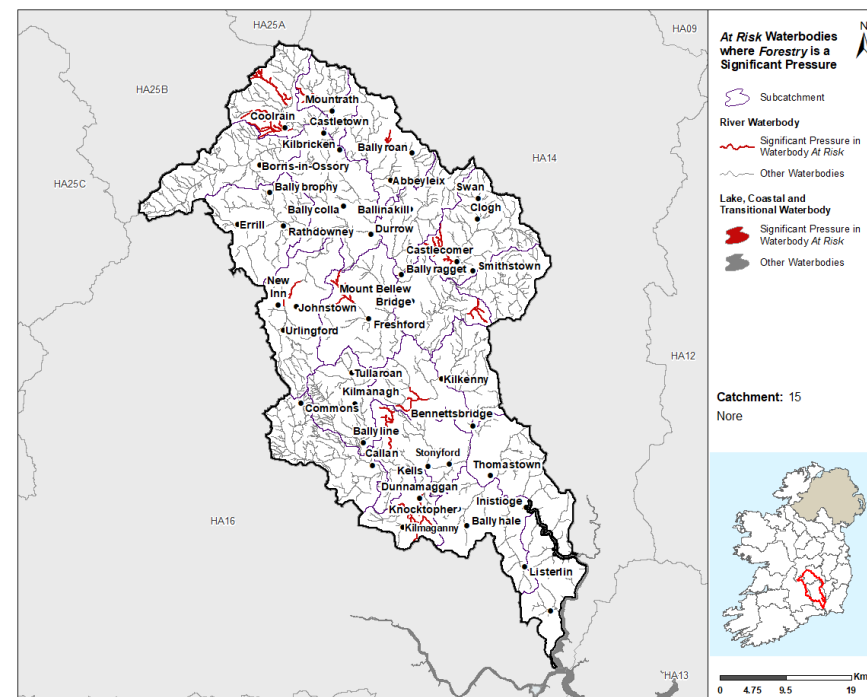
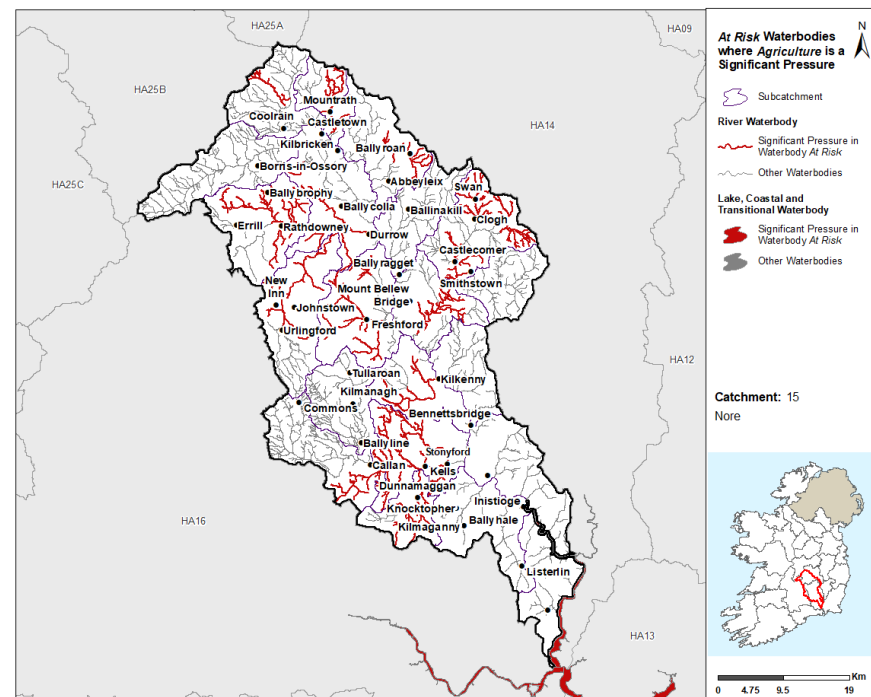


Figure 15: Locations of Waterbodies where Agriculture is a Significant Pressure

Figure 16: Locations of Waterbodies where Forestry is a Significant Pressure

Figure 17: Locations of Waterbodies where Urban Run-off is a Significant Pressure

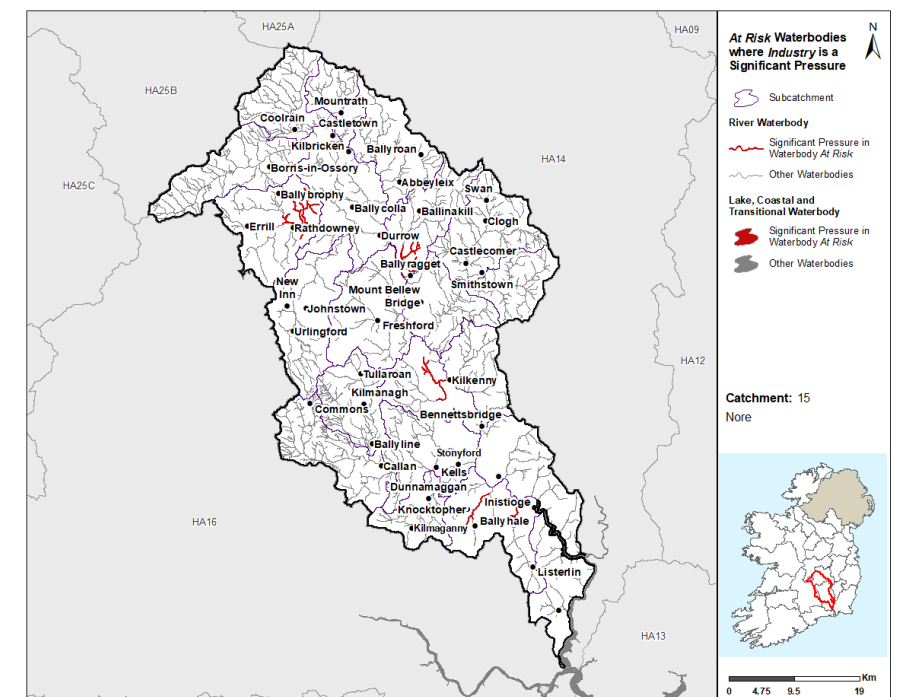
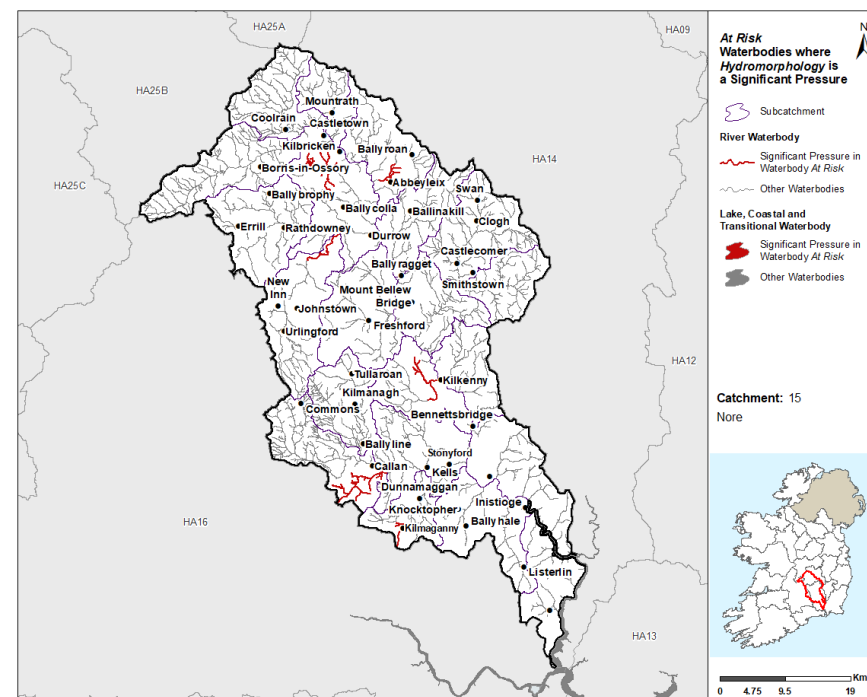
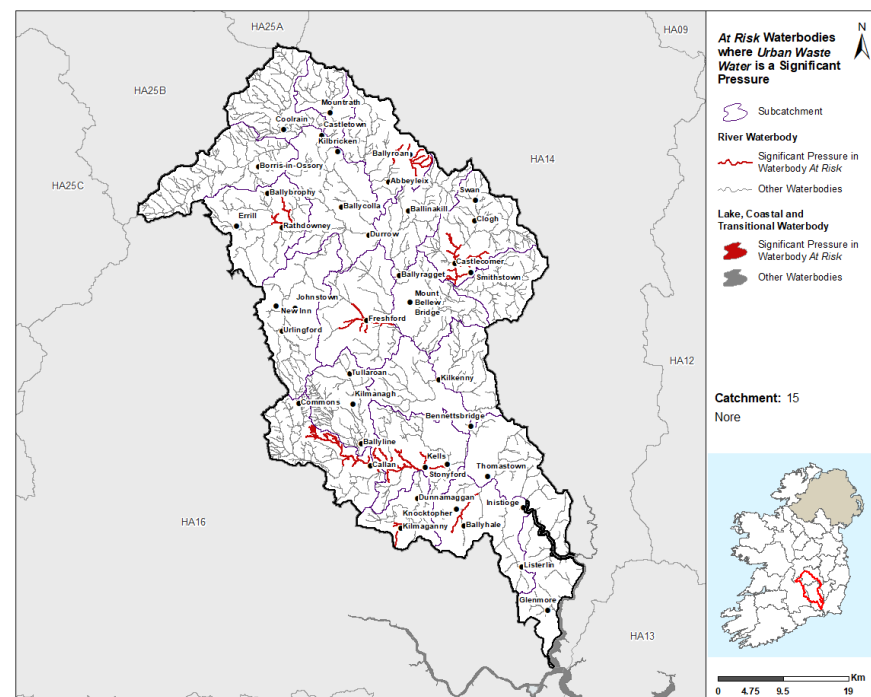


