3rd Cycle Draft Shannon Estuary South Catchment Report (HA 24)

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 Shannon Estuary South 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.
2nd 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.
2nd 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.
3rd 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.
3rd 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 Shannon Estuary South 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 Shannon Estuary South includes the area drained by the Rivers Deel and Maigue and all streams entering tidal water in Shannon Estuary between Kilconly Point and Thomond Bridge, Limerick, draining a total area of 2,033km² (Figure 1). The largest urban centre in the catchment is the southern part of Limerick City. The other main urban centres in this catchment are Newcastle West, Charleville, Kilmallock Rathkeale and Mungret. The total population of the catchment is approximately 112,430 with a population density of 55 people per km². This catchment is predominantly lowlying, flat and underlain by limestones with the exception of a few isolated hills. This geology provides a significant groundwater resource in the catchment. The steep scarp delineating the western edge of the catchment denotes an abrupt change in geology to shales, which are found on the high ground along the catchment boundary.

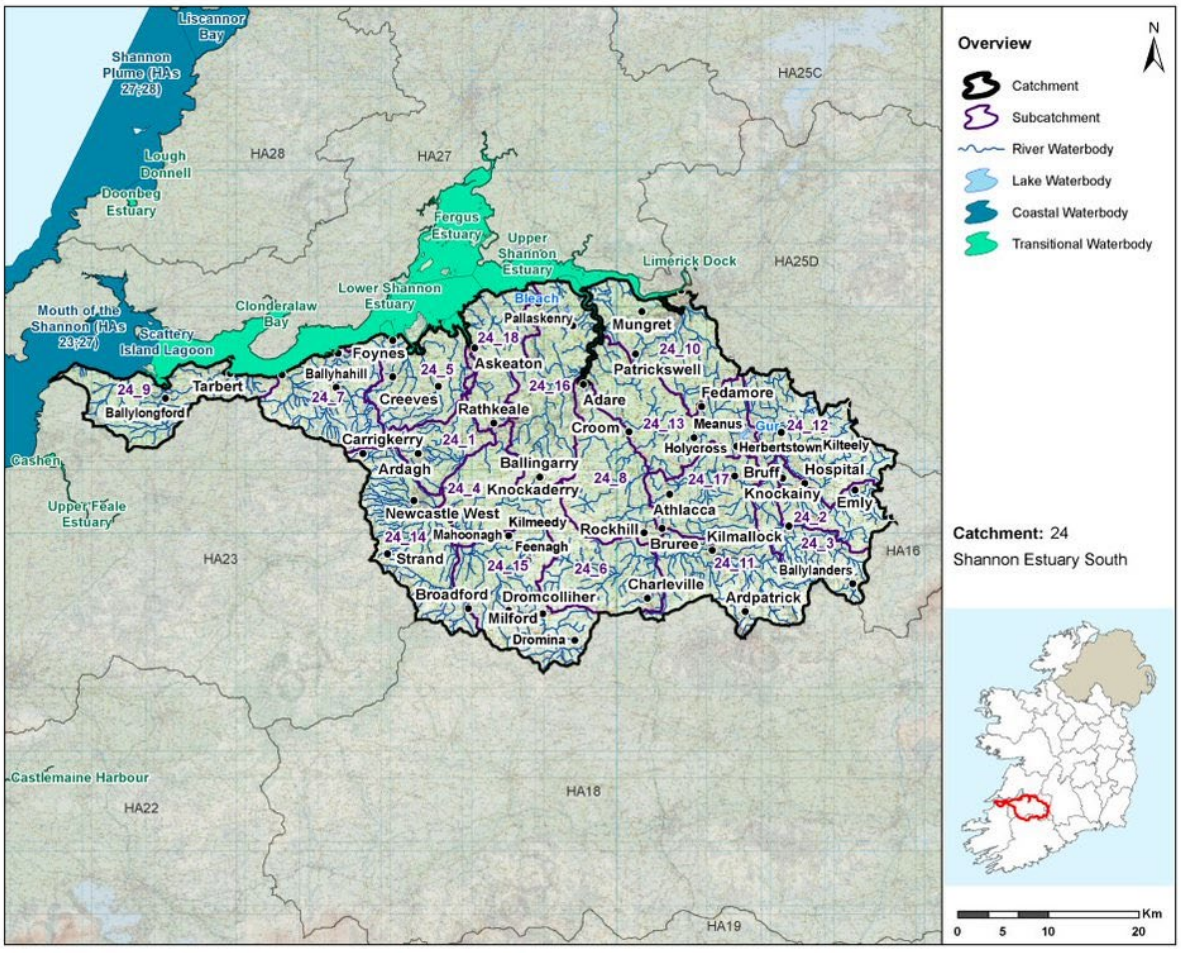


Figure 1: Overview of subcatchments in the Shannon Estuary South catchment

The Shannon Estuary South catchment is divided into 18 subcatchments (Figure 1) with 95 river waterbodies, two lake waterbodies, seven transitional waterbodies, one coastal waterbody and 46 groundwater bodies (Figure 2).

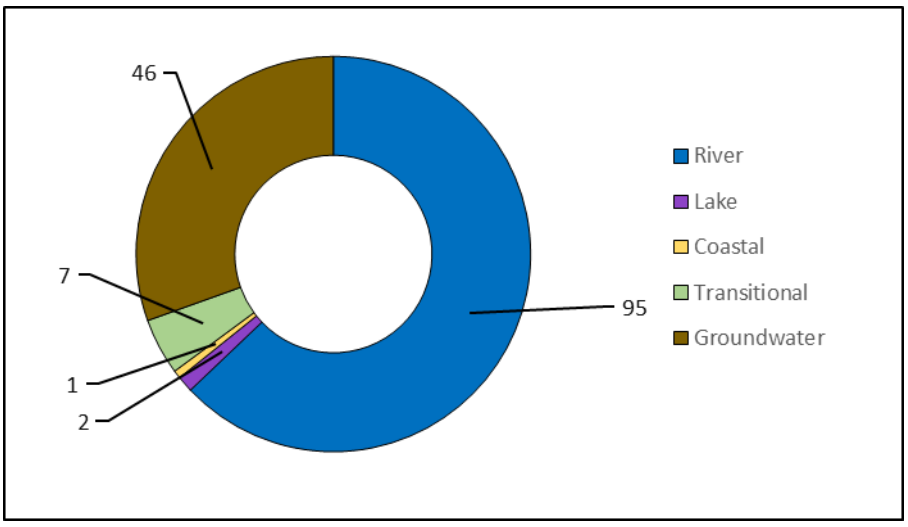


Figure 2: Waterbody types and numbers in the Shannon Estuary South Catchment.