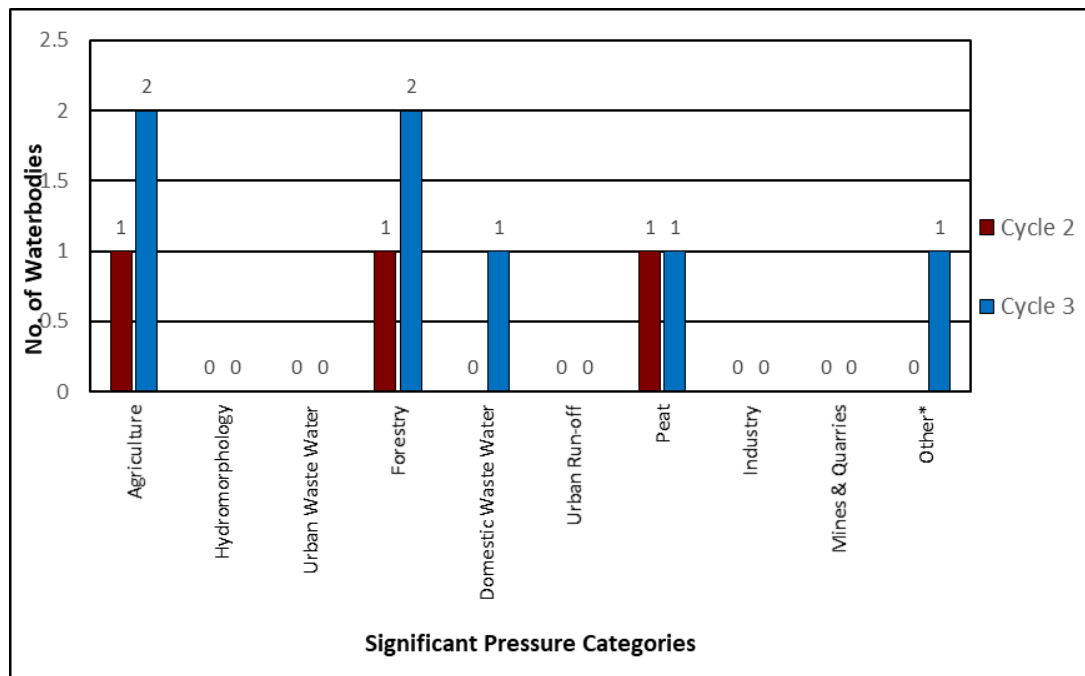
Figure 18: Locations of Waterbodies where Urban Waste Water is a Significant Pressure

Figure 19: Locations of Waterbodies where Hydromorphology is a Significant Pressure

Figure 20: Locations of Waterbodies where Industry is a Significant Pressure

5.2 High Status Objective Waterbodies

- ◆ In Cycle 3 there are three High Status Objective waterbodies that are currently *At Risk*. Needleford Stream_010 is impacted by abstraction, peat and agricultural pressures. Muckalee_010 is impacted by forestry and Killeen (Delour)_010 is impacted by agriculture, domestic waste water and forestry pressures.



*Other – abstractions, aquaculture, atmospheric, anthropogenic pressures, historically polluted sites, waste, water treatment and invasive species have all been grouped into the “Other” pressure category for the purpose of this report

Figure 21: Significant Pressure *At Risk* High Status Objective Waterbodies

6 Source Load Apportionment Modelling (SLAM)

- ◆ The EPA has developed Source Load Apportionment Models (SLAM) for both P and N which estimate the proportion of the phosphorus and nitrogen inputs, respectively, to waters in each catchment that comes from each sector.
- ◆ The main data inputs for the model for agriculture are the 2018 land parcel (LPIS) and animal (AIMs) data from the Department of Agriculture Food and the Marine. The Urban Waste Water (UWW) data comes from Irish Water’s discharge monitoring data. The model also calculates the inputs from a range of other sectors, including for example, forestry, septic tanks, peat, urban runoff and atmospheric deposition.
- ◆ In the catchment pasture and arable land is responsible for 89% and 8% of the nitrogen load respectively while land in pasture, forestry and discharges from urban waste water contribute 49%, 17% and 14% of the phosphorus loadings for the catchment respectively (Figure 17).

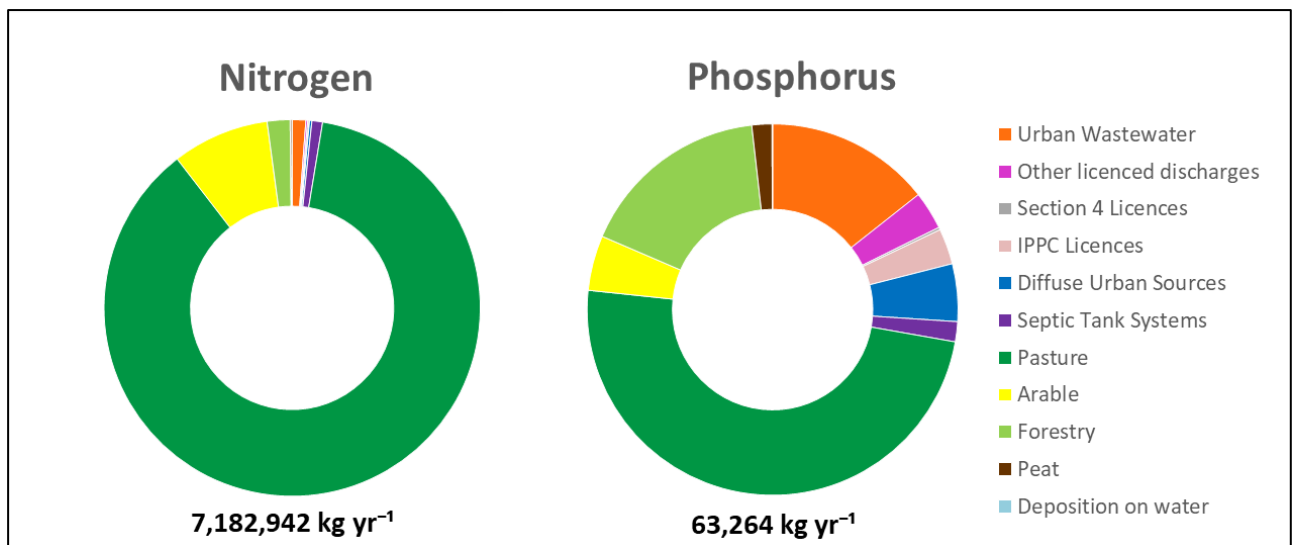


Figure 22: Estimated Proportions of N & P from Each Sector in the Nore Catchment

7 Load Reduction Assessment

7.1 Nitrogen Load Reduction

- ◆ An assessment was undertaken to determine if nitrogen reductions in rivers, streams and lakes are required for Transitional and Coastal (TRACs) waterbodies to achieve their WFD environmental objective. The outcome of the assessment indicated that 10 of the 46 catchments require N reductions in our inland waters to restore some TRAC waterbodies. The assessment report can be found at <https://www.catchments.ie/assessment-of-the-catchments-that-need-reductions-in-nitrogen-concentrations-to-achieve-water-quality-objectives>.
- ◆ The N reduction required in the Nore Catchment is considered to be high and ranges from 500-2000 t N/yr.
- ◆ Source load apportionment modelling indicates that the main sources of N in the catchment are 87% pasture, 8% arable, 1% Urban waste water and 3% from miscellaneous sources.

7.2 Phosphorous / Sediment Load Reduction

- ◆ Further modelling work is required to determine if and what P load reductions are required.

Figure 23 highlights areas where agricultural measures for nitrogen, sediment and phosphorus should be targeted. Waterbodies with orange fill are areas where nitrogen measures should be targeted, waterbodies with blue fill are areas where sediment or phosphorus should be targeted and waterbodies with orange and blue hatching highlight areas where multiple measures (phosphorus/sediment and nitrogen) are required. Pollution Impact Potential mapping for both phosphorus and nitrogen in the catchment are provided in Appendix 2.

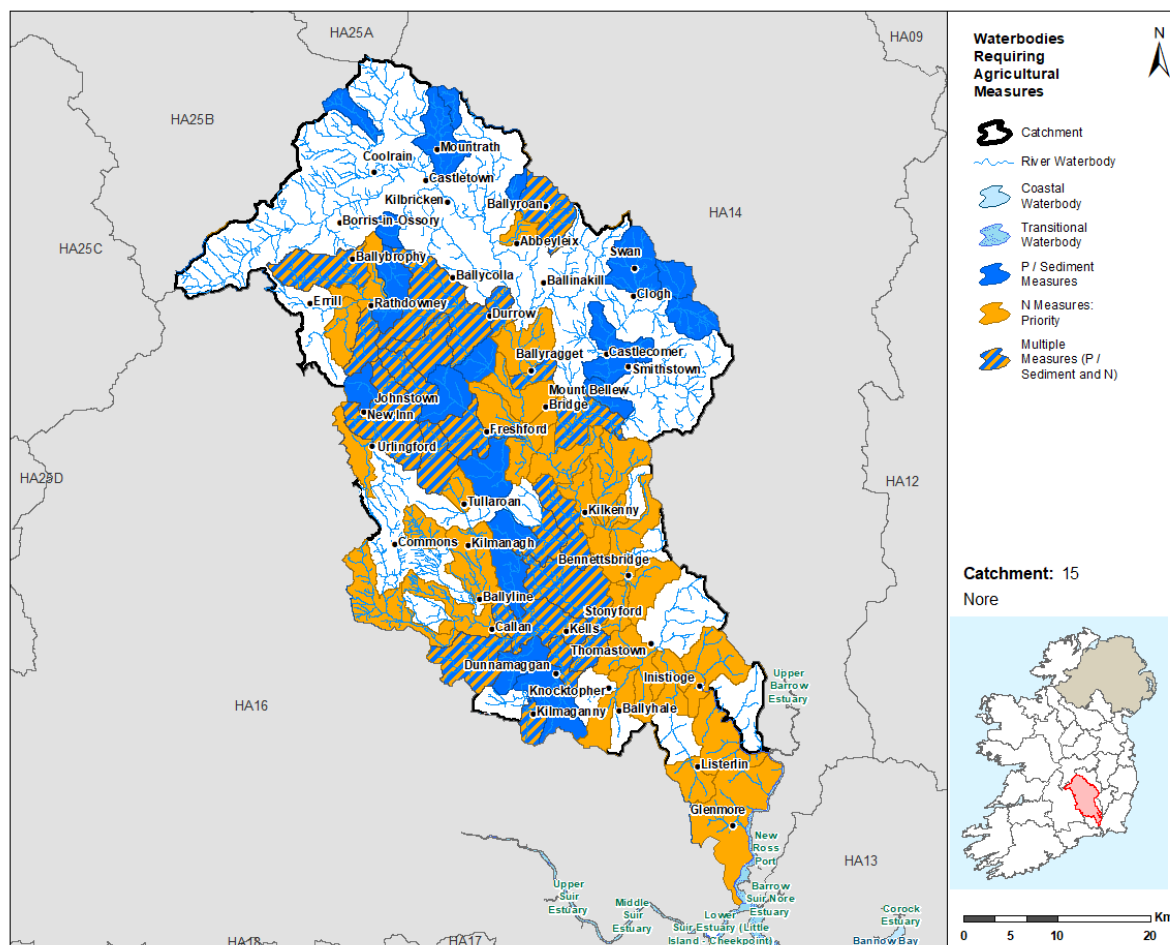


Figure 23: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- ◆ There were seven Areas for Action, comprising of 22 waterbodies, selected for further characterisation and action in the catchment for the 2nd Cycle River Basin Management Plan. The Areas for Action in the catchment are listed in Table 7 and shown in Figure 24. LAWPRO, in conjunction with local authorities and stakeholders from the South-eastern Regional Operational Committee, have been working in these areas since 2018.