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 62 waterbodies achieving Good Status, 24 achieving Moderate Status, 24 achieving Poor Status and one achieving Bad Status. There are 40 waterbodies that do not have status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.

- There is one lake waterbody that must achieve High Ecological Status (HES) in this catchment. This waterbody is listed in Appendix 1. This lake waterbody (Bleach) is at Good Status. There are no river, transitional, coastal or groundwater bodies that must achieve High Ecological Status (HES) in this catchment.

- One lake waterbody (Bleach) has declined from High to Good Status, this decline means there are no waterbodies achieving High Status in Cycle 3. The overall number of waterbodies achieving Good Status has remained at 62 between Cycle 2 and Cycle 3. However, seven river waterbodies declined from Good to Moderate Status, but seven waterbodies (lake transitional, coastal, groundwater) improved to Good Status. There has been an overall increase in five waterbodies achieving Moderate Status (seven river waterbodies, one lake) and a decrease of five waterbodies achieving Poor Status. One river (Ahavarraga Stream_010) has declined from Poor to Bad Status (Figure 3 & Table 1).

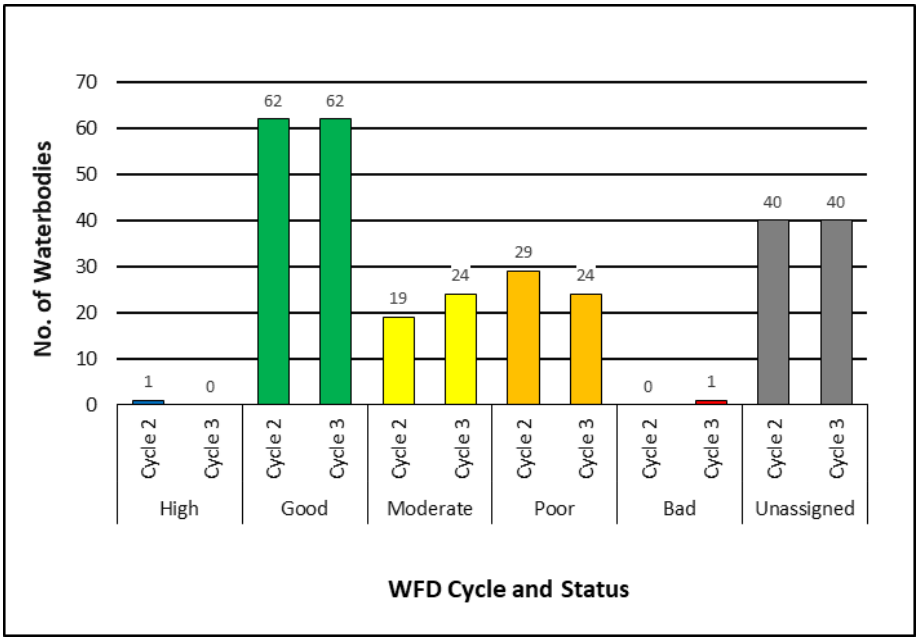


Figure 3: Waterbody Status Breakdown (All waterbodies)

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	0	0	1	0	0	0	0	0	0	0	**1**	**0**
Good	21	14	0	1	0	2	0	1	41	44	**62**	**62**
Moderate	14	21	0	1	4	2	1	0	0	0	**19**	**24**
Poor	22	21	1	0	1	1	0	0	5	2	**29**	**24**
Bad	0	1	0	0	0	0	0	0	0	0	**0**	**1**
Unassigned	38	38	0	0	2	2	0	0	0	0	**40**	**40**
Total	95	95	2	2	7	7	1	1	46	46	**151**	**151**

- 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 13 (12%) waterbodies have improved in status, 82 (74%) waterbodies have remained unchanged and 16 (14%) waterbodies have declined in status.[1]
- There is an overall decline in the status of three 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 4. Percentage displayed in the 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.

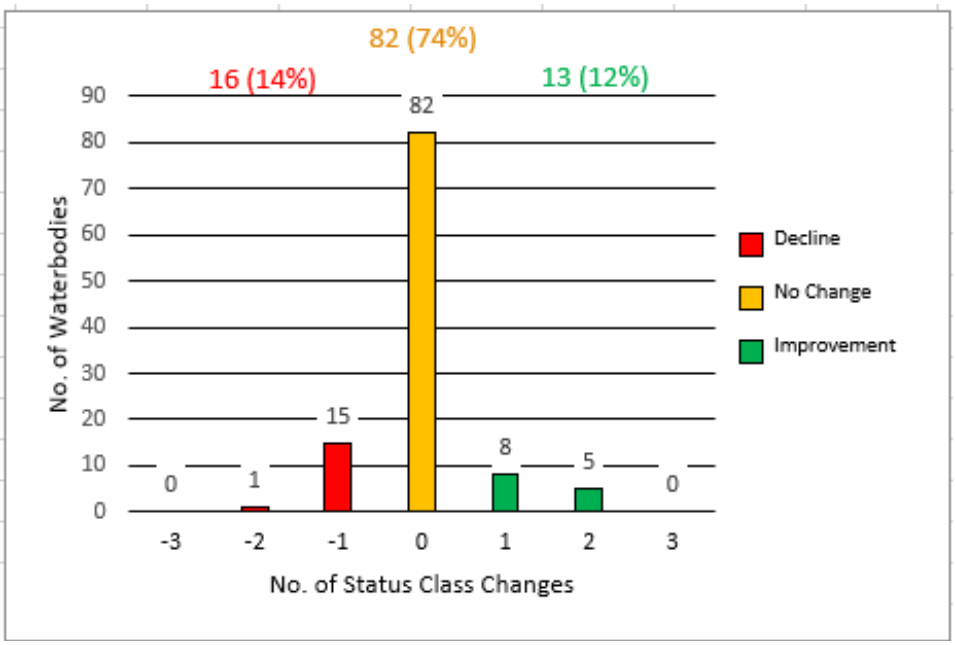


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- There are five 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*.

- Two river waterbodies and one groundwater body in the catchment did not meet the DWPA objective in 2019:
    - Deel (Newcastlewest)_070 (IE_SH_24D020600) river waterbody is the source for the Newcastle West Public Water Supply (1900PUB1042) which had MCPA pesticide exceedances;
    - Deel (Newcastlewest)_140 (IE_SH_24D021400) river waterbody is the source for the Foynes/Shannon Estuary Public Water Supply (1900PUB1027) which had MCPA and 2, 4-D pesticide exceedances and;
    - Templemore (IE_SE_G_131) groundwater body is the source for Templetuohy public supply (2800PUB1013) which had nitrate exceedance.

- For more detailed information please see the EPA reports on drinking water quality in 2019 for Public Supplies[2] and Private Supplies[3].

[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

2.2.2 Bathing Waters

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

- For more detailed information please see the EPA report on bathing water quality in 2020[4].

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		Waterbody intersection		Objective met?	
Name	Code	Name	Code	Yes	No
West Shannon Ballylongford	IEPA2_0061	Lower Shannon Estuary	IE_SH_060_0300	✓	

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

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

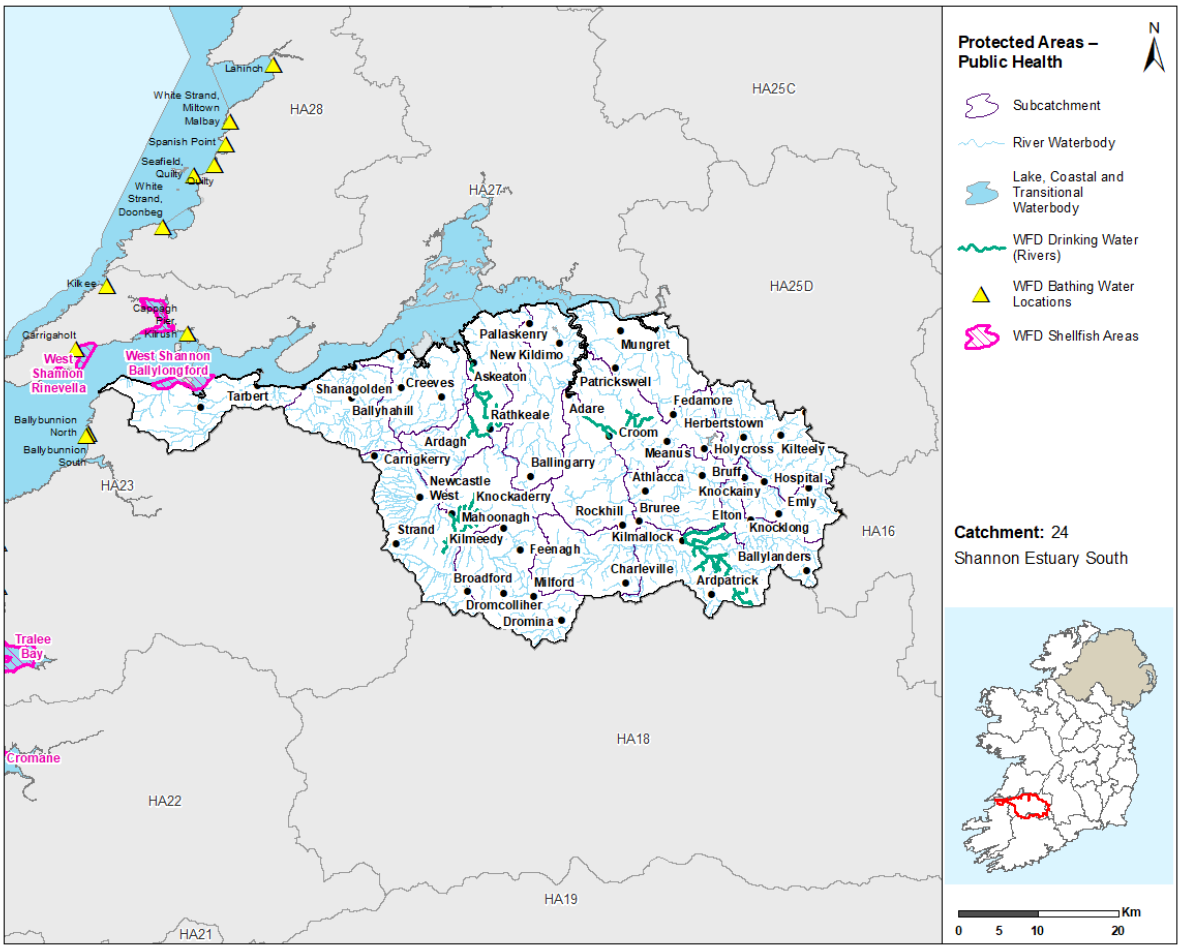


Figure 5: Protected Areas – Public Health

2.2.4 Natura 2000 Sites

- 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 seven SACs in this catchment, all 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.[5]

Table 3: Natura 2000 Network Assessment Summary

Water Body Type	Total No.	Meeting the Requirements	Did not meet the Requirements	Unknown*
Rivers	23	0	7	16
Transitional & Coastal	7	3	4	0

**As the waterbody status was unassigned.*

- There are no river waterbodies with FWPM habitats in the catchment.
- There are three groundwater bodies (GWDTE-Tory Hill Fen (SAC000439), GWDTE-Askeaton North Fens (SAC002279) & GWDTE-Askeaton South Fens (SAC002279)) delineated and assessed as Groundwater Dependent Terrestrial Ecosystems for this catchment. All three groundwater are at Good status (2013-2018).
- Water dependent SACs/ SPAs in the catchment are illustrated in Figure 6.

[5] https://www.catchments.ie/download/catchments-assessments-protected-areas-supporting-documents/