2 nd Cycle Area for Action	Number of Waterbodies	Sub-catchment	Local Authority	Reason for Selection
				<ul style="list-style-type: none"> • Lots of historical information from pathways project. • Potential to work with a recently established, active tidy towns group. • Six group water schemes in the area. Lots of ZOC work completed recently. • Two potential 'quick wins'. • Two of the three water bodies are deteriorated water bodies.
Erkina	8	15_14 15_16	Laois	<ul style="list-style-type: none"> • Groundwater abstraction at Durrow is failing for nitrates. • Potential to work with active community groups. • Important amenity – local groups are in the process of trying to establish a blueway. • Potential to work with active group water schemes. • Two deteriorated water bodies.
Owveg (Nore)	1	15_7	Laois	<ul style="list-style-type: none"> • One deteriorated water body. • Will restore all water bodies in the subcatchment to Good status. • One potential quick win.
Ballyroan	2	15_10	Laois	<ul style="list-style-type: none"> • Building on improvements at the plant (Ballyroan hydraulically overloaded and works are due to be completed on the inlet works). • Discrete area, would build on the improvements in the adjacent subcatchment. • Deteriorated water body (Ballyroan_010). • Both Owveg and Ballyroan discharge into Freshwater Pearl Mussel water bodies.

8.2 Status Change in 2nd Cycle Areas for Action

- ◆ For Cycle 3, of the 22 waterbodies in the 2nd Cycle Areas for Action, there are six waterbodies at Good Status, seven waterbodies at Moderate Status, six waterbodies at Poor Status and three waterbodies where status has not been assigned.
- ◆ There is an overall improvement in the status of six of the 2nd cycle Areas for Action waterbodies across the catchment.⁷
- ◆ Of the 19 waterbodies within the 2nd Cycle Areas for Action which had status assigned, seven experienced no change in status between Cycle 2 and Cycle 3, nine waterbodies experienced an improvement and three river waterbodies (Ballyroan_010, Bregagh (Kilkenny)_010 & Erkina_040) were subject to deterioration in status (Figure 25). The six waterbody improvements were across Ballyroan, Dinin (south, main and muckalee), Erkina, Nuenna and Owveg (Nore) Areas for Action. The three waterbodies which experienced decline were in Ballyroan, Bregagh (kilkenny) and Erkina Area for Action.

⁷ Status class change cannot be calculated for waterbodies where status has not been assigned in either cycle 2 or 3 and therefore these waterbodies are not represented in Figure 18. Percentage displayed in the chart below are in relation to the total number of waterbodies with status assigned in both cycles, as opposed to total number of all waterbodies.

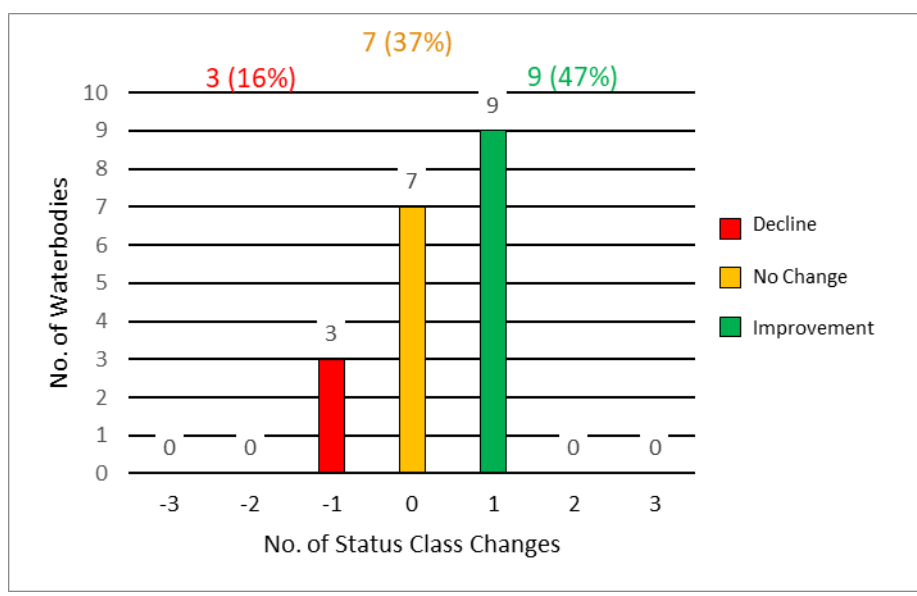


Figure 25: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- ◆ For the 22 waterbodies in the 2nd Cycle Areas for Action, 16 (73%) of these are currently *At Risk*, three (14%) are in *Review* and three (14%) Are *Not Risk*.
- ◆ All 16 *At Risk* waterbodies are river waterbodies. Figure 26 gives an overview of the breakdown of risk across waterbody types for both Cycle 2 and Cycle 3 in 2nd Cycle Areas for Action.
- ◆ Overall there is a decrease from 20 to 16 *At Risk* waterbodies in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3. Dinin (South)_020, Errill_020 and Owveg (Nore)_030 were *At Risk* in Cycle 2 but are currently *Not At Risk*. Erkina_010 was *At Risk* in Cycle 2 but is in *Review* in Cycle 3.

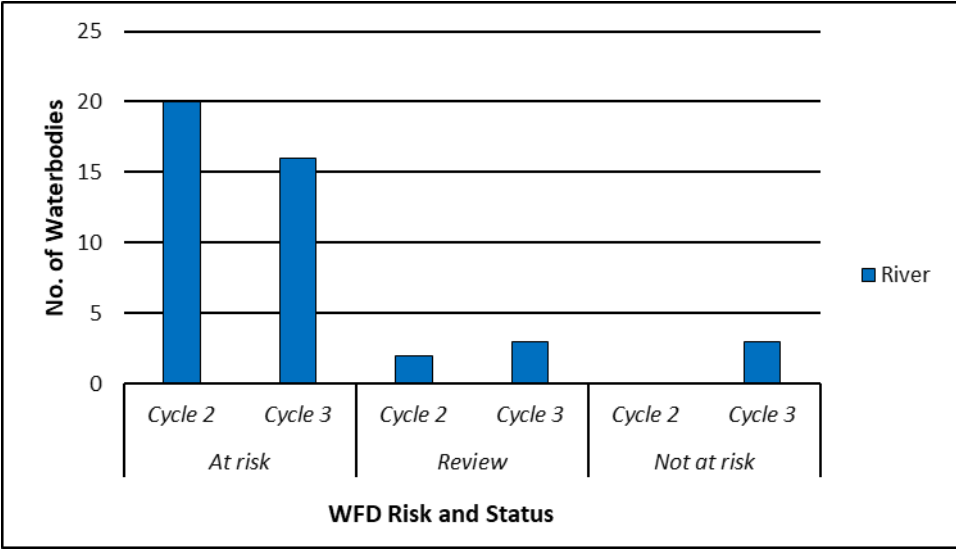
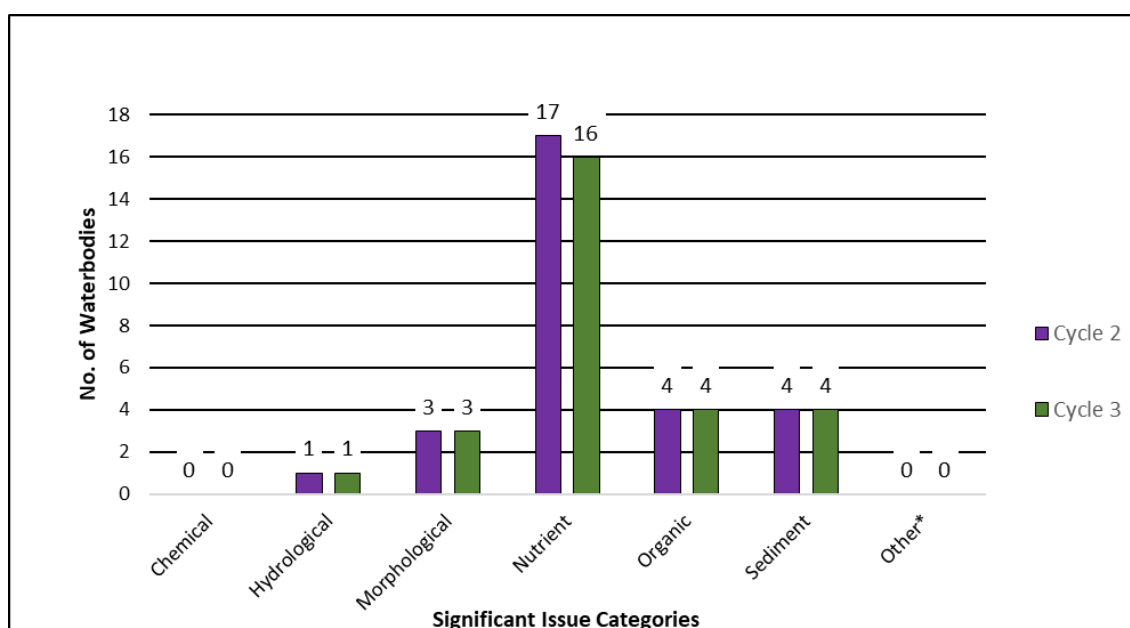


Figure 26: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

8.4 Significant Issues in 2nd Cycle Areas for Action

- ◆ Based on the EPA assessment for Cycle 3, the significant issue in the 2nd Cycle Areas for Action is nutrient pollution impacting 16 waterbodies (Figure 27). This is followed by organic pollution which is impacting four waterbodies (Nuenna_020, Brownstown (Pococke)_010, Ballyroan_020 & Ballyroan_010), sediment impacting four waterbodies (Bregagh (Kilkenny)_010, Dinin (Main Channel)_020, Erkina_040 & Muckalee_010), morphological impacts impacting three waterbodies (Ballyroan_020, Bregagh (Kilkenny)_020 & Bregagh (Kilkenny)_030), and hydrological issues impacting one waterbody (Dinin (Main Channel)_020).
- ◆ The number of 2nd Cycle Areas for Action waterbodies associated with nutrient and morphological significant issues have reduced from 17 to 16 between Cycle 2 and Cycle 3. The number of waterbodies impacted by sediment, organic pollution, morphological and hydrological issues remain unchanged since Cycle 2.