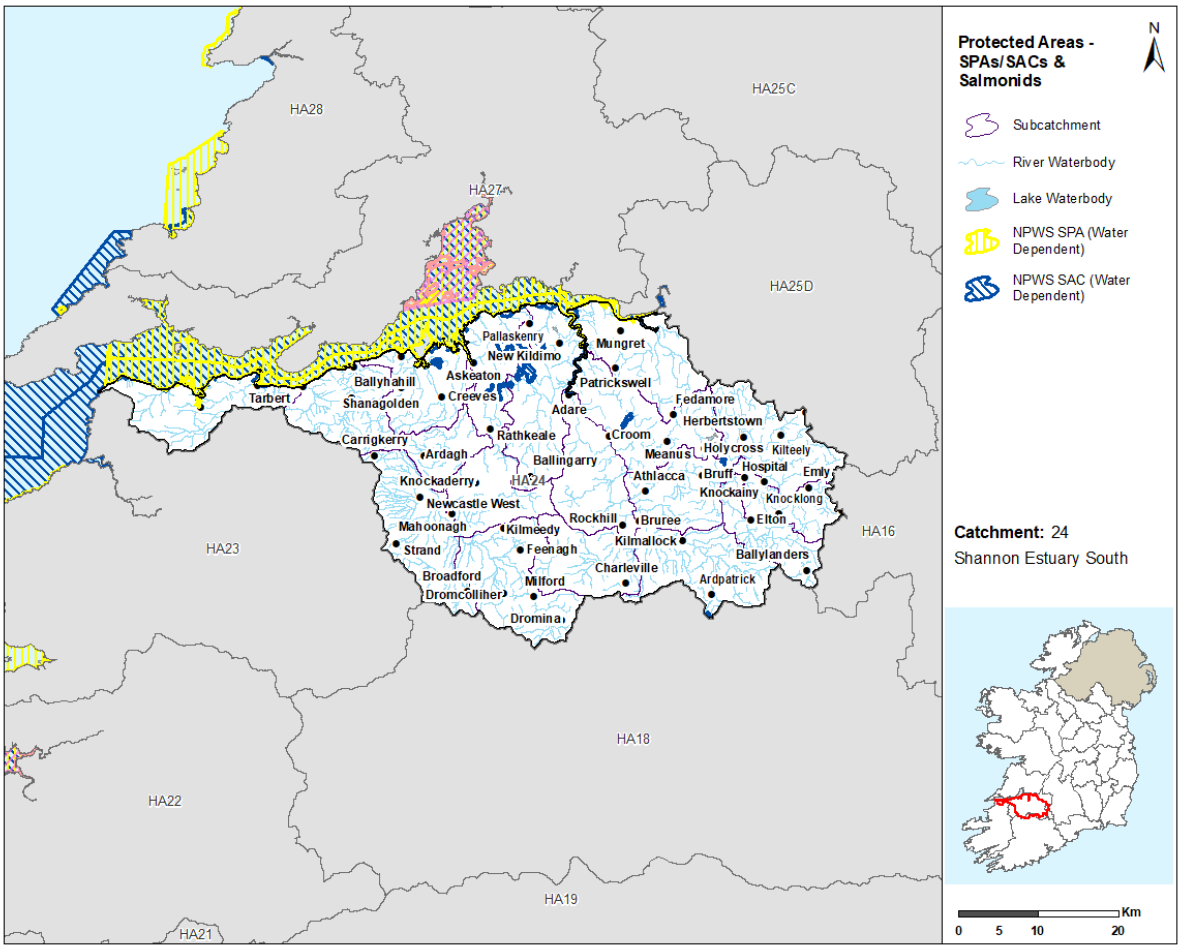


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

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 three 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 three 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	
Charleville Stream (010 & 020)	Charleville	D0204-01	Charleville Stream_010	IE_SH_24C020780	✓		Tertiary Treatment in place
			Charleville Stream_020	IE_SH_24C020800			
Maigue River (030)	Charleville	D0204-01	Maigue_030	IE_SH_24M010300	✓		Tertiary Treatment in place
Deel(NewcastleWest)_090 & 100 & 110	Newcastle West	D0108-01	Deel (NewcastleWest)_090	IE_SH_24D020800	✓		Tertiary Treatment in place
			Deel (NewcastleWest)_100	IE_SH_24D021000			
			Deel (NewcastleWest)_110	IE_SH_24D021100			

2.3 Heavily Modified Waterbodies

- Based on the 1st and 2nd RBMPs there are currently two designated heavily modified water bodies (HMWB) in the catchment – Limerick Dock and Foynes Harbour due to port facilities. Limerick Dock was classified as having Moderate Ecological Potential in 2013-15 but has improved to Good in the 2016-2018 iteration, while Foynes Harbour remains Unassigned. 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 Shannon Estuary – South 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 151 waterbodies in the Shannon Estuary South Catchment and 66 (44%) are *At Risk*, 51 (34%) in *Review* and 34 (23%) are *Not At Risk*.

3.2 Surface Waters

- For the 95 river waterbodies in the catchment, 48 (51%) are *At Risk,* 34 (36%) are in *Review* and 13 (14%) are *Not At Risk*.

- Both lake waterbodies in the catchment (Bleach & Gur) are *At Risk.*

- For the seven transitional waterbodies in the catchment, three (43%) are *At Risk* (Deel Estuary, Maigue Estuary, Upper Shannon Estuary), three (43%) are in *Review* and one (14%) is *Not At Risk* (Lower Shannon Estuary).

- The only coastal waterbody in the catchment (Mouth of the Shannon (HAs 23;27)) is *Not At Risk*.

- The largest proportion of *At Risk* waterbodies are found in river waterbodies with 48 (73%) of 66 waterbodies deemed to be *At Risk*. In addition, there are two lake waterbodies and three transitional waterbodies *At Risk*. 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 three *At Risk* waterbodies and an increase of one *Not At Risk* waterbody between Cycle 2 and Cycle 3, and a reduction of four *Review* waterbodies.

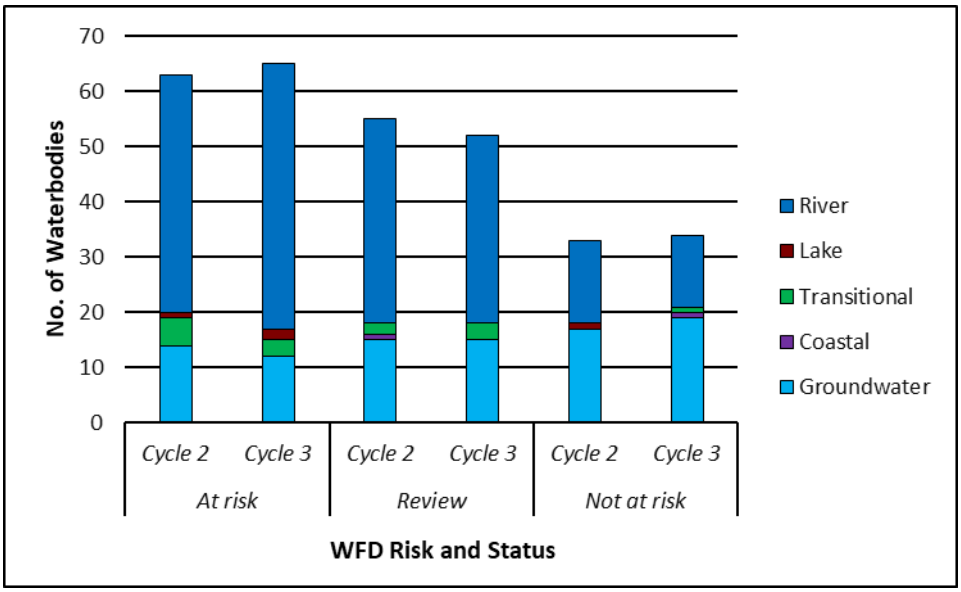


Figure 7: Number of waterbodies in each risk category

- 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.

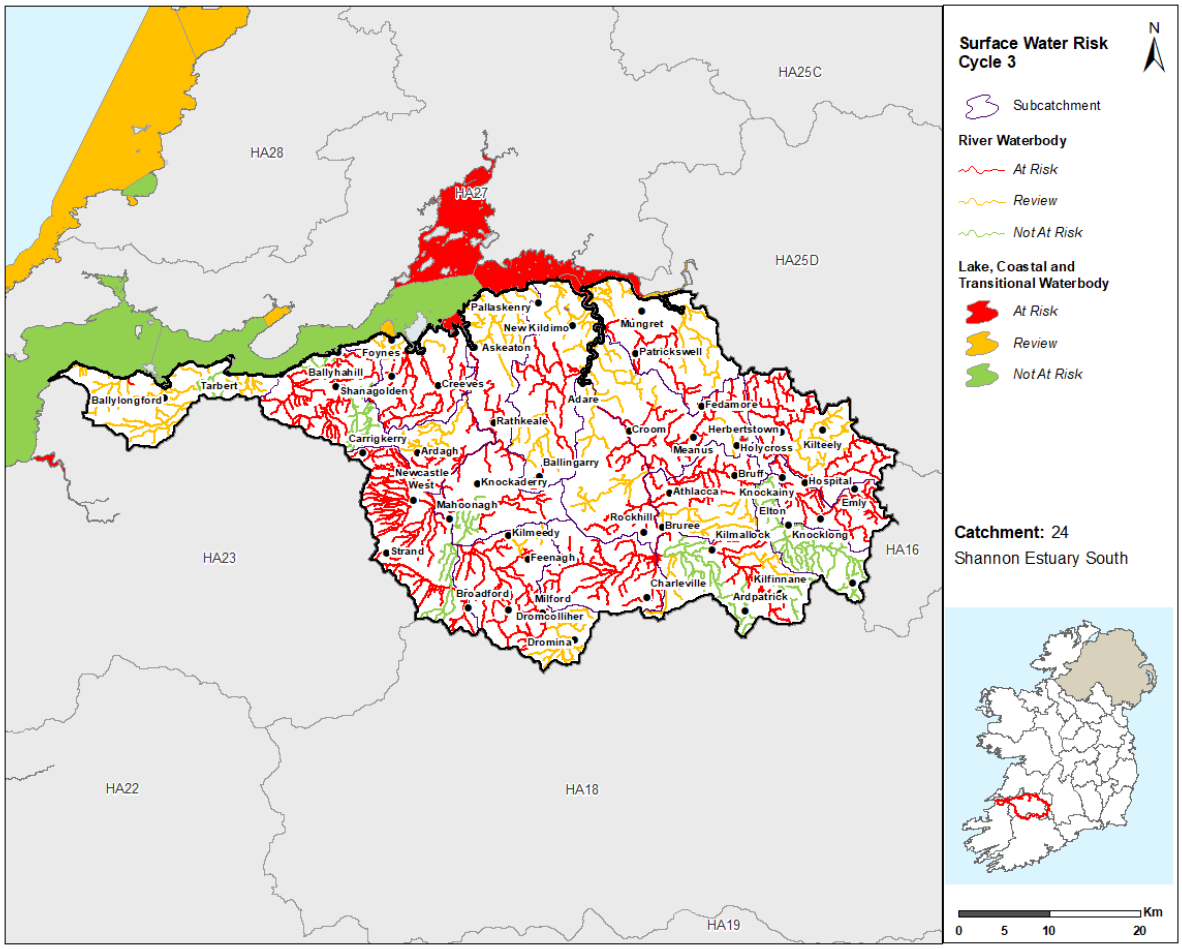


Figure 8: Surface Water Risk Cycle 3

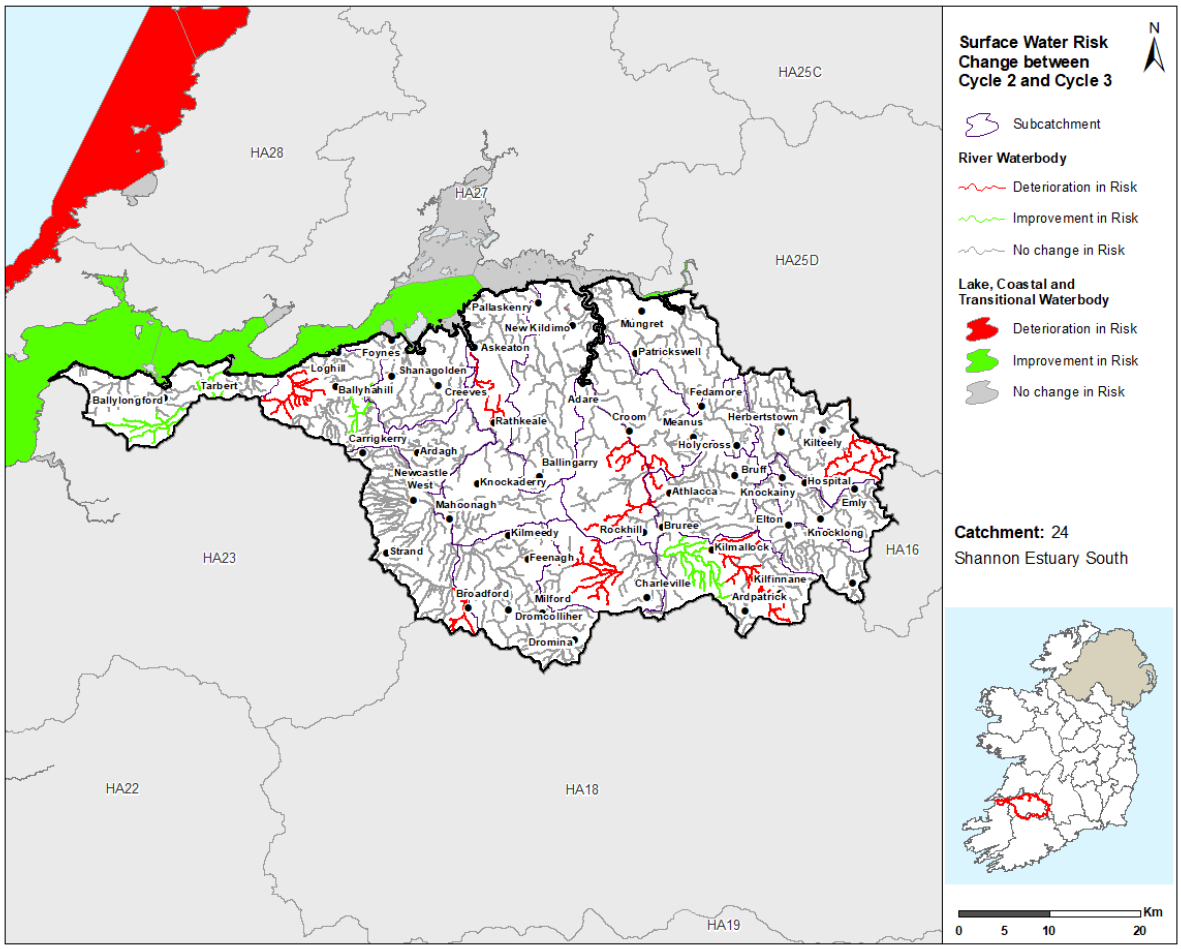


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- For the 46 groundwater bodies, 13 (28%) are *At Risk,* 14 (30%) are in *Review* and 19 (41%) are *Not At Risk*.