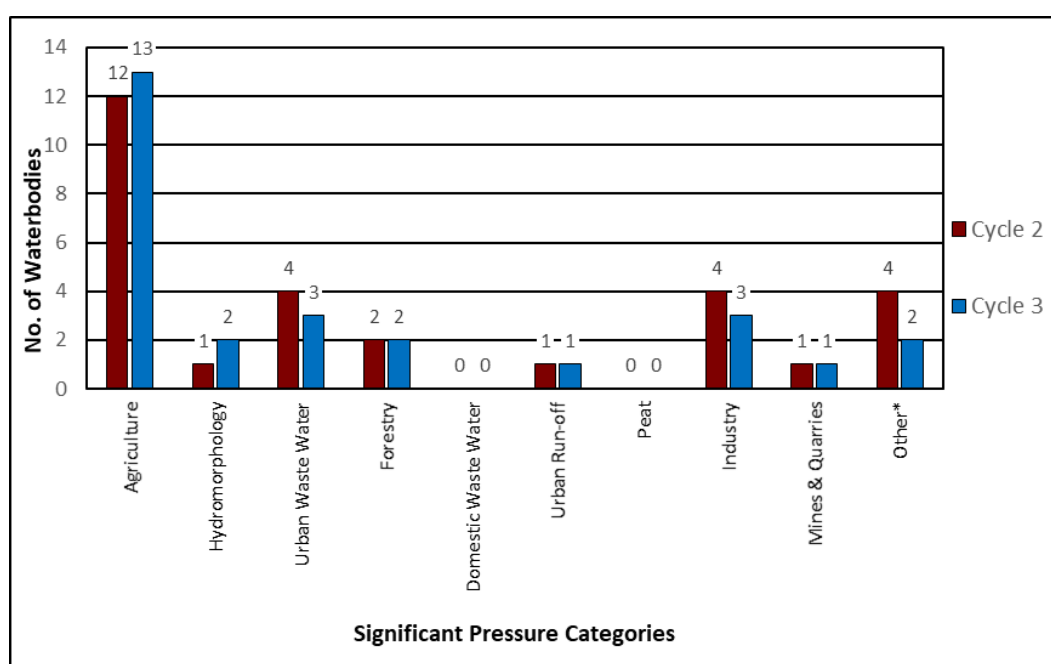
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 27: Significant Issues across all 2nd Cycle Areas for Action Waterbodies

8.5 Significant Pressure in 2nd Cycle Areas for Action

- ◆ For Cycle 3, in 2nd Cycle Areas for Action waterbodies in the catchment the dominant significant pressures are:
- ◆ Agriculture - 13 waterbodies impacted in Cycle 3 an increase by one since Cycle 2.
- ◆ Urban Waste Water - three waterbodies (Ballyroan_010, Erkina_030, & Nuenna_020) remain impacted in Cycle 3. Erkina_040 is no longer impacted by urban waste water in Cycle 3.
- ◆ Industry - three waterbodies (Bregagh (Kilkenny)_030, Erkina_030 & Erkina_040) impacted in Cycle 3, a reduction from four waterbodies in Cycle 2.
- ◆ Forestry – two waterbodies (Bregagh (Kilkenny)_020 & Muckalee_010) remain impacted in Cycle 3.
- ◆ Hydromorphology – In addition to impacting Bregagh (Kilkenny)_030, as identified in Cycle 2, Ballyroan_020 is now deemed to be impacted by hydromorphological pressures in Cycle 3.
- ◆ Urban Run-off – one waterbody (Brownstown (Pococke)_010) remains impacted in Cycle 3.

- ◆ Mines & Quarries - one waterbody (Dinin (Main Channel)_020) remains impacted by Harding Brothers QY14 quarry in Cycle 3.
- ◆ Other – two waterbodies are impacted by pressures that fall under the other category as illustrated in Figure 28. An abstraction for water supply is impacted by Dinin (Main Channel)_020 and the significant pressure type in Ballyroan_020 is unknown.
- ◆ When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has been no change in the number of waterbodies affected by agriculture, urban waste water, forestry, urban run-off and mines and quarries. The number of waterbodies impacted by industry has reduced from four to three. The only pressure category that has seen an increase in the number of waterbodies impacted is hydromorphological pressures which has increased from one to two waterbodies. However, the addition is due to an increased awareness in hydromorphological pressures as opposed to a new modification introduced.



*Other – abstractions, aquaculture, atmospheric, anthropogenic pressures, historically polluted sites, waste, water treatment and invasive species have all been grouped into the “Other” pressure category for the purpose of this report

Figure 28: Significant Pressures in 2nd Cycle Area for Action Waterbodies

9 3rd Cycle Recommended Areas for Action

9.1 Recommended Areas for Action Overview

- ◆ For the 3rd Cycle Draft River Basin Management Plan Areas for Action have been extended out to not only include Prioritised Areas for Action undertaken by LAWPRO which focussed on restoring waterbodies, but to also include restoration work undertaken by all agencies under Areas for Restoration. In addition, protection work is included under Areas for Protection and research, pilot schemes and community initiatives are included under Catchment Projects. The aim of the 3rd Cycle Plan is to capture all activity that is working to restore, improve and/or protect waterbodies.
- ◆ The Recommended 3rd Cycle Areas for Action list will be included in the Draft River Basin Management Plan and will be finalised after the consultation period.

- ◆ There are 22 Areas for Action, comprising of 82 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 49 of the 82 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, 16 are in *Review* and 17 are *Not At Risk*. The 22 Recommended Areas for Action consist of eight Areas for Protection, 13 Areas for Restoration and one Catchment Project. LAWPRO are the proposed lead organisation in 13 Recommended Areas for Action, NFGWS are the proposed lead in six Recommended Areas for Action. Kilkenny County Council are the proposed lead for Tullaroan Stream Recommended Area for Action and Tipperary County Council are the proposed lead for King's (Kilkenny) Tipperary Recommended Area for Action. GSI, NFGWS and TCD are the proposed joint leads on the Durrow groundwater Recommended Area for Action. The Recommended Areas for Action in the catchment are listed in Table 8 and shown in Figure 29. The reason for selecting each waterbody in a Recommended Areas for Action is provided in Appendix 3.

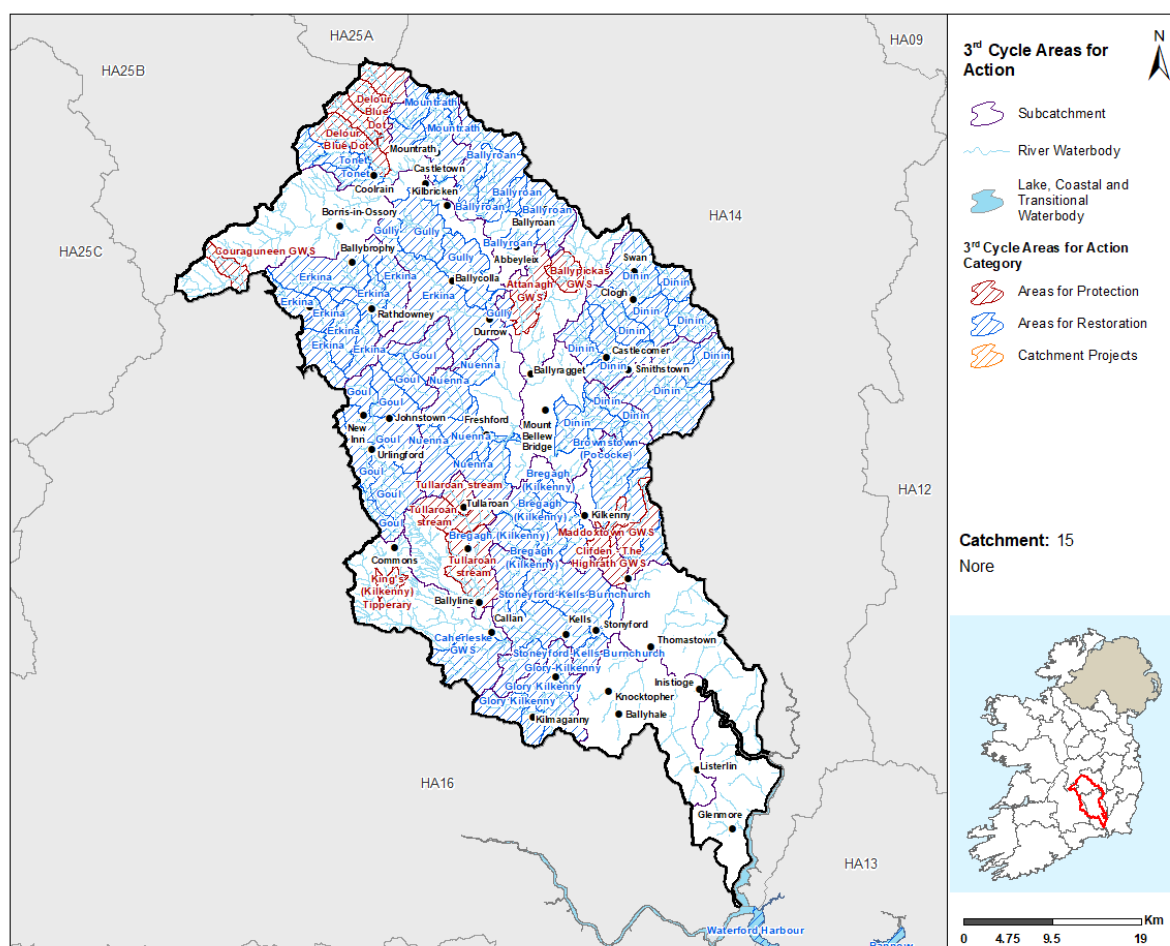


Figure 29: 3rd Cycle Recommended Areas for Action Locations

Table 8: 3rd Cycle Recommended Areas for Action Breakdown

3 rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Nuenna	5	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

3rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Goul	8	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Ballyroan	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Bregagh (Kilkenny)	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Brownstown (Pococke)	3	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Dinin	12	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Stoneyford-Kells-Burnchurch	5	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Delour - Blue Dot	4	Protection	Blue Dot Areas for Protection LAWPRO and Others	LAWPRO
Erkina	9	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Glory Kilkenny	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Gully	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
King's (Kilkenny) Tipperary	1	Protection	LA Areas for Protection Local Authorities	Tipperary County Council
Caherleske GWS	1	Restoration	Public Health Areas for Restoration NFGWS, IW, HSE, LAs, SFPA	NFGWS
Mountrath	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Couraguneen GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Maddoxtown GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Clifden - The Highrath GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Ballypickas GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Attanagh GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Tonet	3	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Tullaroan stream	3	Protection	LA Areas for Protection Local Authorities	Kilkenny County Council
Durrow Groundwater	1	Catchment Projects	Public Body Research	GSI and NFGWS and TCD

10 Catchment Summary

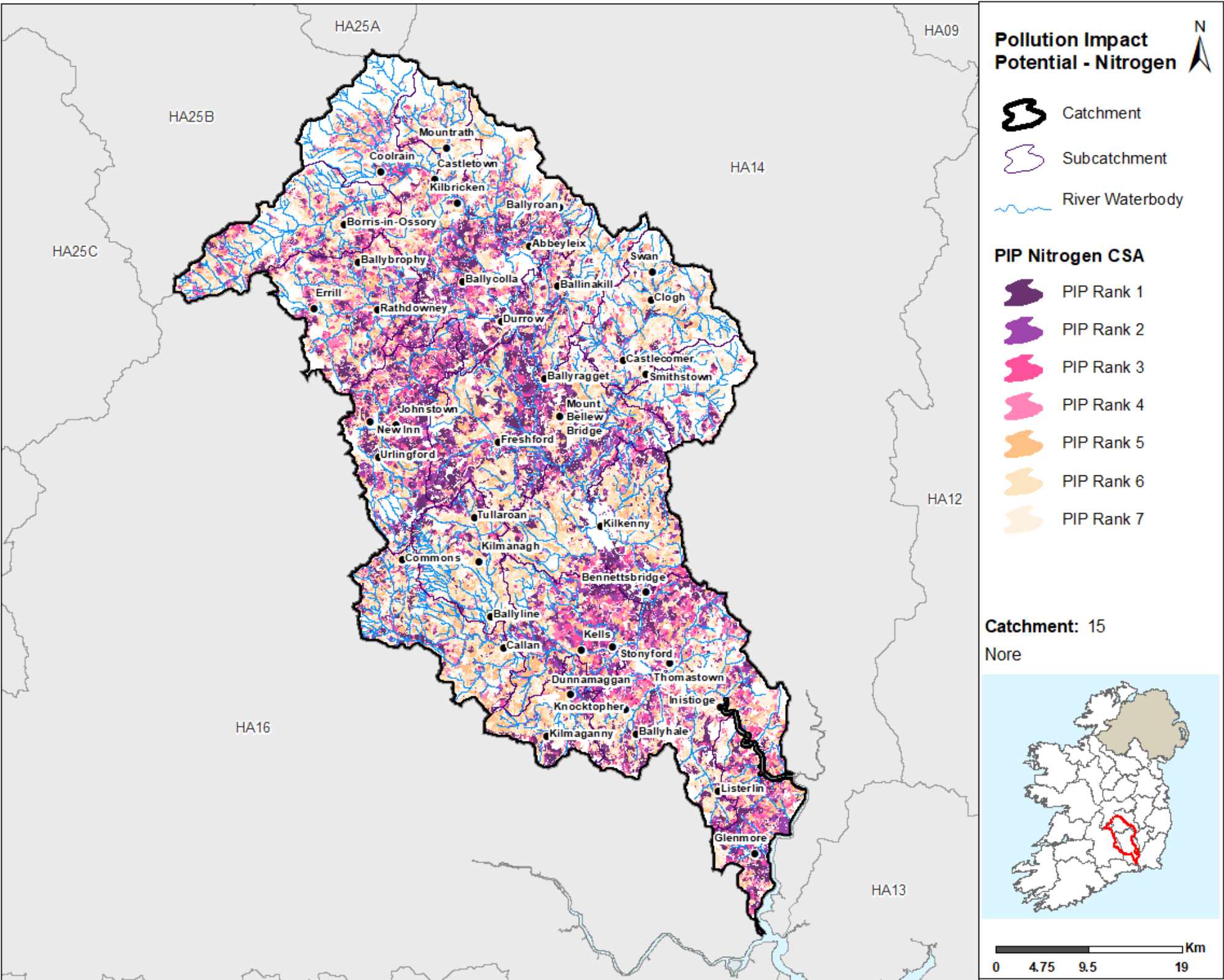
- Of the 123 river waterbodies, 53 are *At Risk* of not meeting their WFD objectives.
- Four out of five transitional waterbodies in the catchment are *At Risk* and impacted by eutrophication. Agriculture is the significant pressure.
- There are seven *At Risk* groundwater bodies out of 48.
- There has been an overall deterioration across the catchment with 64 waterbodies *At Risk* in Cycle 3 compared to 56 waterbodies *At Risk* in Cycle 2.
- The main significant issues are impacts from nutrient pollution, followed by organic pollution, sediment and morphological impacts.
- The main significant pressures are agricultural pressures followed by forestry, urban run-off, urban waste water, hydromorphological and industrial pressures.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by nutrient, organic and sediment pollution from agriculture, urban run-off sources with nutrient issues from agriculture being the dominant driver.
- In the 2nd Cycle Areas for Action, there was a reduction in the number of *At Risk* waterbodies. 20 waterbodies were *At Risk* in Cycle 2 and 16 waterbodies are *At Risk* in Cycle 3. The change in risk has occurred in waterbodies where agriculture and unknown pressures were a significant pressure in Cycle 2 but are no longer impacting in Cycle 3.
- There are 22 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 82 waterbodies with 49 waterbodies *At Risk*, 16 in *Review* and 17 *Not At Risk*.

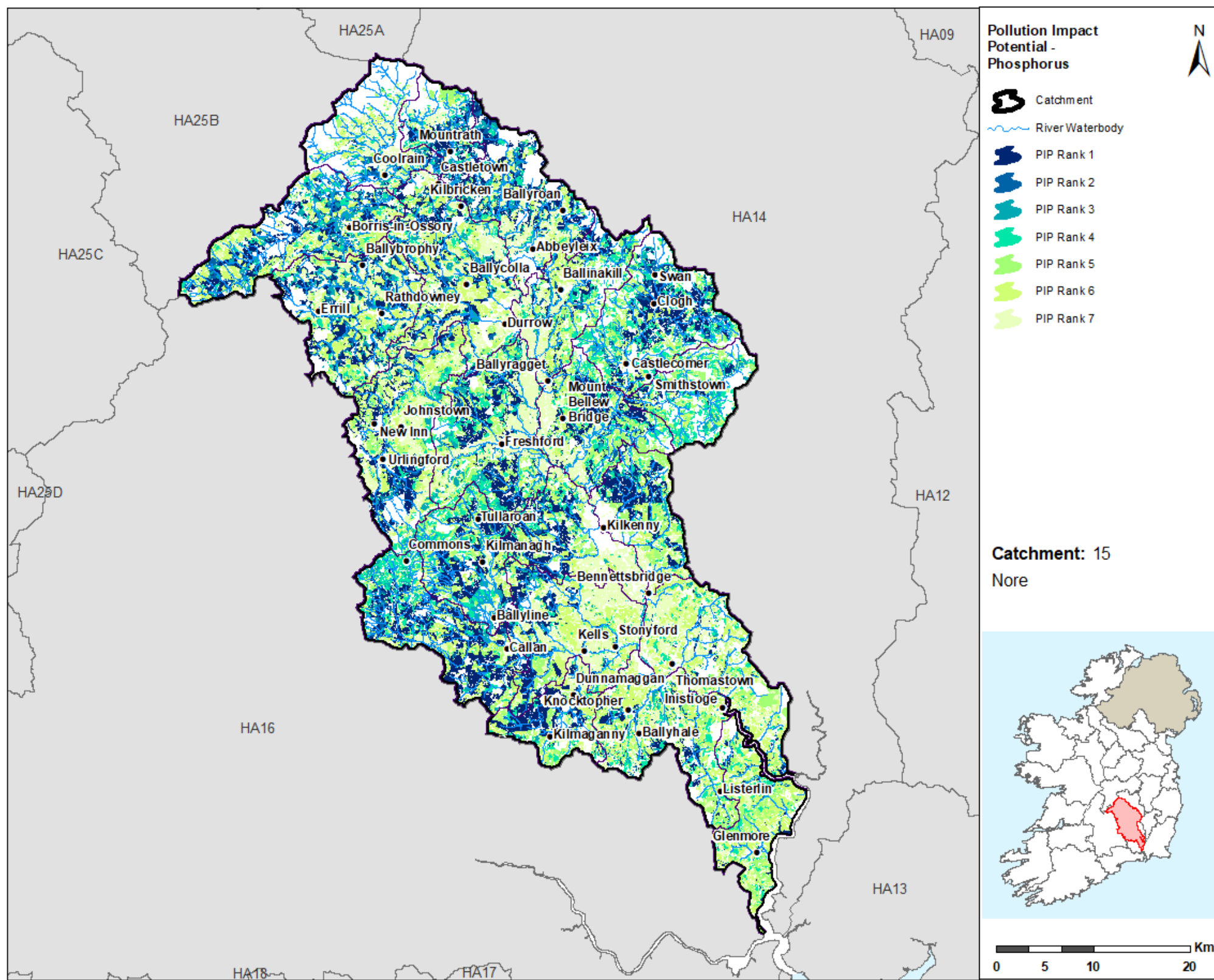
Appendix 1

High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
DELOUR_010	River	IE_SE_15D010060	High
DELOUR_020	River	IE_SE_15D010150	High
DELOUR_030	River	IE_SE_15D010400	High
KILLEEN (DELOUR)_010	River	IE_SE_15K010400	Good
MUCKALEE_010	River	IE_SE_15M020100	Good
NEEDLEFORD STREAM_010	River	IE_SE_15N040200	High
TONET_010	River	IE_SE_15T010200	High

Appendix 2
Pollution Impact Potential Mapping





Appendix 3

Summary information on all waterbodies in the Nore Catchment

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_18	IE_SE_14O130860	OAKLANDS_010	River	Review	Review	Unassigned	Unassigned	No			
15_21	IE_SE_15A010400	ARIGNA (KILKENNY)_010	River	Not at risk	At risk	Good	Moderate	No	Ag	Nuenna	LAWPRO: Subcatchment of existing PAA Kilkenny CC: proposed for LAWPRO
15_20	IE_SE_15A020100	ARRIGLE_010	River	Not at risk	Not at risk	Good	Good	No			
15_20	IE_SE_15A020250	ARRIGLE_020	River	Not at risk	Not at risk	Good	High	No			
15_20	IE_SE_15A020300	ARRIGLE_030	River	At risk	At risk	Moderate	Moderate	No	Ind		
15_15	IE_SE_15A030960	ARDREAGH_010	River	Review	Review	Unassigned	Unassigned	No		Goul	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle)
15_10	IE_SE_15B010100	BALLYROAN_010	River	At risk	At risk	Moderate	Poor	No	Ag, UWW	Ballyroan	Existing PAA
15_10	IE_SE_15B010200	BALLYROAN_020	River	At risk	At risk	Poor	Moderate	No	Hymo, Other	Ballyroan	Existing PAA
15_6	IE_SE_15B020080	BREGAGH (KILKENNY)_010	River	At risk	At risk	Moderate	Poor	No	Ag	Bregagh (Kilkenny)	LAWPRO: Existing PAA
15_6	IE_SE_15B020100	BREGAGH (KILKENNY)_020	River	At risk	At risk	Unassigned	Unassigned	No	Ag, For	Bregagh (Kilkenny)	LAWPRO: Existing PAA
15_6	IE_SE_15B020350	BREGAGH (KILKENNY)_030	River	At risk	At risk	Poor	Poor	No	Ag, Hymo, Ind	Bregagh (Kilkenny)	LAWPRO: Existing PAA
15_4	IE_SE_15B041100	BROWNSTOWN (POCOCKE)_010	River	At risk	At risk	Poor	Poor	No	UR	Brownstown (Pococke)	LAWPRO: Existing PAA
15_15	IE_SE_15B120080	BAUNBALLINLOUGH STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag	Goul	At Risk WB - Not Proposed
15_12	IE_SE_15C010100	CASTLECOMER STREAM_010	River	Not at risk	At risk	Good	Moderate	No	For, UR	Dinin	LAWPRO: Upstream of existing PAA & contributing
15_12	IE_SE_15C030300	CLOGH_010	River	At risk	At risk	Moderate	Good	No	Ag, UR	Dinin	LAWPRO: Upstream of existing PAA & contributing
15_8	IE_SE_15C040400	CLOGHNAGH_010	River	Not at risk	Not at risk	Good	Good	No			
15_17	IE_SE_15C050100	Clodiagh_010	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
15_10	IE_SE_15C060600	CAPPANACLOGHY_010	River	At risk	At risk	Poor	Poor	No	Peat	Ballyroan	At Risk wb - not proposed, include in Ballyroan PAA, same subcatchment
15_10	IE_SE_15C060900	CAPPANACLOGHY_020	River	Not at risk	Not at risk	Good	Good	No		Ballyroan	At Risk wb - not proposed, include in Ballyroan PAA, same subcatchment
15_10	IE_SE_15C060990	CAPPANACLOGHY_030	River	Review	Review	Unassigned	Unassigned	No		Ballyroan	At Risk wb - not proposed, include in Ballyroan PAA, same subcatchment
15_19	IE_SE_15C120400	CAHERLESK STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag	Stoneyford-Kells-Burnchurch	Kilkenny CC proposed for LAWPRO

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_10	IE_SE_15C191100	CLONAWOOLAN STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, For, Peat	Ballyroan	At Risk wb - not proposed, include in Ballyroan PAA, same subcatchment
15_11	IE_SE_15C200040	COALBROOK STREAM_010	River	Not at risk	Not at risk	Good	Good	No			
15_9	IE_SE_15D010060	DELOUR_010	River	Not at risk	Not at risk	High	High	Yes		Delour - Blue Dot	Laois CC: Proposed for LAWPRO HSO sub-catchment, one wb requires improvement
15_9	IE_SE_15D010150	DELOUR_020	River	Not at risk	Not at risk	High	High	Yes		Delour - Blue Dot	Laois CC: Proposed for LAWPRO HSO sub-catchment, one wb requires improvement
15_9	IE_SE_15D010400	DELOUR_030	River	Not at risk	Not at risk	High	High	Yes		Delour - Blue Dot	Laois CC: Proposed for LAWPRO HSO sub-catchment, one wb requires improvement
15_8	IE_SE_15D020700	DININ (MAIN CHANNEL)_010	River	Not at risk	At risk	Good	Moderate	No	Ag, DWW	Dinin	LAWPRO: Subcatchment of Existing PAA IFI: Impact of barriers/impediments to fish be focused on
15_8	IE_SE_15D020800	DININ (MAIN CHANNEL)_020	River	At risk	At risk	Moderate	Moderate	No	Ag, M+Q, Other	Dinin	LAWPRO: Existing PAA IFI: Impact of barriers/impediments to fish be focused on NFGWS: GW abstraction
15_14	IE_SE_15D030700	DONAGHMORE STREAM_010	River	At risk	At risk	Moderate	Moderate	No	Ag	Erkina	LAWPRO: Existing PAA
15_19	IE_SE_15D040500	DESART STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, For	Stoneyford-Kells-Burnchurch	Kilkenny CC proposed for LAWPRO NFGWS: GW abstraction
15_12	IE_SE_15D070080	DININ (NORTH)_010	River	At risk	At risk	Poor	Good	No	Ag	Dinin	LAWPRO: Upstream of existing PAA & contributing
15_12	IE_SE_15D070200	DININ (NORTH)_020	River	Not at risk	Not at risk	Good	Good	No		Dinin	LAWPRO: Upstream of existing PAA & contributing
15_12	IE_SE_15D070250	DININ (NORTH)_030	River	Review	Review	Unassigned	Unassigned	No		Dinin	LAWPRO: Upstream of existing PAA & contributing
15_12	IE_SE_15D070400	DININ (NORTH)_040	River	Review	At risk	Good	Moderate	No	Ag, DWW, UR, UWW	Dinin	LAWPRO: Upstream of existing PAA & contributing
15_3	IE_SE_15D080450	DININ (SOUTH)_010	River	Not at risk	Review	Good	Moderate	No		Dinin	LAWPRO: Subcatchment of Existing PAA
15_3	IE_SE_15D080600	DININ (SOUTH)_020	River	At risk	Not at risk	Moderate	Good	No		Dinin	LAWPRO: Existing PAA
15_6	IE_SE_15D420500	DREELINGSTOWN_010	River	Review	Review	Unassigned	Unassigned	No		Bregagh (Kilkenny)	LAWPRO: Existing PAA
15_14	IE_SE_15E010040	ERKINA_010	River	At risk	Review	Moderate	Good	No		Erkina	LAWPRO: Existing PAA
15_14	IE_SE_15E010100	ERKINA_020	River	Review	Review	Unassigned	Unassigned	No		Erkina	LAWPRO: Existing PAA
15_14	IE_SE_15E010200	ERKINA_030	River	At risk	At risk	Poor	Moderate	No	Ag, Ind, UWW	Erkina	LAWPRO: Existing PAA
15_14	IE_SE_15E010300	ERKINA_040	River	At risk	At risk	Moderate	Poor	No	Ag, Ind	Erkina	LAWPRO: Existing PAA
15_16	IE_SE_15E010550	ERKINA_050	River	At risk	At risk	Moderate	Moderate	No	Ag	Erkina	LAWPRO: Existing PAA
15_19	IE_SE_15E020700	ENNISNAG STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Stoneyford-Kells-Burnchurch	Kilkenny CC proposed for LAWPRO NFGWS: GW abstraction

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_14	IE_SE_15E030400	ERRILL_010	River	Not at risk	Not at risk	Unassigned	Unassigned	No		Erkina	LAWPRO: Subcatchment of existing PAA
15_14	IE_SE_15E030500	ERRILL_020	River	At risk	Not at risk	Moderate	Good	No		Erkina	LAWPRO: Existing PAA
15_2	IE_SE_15G010045	GLORY_010	River	At risk	At risk	Moderate	Poor	No	Ag, Hymo, UWW	Glory Kilkenny	At Risk wb - not proposed
15_2	IE_SE_15G010190	GLORY_020	River	Review	At risk	Unassigned	Unassigned	No	Ag, For	Glory Kilkenny	At Risk wb - not proposed
15_2	IE_SE_15G010300	GLORY_030	River	Review	At risk	Good	Moderate	No	Ag, UR	Glory Kilkenny	At Risk wb - not proposed
15_15	IE_SE_15G020060	GOUL_010	River	Review	Review	Unassigned	Unassigned	No		Goul	EPA: Headwater
15_15	IE_SE_15G020110	GOUL_020	River	At risk	Review	Unassigned	Unassigned	No		Goul	NFGWS: GWS groundwater abstraction (Fennor/ Inchorourke GWS)
15_15	IE_SE_15G020200	GOUL_030	River	At risk	At risk	Unassigned	Unassigned	No	Ag	Goul	EPA: Between waterbodies that require restoration
15_15	IE_SE_15G020300	GOUL_040	River	At risk	At risk	Moderate	Moderate	No	Ag, For	Goul	NFGWS: GWS groundwater abstraction
15_15	IE_SE_15G020360	GOUL_050	River	At risk	At risk	Moderate	Moderate	No	Ag	Goul	At Risk WB - Not Proposed
15_15	IE_SE_15G020500	GOUL_060	River	At risk	At risk	Moderate	Poor	No	Ag, Hymo	Goul	At Risk WB - Not Proposed
15_16	IE_SE_15G030060	GULLY_010	River	At risk	At risk	Poor	Poor	No	Ag	Gully	LAWPRO: Subcatchment of existing PAA
15_16	IE_SE_15G030100	GULLY_020	River	At risk	At risk	Poor	Moderate	No	Hymo	Gully	LAWPRO: Subcatchment of existing PAA
15_16	IE_SE_15G030300	GULLY_030	River	Not at risk	Not at risk	Good	Good	No		Gully	LAWPRO: Subcatchment of existing PAA
15_21	IE_SE_15G080300	GORTEENAHILLA_010	River	Not at risk	At risk	Good	Poor	No	Ag, For	Nuenna	LAWPRO: Subcatchment of existing PAA
15_11	IE_SE_15G100060	GARRANACOOOL STREAM_010	River	Not at risk	Not at risk	Good	Good	No			
15_20	IE_SE_15G720980	GLEBE_010	River	Review	Review	Unassigned	Unassigned	No			
15_2	IE_SE_15G820400	Glory River_010	River	Review	Review	Unassigned	Unassigned	No		Glory Kilkenny	At Risk wb - not proposed
15_12	IE_SE_15H010300	HOLLY PARK STREAM_010	River	At risk	At risk	Unassigned	Unassigned	No	Ag	Dinin	LAWPRO: Upstream of existing PAA & contributing
15_9	IE_SE_15K010400	KILLEEN (DELOUR)_010	River	Not at risk	At risk	High	Good	Yes	Ag, DWW, For	Delour - Blue Dot	Laois CC: Proposed for LAWPRO HSO sub-catchment, one wb requires improvement
15_11	IE_SE_15K020200	KING'S (KILKENNY)_010	River	Not at risk	Not at risk	Good	Good	No		King's (Kilkenny) Tipperary	Tipperary CC: Proposed for Protection
15_11	IE_SE_15K020400	KING'S (KILKENNY)_020	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
15_11	IE_SE_15K020560	KING'S (KILKENNY)_030	River	Review	At risk	Good	Moderate	No	Other, UR, UWW		
15_11	IE_SE_15K020600	KING'S (KILKENNY)_040	River	At risk	At risk	Moderate	Moderate	No	Ag, Hymo, Other	Caherleske GWS	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle) IFI: Weirs, impoundments
15_19	IE_SE_15K020910	KING'S (KILKENNY)_050	River	At risk	At risk	Moderate	Moderate	No	Ag, UWW	Stoneyford-Kells-Burnchurch	Kilkenny CC proposed for LAWPRO IFI: Numerous weirs and impoundments on Kings River blocking passage upstream NFGWS: Group Water Scheme groundwater abstraction sources