- In Cycle 2 there were 14 groundwater bodies *At Risk* in this catchment, 15 in *Review* and 17 *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.

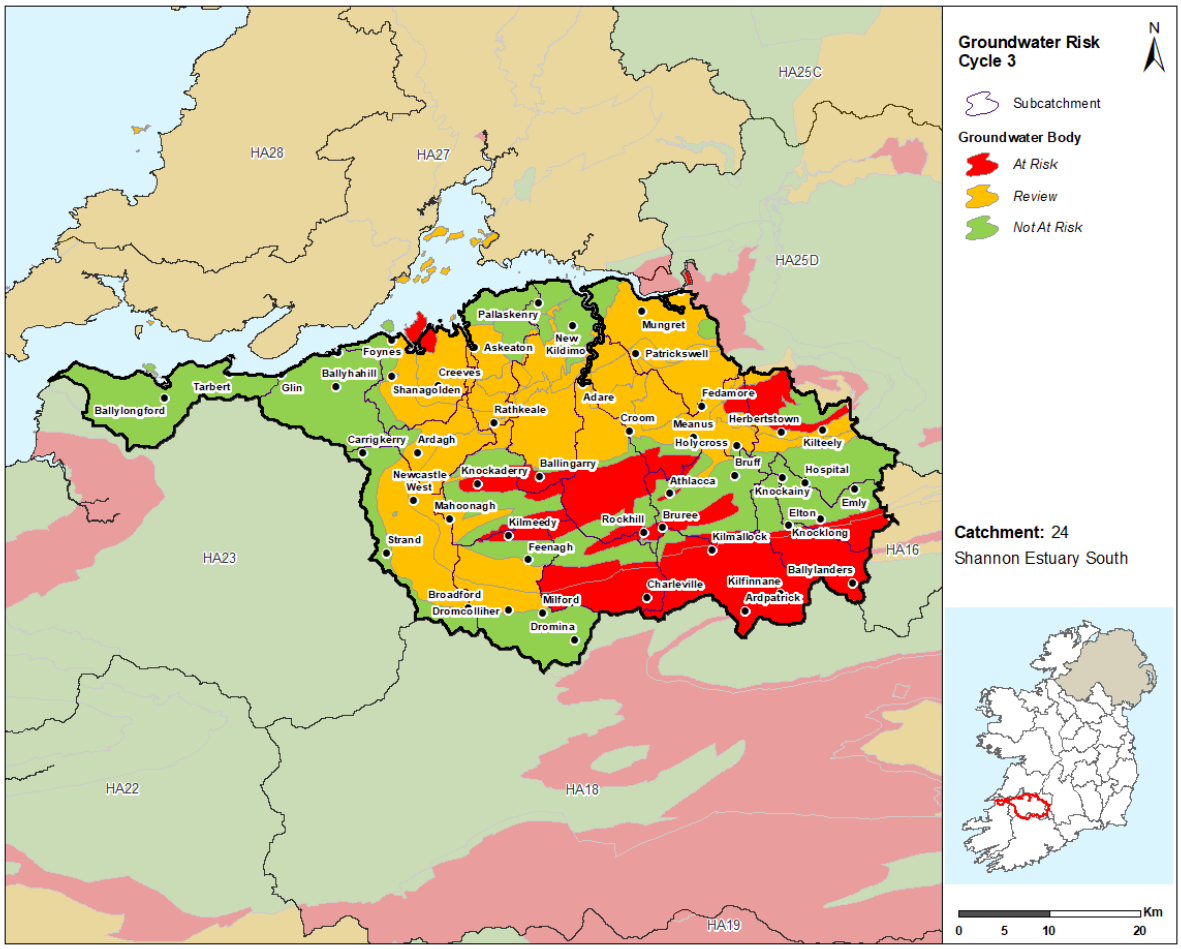


Figure 10: Cycle 3 Groundwater Body Risk

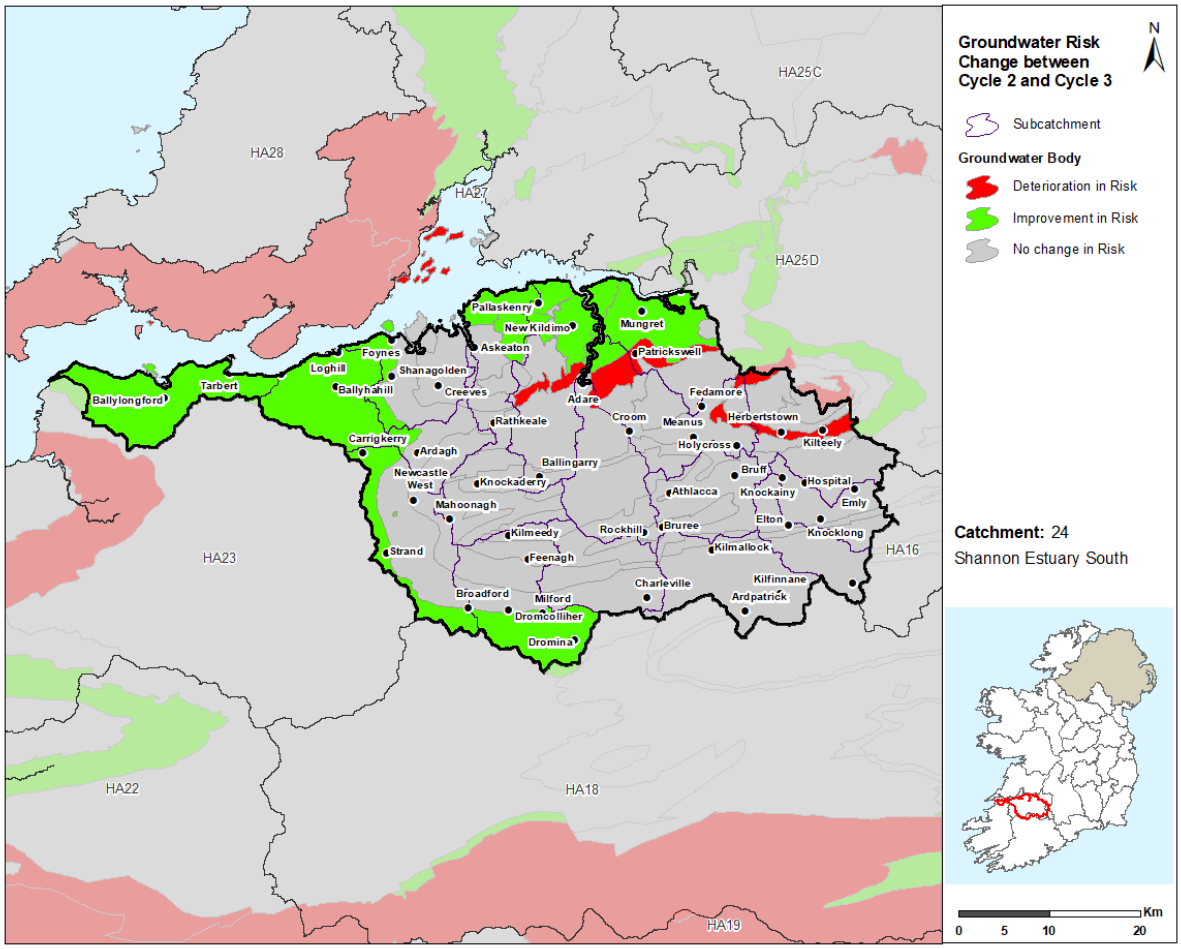


Figure 11: Groundwater Body Risk Change between Cycle 2 & Cycle 3

3.4 Heavily Modified Waterbodies

- Both designated heavily modified water bodies (HMWB) in the catchment (Limerick Dock and Foynes Harbour) are currently in *Review*. 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 Shannon Estuary – South Catchment.

4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

- Excess nutrients remain the most prevalent issue in the Shannon Estuary South catchment (Figure 12), impacting 63 waterbodies in Cycle 3. Organic pollution is impacting 17 waterbodies, sediment is impacting 10 waterbodies, morphological issues are impacting seven waterbodies, hydrological issues are impacting three waterbodies and chemical pollution is impacting two waterbodies. There are also 15 waterbodies impacted by issues that fall under the other category, 13 of which are groundwaters where diminution of quality of associated surface waters for chemical reasons

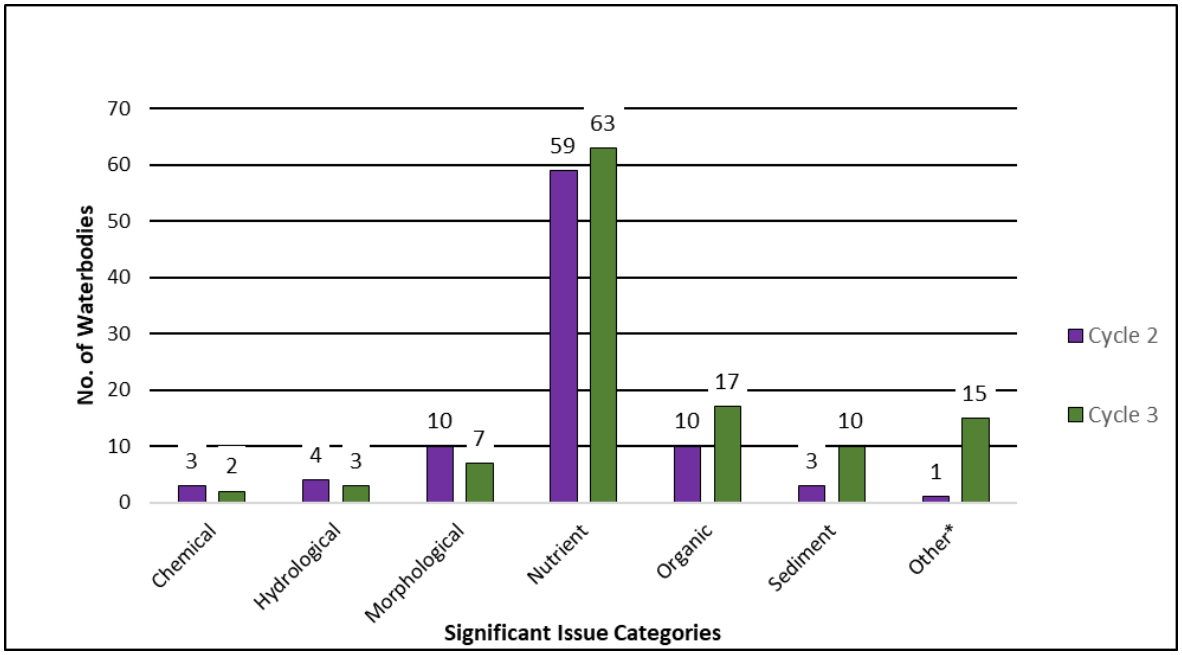
has been identified. Deel (Newcastlewest)_090 and Clonshire_030 are impacted by an unknown impact type and microbiological pollution respectively.

- For river waterbodies, the main significant issues are nutrient pollution (47), organic pollution (16), sediment (10), morphological impacts (6), hydrological impacts (3), other impacts (2) and chemical pollution (1).
- For the two *At Risk* lake waterbodies Gur lake is impacted by nutrient pollution and bleach lake is affected by morphological impacts.
- For the three *At Risk* transitional waterbodies (Deel Estuary, Maigue Estuary, Upper Shannon Estuary), nutrient pollution is impacting each of them with organic pollution also a problem in Deel Estuary.
- For groundwater bodies, the significant issues are nutrient pollution (11), Diminution of quality of associated surface waters for chemical reasons (13) and chemical pollution (1).

- Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues have increased by four from 59 to 63 and the number of waterbodies impacted by organic issues has increased by seven from 10 to 17.

- The numbers of waterbodies with sediment issues have increased by seven from three to 10 and the number of waterbodies impacted by morphological issues have reduced from by three from 10 to seven. The number of waterbodies impacted by hydrological issues has reduced from four in Cycle 2 to three in Cycle 3.

- The numbers of waterbodies with impacted by chemical pollution have decreased by one from three to two and the number of waterbodies impacted by other issues have increased from one in Cycle 2 to two in Cycle 3.