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
											proposed for inclusion as an Area for Acton (3rd Cycle)
15_4	IE_SE_15K540650	KILDERRY_010	River	Review	Review	Unassigned	Unassigned	No		Brownstown (Pococke)	LAWPRO: Subcatchment of Existing PAA
15_20	IE_SE_15K750910	Knockwilliam_010	River	Review	Review	Unassigned	Unassigned	No			
15_20	IE_SE_15L010200	LITTLE ARRIGLE_010	River	At risk	At risk	Unassigned	Unassigned	No	Ind, UR, UWW		
15_21	IE_SE_15L020100	LISDOWNEY_010	River	At risk	At risk	Moderate	Good	No	Ag	Nuenna	LAWPRO: Existing PAA NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle)
15_1	IE_SE_15M010080	MOUNTRATH_010	River	Not at risk	Not at risk	Good	Good	No		Mountrath	Laois CC: Proposed for LAWPRO - Review at Laois Meeting
15_1	IE_SE_15M010100	MOUNTRATH_020	River	Not at risk	At risk	Good	Moderate	No	For	Mountrath	Laois CC: Proposed for LAWPRO - Review at Laois Meeting
15_1	IE_SE_15M010300	MOUNTRATH_030	River	Not at risk	At risk	Good	Moderate	No	Ag	Mountrath	Laois CC: Proposed for LAWPRO - Review at Laois Meeting
15_8	IE_SE_15M020100	MUCKALEE_010	River	At risk	At risk	Good	Good	Yes	For	Dinin	LAWPRO: Existing PAA
15_5	IE_SE_15M030540	MUNSTER_010	River	Not at risk	Not at risk	Good	Good	No			
15_5	IE_SE_15M030600	MUNSTER_020	River	Not at risk	Not at risk	Good	Good	No			
15_5	IE_SE_15M030700	MUNSTER_030	River	Not at risk	Not at risk	Good	Good	No			
15_11	IE_SE_15M340730	MODESHIL_010	River	Review	Review	Unassigned	Unassigned	No			
15_13	IE_SE_15N010080	NORE_010	River	Review	Review	Good	Good	No			
15_13	IE_SE_15N010100	NORE_020	River	Review	Review	Unassigned	Unassigned	No		Couraguneen GWS	IFI: Historic Weir, migration - salmon NFGWS: Group water scheme - groundwater source
15_13	IE_SE_15N010200	NORE_030	River	Review	Review	Unassigned	Unassigned	No			
15_13	IE_SE_15N010300	NORE_040	River	Review	Review	Good	Good	No			
15_13	IE_SE_15N010400	NORE_050	River	Review	Review	Unassigned	Unassigned	No			
15_13	IE_SE_15N010500	NORE_060	River	Not at risk	Not at risk	Good	Good	No			
15_16, 15_9	IE_SE_15N010600	NORE_070	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
15_1, 15_16	IE_SE_15N010700	NORE_080	River	Not at risk	Not at risk	Good	High	No			
15_10, 15_16	IE_SE_15N010900	NORE_090	River	Not at risk	Not at risk	Good	High	No			
15_10, 15_16	IE_SE_15N011100	NORE_100	River	Not at risk	Not at risk	Good	High	No			
15_16, 15_7	IE_SE_15N011300	NORE_110	River	Not at risk	Not at risk	Good	Good	No		Gully	LAWPRO: Subcatchment of Existing PAA IFI: Historic Milling weirs - 6 Structures, Migration - Salmon/ Sea trout
15_21, 15_7	IE_SE_15N011400	NORE_120	River	At risk	At risk	Unassigned	Unassigned	No	Ind		
15_21, 15_8	IE_SE_15N011500	NORE_130	River	Not at risk	Not at risk	Good	Good	No			
15_21, 15_8	IE_SE_15N011600	NORE_140	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
15_21, 15_8	IE_SE_15N011700	NORE_150	River	Not at risk	Not at risk	Good	Good	No			
15_6, 15_8	IE_SE_15N011750	NORE_160	River	Not at risk	Not at risk	Unassigned	Unassigned	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_4, 15_6	IE_SE_15N011950	NORE_170	River	Review	Not at risk	Good	Good	No			
15_4, 15_6	IE_SE_15N012000	NORE_180	River	Review	Not at risk	Good	Good	No		Maddoxtown GWS	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle)
15_4, 15_6	IE_SE_15N012090	NORE_190	River	Review	Review	Unassigned	Unassigned	No		Clifden - The Highrath GWS	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle)
15_17, 15_6	IE_SE_15N012130	NORE_200	River	At risk	Review	Unassigned	Unassigned	No			
15_17, 15_19	IE_SE_15N012200	NORE_210	River	At risk	Review	Moderate	Good	No			
15_17, 15_20	IE_SE_15N012310	NORE_220	River	Not at risk	Review	Good	Moderate	No			
15_17, 15_20	IE_SE_15N012330	NORE_230	River	Review	At risk	Good	Moderate	No	UR		
15_17, 15_20	IE_SE_15N012400	NORE_240	River	Not at risk	Review	Good	Moderate	No			
15_17, 15_20	IE_SE_15N012500	NORE_250	River	Not at risk	Not at risk	Good	Good	No			
15_21	IE_SE_15N020100	NUENNA_010	River	At risk	At risk	Poor	Moderate	No	Ag	Nuenna	LAWPRO: Existing PAA
15_21	IE_SE_15N020400	NUENNA_020	River	At risk	At risk	Poor	Moderate	No	Ag, UWW	Nuenna	LAWPRO: Existing PAA
15_1	IE_SE_15N040200	NEEDLEFORD STREAM_010	River	At risk	At risk	Good	High	Yes	Ag, Other, Peat	Mountrath	Laois CC: Proposed for LAWPRO - Review at Laois Meeting
15_7	IE_SE_15O010050	OWVEG (NORE)_010	River	Not at risk	Not at risk	Good	Good	No			
15_7	IE_SE_15O010080	OWVEG (NORE)_020	River	Not at risk	Not at risk	Good	Good	No			
15_7	IE_SE_15O010160	OWVEG (NORE)_030	River	At risk	Not at risk	Moderate	Good	No		Ballypickas GWS	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle)
15_7	IE_SE_15O010280	OWVEG (NORE)_040	River	Not at risk	Not at risk	Good	Good	No			
15_7	IE_SE_15O010400	OWVEG (NORE)_050	River	Not at risk	Not at risk	Good	Good	No		Attanagh GWS	NFGWS: Group Water Scheme groundwater abstraction sources proposed for inclusion as an Area for Acton (3rd Cycle) NPWS: Lisbigney Bog SAC
15_14	IE_SE_15R031100	RATHDOWNEY STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag	Erkina	LAWPRO: Existing PAA
15_4	IE_SE_15R370950	RATHGARVAN_or_CLIFDEN_010	River	Review	Review	Unassigned	Unassigned	No		Brownstown (Pococke)	LAWPRO: Subcatchment of Existing PAA
15_19	IE_SE_15S010100	STONYFORD STREAM (KILKENNY)_010	River	At risk	At risk	Unassigned	Unassigned	No	Ag, DWW	Stoneyford-Kells-Burnchurch	Kilkenny CC proposed for LAWPRO NFGWS: GW abstraction
15_9	IE_SE_15T010200	TONET_010	River	Not at risk	Not at risk	High	High	Yes		Tonet	HSO not at risk (others in SC at risk)
15_9	IE_SE_15T010400	TONET_020	River	At risk	At risk	Poor	Moderate	No	For	Tonet	At risk wb - not proposed
15_9	IE_SE_15T010600	TONET_030	River	At risk	At risk	Moderate	Moderate	No	For	Tonet	At risk wb - not proposed
15_5	IE_SE_15T020200	TULLAROAN STREAM_010	River	Review	Review	Unassigned	Unassigned	No		Tullaroan stream	Kilkenny CC for KCC as an area for protection EPA: Headwater

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_5	IE_SE_15T020250	TULLAROAN STREAM_020	River	Not at risk	Not at risk	Good	Good	No		Tullaroan stream	Kilkenny CC for KCC as an area for protection NFGWS: GW abstraction
15_5	IE_SE_15T020450	TULLAROAN STREAM_030	River	Review	Review	Good	Good	No		Tullaroan stream	Kilkenny CC for KCC as an area for protection NFGWS: GW abstraction
15_18	IE_SE_15T360920	TULLAGHER_010	River	Review	Review	Unassigned	Unassigned	No			
14_19, 15_18	IE_SE_100_0200	New Ross Port	Transitional	At risk	At risk	Moderate	Moderate	No	Ag		
14_19, 14_7, 15_17, 15_18	IE_SE_100_0250	Barrow Nore Estuary Upper	Transitional	Review	At risk	Good	Moderate	No	Ag, UR		
14_19, 14_7, 15_17, 15_18	IE_SE_100_0300	Upper Barrow Estuary	Transitional	Review	Review	Good	Good	No			
14_19, 14_7, 15_17, 15_18, 15_20	IE_SE_100_0400	Nore Estuary	Transitional	At risk	At risk	Moderate	Good	No	Ag		
14_19, 15_18, 16_19, 16_29	IE_SE_100_0500	Lower Suir Estuary (Little Island - Cheekpoint)	Transitional	At risk	At risk	Moderate	Good	No	Ag		
14_11, 14_12, 14_17, 14_8, 15_10, 15_11, 15_12, 15_15, 15_19, 15_21, 15_3, 15_4, 15_5, 15_6, 15_7, 15_8, 16_21, 16_24, 16_6	IE_SE_G_009	Ballingarry	Groundwater	Review	Review	Good	Good	No			
14_7, 14_8, 15_11, 15_17, 15_19, 15_2, 15_20, 15_4, 16_24	IE_SE_G_021	Bennettsbridge	Groundwater	Review	Review	Good	Good	No			
15_11, 15_19, 15_5, 15_6	IE_SE_G_026	Callan	Groundwater	At risk	At risk	Good	Good	No	Ag		
14_15, 15_1, 15_13, 15_9, 25A_12, 25A_6, 25B_3, 25B_6	IE_SE_G_027	Camross	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_11, 15_2, 16_1, 16_12, 16_15, 16_16, 16_17, 16_19, 16_23, 16_24, 16_25, 16_27, 16_29, 16_3,	IE_SE_G_030	Carrick-on-Suir	Groundwater	At risk	At risk	Good	Good	No	Ag		

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
16_7, 16_8, 18_17											
14_12, 14_5, 14_8, 15_12, 15_3, 15_7, 15_8	IE_SE_G_034	Castlecomer	Groundwater	Not at risk	Not at risk	Good	Good	No			
14_8, 15_17, 15_4, 15_6	IE_SE_G_038	Clifden	Groundwater	Not at risk	Not at risk	Good	Good	No			
14_15, 15_1, 15_10, 25A_6	IE_SE_G_039	Clonaslee	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_11, 15_15, 16_1, 16_10, 16_11, 16_12, 16_14, 16_15, 16_16, 16_17, 16_18, 16_20, 16_21, 16_23, 16_24, 16_25, 16_26, 16_27, 16_29, 16_3, 16_6, 16_7, 16_8, 16_9, 18_17	IE_SE_G_040	Clonmel	Groundwater	Review	Review	Good	Good	No			
14_15, 15_1, 15_10, 15_13, 15_9, 25B_6	IE_SE_G_047	Coolrain	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_13, 25B_6	IE_SE_G_050	Derrymore Gravels	Groundwater	Review	Not at risk	Good	Good	No			
15_13, 15_14, 16_22	IE_SE_G_051	Donaghmore	Groundwater	Review	Not at risk	Good	Good	No			
14_7, 15_17, 15_18, 15_20, 16_29	IE_SE_G_076	Inistioge	Groundwater	Review	Not at risk	Good	Good	No			
14_8, 15_11, 15_19, 15_4, 15_5, 15_6, 16_24	IE_SE_G_078	Kilkenny	Groundwater	At risk	At risk	Good	Good	No	Ag, Other		
15_11, 15_15, 16_10, 16_21, 16_24, 16_6	IE_SE_G_081	Killenaule	Groundwater	Not at risk	Review	Good	Good	No			
15_11, 15_5	IE_SE_G_083	Kilmanagh Gravels	Groundwater	Not at risk	Not at risk	Good	Good	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_15, 15_16, 15_21, 15_7	IE_SE_G_088	Lisdowney	Groundwater	Review	Review	Good	Good	No			
14_12, 14_5, 15_12, 15_3, 15_7	IE_SE_G_104	Newtown	Groundwater	Not at risk	Not at risk	Good	Good	No			
14_1, 14_11, 14_15, 14_20, 15_10, 25A_4, 25A_6	IE_SE_G_107	Portlaoise	Groundwater	Not at risk	Not at risk	Good	Good	No			
14_11, 14_15, 15_1, 15_10, 15_13, 15_14, 15_15, 15_16, 15_9, 16_21, 16_22, 25B_6	IE_SE_G_114	Rathdowney	Groundwater	Review	Review	Good	Good	No			
14_15, 15_1, 15_9, 25A_6	IE_SE_G_118	Rosenallis	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_10, 15_14, 15_15, 15_16, 16_21	IE_SE_G_119	Shanahoe	Groundwater	Review	Review	Good	Good	No			
14_12, 14_17, 14_5, 14_8, 15_12, 15_3, 15_4, 15_7, 15_8	IE_SE_G_124	Shanragh	Groundwater	Not at risk	Review	Good	Good	No			
15_11, 15_15, 15_5, 16_21, 16_6	IE_SE_G_126	Slieveardagh Hills	Groundwater	Review	Review	Good	Good	No			
15_17, 15_19, 15_20, 15_4, 15_6	IE_SE_G_128	Stoneyford Gravels	Groundwater	Review	Review	Good	Good	No			
15_13, 15_14, 15_15, 16_10, 16_11, 16_13, 16_18, 16_2, 16_20, 16_21, 16_22, 16_28, 16_4, 16_5, 16_6, 16_9, 24_12, 24_2, 24_3, 25B_6, 25C_4, 25C_5, 25D_2, 25D_5, 25D_7	IE_SE_G_131	Templemore	Groundwater	Review	Review	Good	Good	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
15_15, 15_21	IE_SE_G_134	GWDTE-The Loughlans Turlough (SAC000407)	Groundwater	Review	Review	Good	Good	No			
14_7, 15_11, 15_17, 15_19, 15_2, 15_20, 16_15, 16_24, 16_29	IE_SE_G_135	Thomastown	Groundwater	At risk	At risk	Good	Good	No	Ag		
15_18, 16_17, 16_19, 16_27, 16_29, 16_7, 17_1, 17_2, 17_3	IE_SE_G_149	Waterford	Groundwater	Review	Review	Good	Good	No			
09_11, 12_12, 12_14, 12_16, 12_7, 12_8, 13_1, 13_3, 13_5, 14_10, 14_13, 14_18, 14_19, 14_2, 14_4, 14_6, 14_7, 14_9, 15_17	IE_SE_G_152	New Ross	Groundwater	Not at risk	Review	Good	Good	No			
07_4, 14_1, 14_11, 14_12, 14_14, 14_16, 14_17, 14_18, 14_2, 14_20, 14_3, 15_10, 15_7, 25A_4	IE_SE_G_153	Bagenalstown Upper	Groundwater	Review	Review	Good	Good	No			
15_18, 15_2, 15_20, 16_12, 16_15, 16_23, 16_24, 16_27, 16_29	IE_SE_G_155	Mullinavat	Groundwater	Not at risk	Not at risk	Good	Good	No			
14_11, 15_10, 15_15, 15_16, 15_21, 15_6, 15_7, 15_8, 16_21	IE_SE_G_156	Durrow	Groundwater	At risk	At risk	Good	Poor	No	Ag	Durrow Groundwater	<p>GSI: The GWB has deteriorated in status due to the increasing groundwater nitrate concentrations exceeding the drinking water standard. Groundwater nitrate concentrations are increasing in the SE. So this type of deterioration may be observed in the future.</p> <p>Deteriorated waterbody; drinking water impacts; GWB has deteriorated in status due to qualitative pressures. Build on existing programmes and</p>

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
											community group initiatives. GSI are involved in research (together with NFGWS and TCD) into the pressures in GWS in this GWB. A PAA status would allow this already existing work to be highlighted via the WFD process.
14_12, 14_13, 14_4, 14_5, 14_6, 14_7, 14_8, 15_17, 15_4	IE_SE_G_157	Bagenalstown Lower	Groundwater	Review	Review	Good	Good	No			
15_14, 15_15, 16_10, 16_2, 16_21, 16_22, 16_28	IE_SE_G_158	Thurles	Groundwater	Review	Not at risk	Good	Good	No			
14_7, 15_11, 15_17, 15_19, 15_2, 15_20, 16_24	IE_SE_G_159	Clifden South	Groundwater	Not at risk	Review	Good	Good	No			
15_11, 15_19, 15_2, 15_5, 15_6, 16_24	IE_SE_G_161	Clifden Northwest	Groundwater	Not at risk	Review	Good	Good	No			
15_12, 15_16, 15_21, 15_3, 15_4, 15_6, 15_7, 15_8	IE_SE_G_163	Killkenny-Ballynakill Gravels	Groundwater	Not at risk	At risk	Good	Good	No	Ag		
14_4, 14_5, 14_8, 15_4	IE_SE_G_165	Goresbridge North	Groundwater	Review	At risk	Good	Good	No	Ag		
14_4, 14_7, 14_8, 15_17	IE_SE_G_166	Goresbridge South	Groundwater	Not at risk	Review	Good	Good	No			
15_10, 15_16	IE_SE_G_168	Poormansbridge Gravels	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_10, 15_7	IE_SE_G_171	Abbeyleix Gravels	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_16, 15_9	IE_SE_G_174	Castletown Gravels	Groundwater	Review	Not at risk	Good	Good	No			
15_13, 25A_12, 25B_3, 25B_6	IE_SH_G_045	Bredagh	Groundwater	Review	Review	Good	Good	No			
15_13, 16_22, 25A_11, 25A_12, 25B_1, 25B_3, 25B_6, 25B_7, 25C_2, 25C_4, 25C_9	IE_SH_G_205	Shinrone	Groundwater	Not at risk	Not at risk	Good	Good	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Area for Action Name	Recommended Area for Action (reasons for selection)
14_15, 15_9, 25A_12, 25A_6, 25B_3	IE_SH_G_210	Slieve Bloom North	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_13, 15_9, 25A_12, 25B_3, 25B_6	IE_SH_G_211	Slieve Bloom South	Groundwater	Not at risk	Not at risk	Good	Good	No			
15_13, 25B_6, 25B_7	IE_SH_G_247	Roscrea Gravels	Groundwater	Review	Not at risk	Good	Good	No			

Ag: Agriculture

DWW: Domestic Waste Water

For: Forestry

Hymo: Hydromorphology

Ind: Industry

M+Q: Mines and Quarries

Peat: Peat Drainage and Extraction

UR: Urban Run-off

UWW: Urban Waste Water

Note: Significant Pressures for Review water bodies have not been included as they will need to be confirmed as part of an Investigative Assessment.