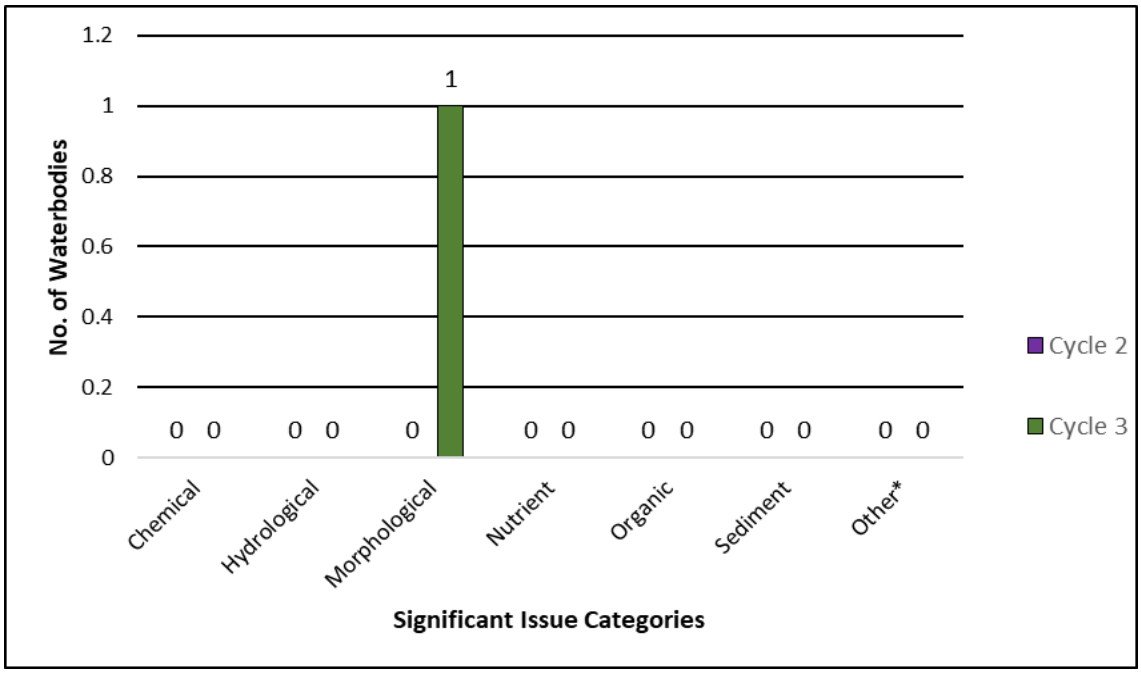


*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

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

4.2 High Status Objective Waterbodies

- In Cycle 3 for the one lake (Bleach) waterbody with a High Status Objective, morphological impacts are the issue (Figure 13).



*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

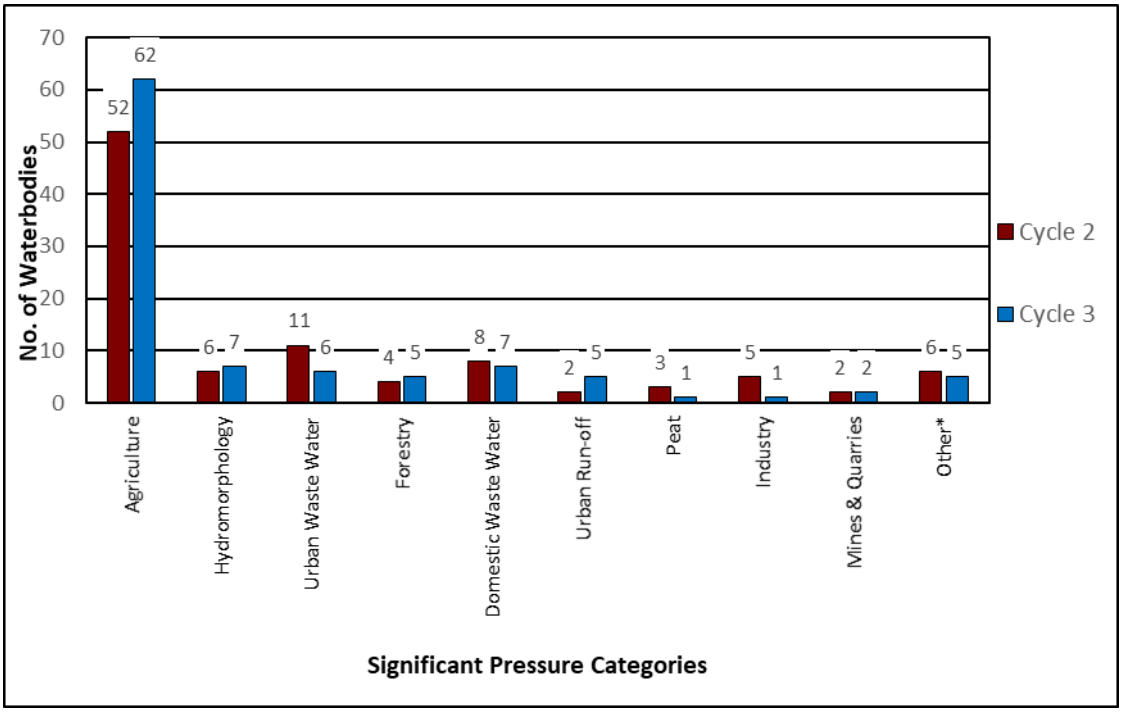
Figure 13: Significant Issues in *At Risk* High Status Objective Waterbodies

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 domestic waste water, hydromorphology, urban waste water, forestry, urban run-off, other[6], mines & quarries, industry and peat.
- When comparing Cycle 2 and Cycle 3 the biggest change is the continued and increasing pressure of agriculture in 62 waterbodies, an increase of 10 waterbodies from 52 waterbodies in Cycle 2.

[6] 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



*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 47 river waterbodies, 11 groundwater bodies, three transitional waterbodies (Deel Estuary, Maigue Estuary, Upper Shannon Estuary) and one lake waterbody (Gur) in Cycle 3. The issues related to agriculture in this catchment is diffuse phosphorus loss to surface waters mainly occurring in areas of poorly draining soils and nutrient losses from impermeable areas, such as farmyards, tracks and storage areas, resulting in excess nutrients (phosphate and ammonia) in surface waters. Another issue from agriculture is sedimentation, due to animal access (poached banks), tilled soils and land drainage. This catchment is largely characterised by intensive dairy farming and poorly draining soils.

- Specific pollution issues are identified in the Drumcmoge_010 due to poor slurry containment and silage leaks causing fish kills in 2015. For the Barnakyle_010, IFI also noted fish kills due to suspected herbicide use.

5.1.1.2 Domestic Waste Water

- Domestic waste water has been identified as a significant pressure in six river waterbodies and one lake waterbody (Gur). The significant issues arise from inadequate domestic waste water systems, many of which are sited on areas of high pollution impact potential/poorly draining soils, that result in enrichment and potential for microbial/organic contamination. Septic tanks are identified as a significant pressure in five waterbodies with high susceptibility for transfer of phosphorus via surface pathways. There is also evidence of direct discharges on the Morningstar_060 and Lough Gur. The significant issue is excess nutrients entering surface waters leading to decreased water quality and additionally microbiological pollution in the Clonshire_030.

5.1.1.3 Hydromorphology

- Hydromorphology is a significant pressure in six river waterbodies and one lake waterbody (Bleach). Channelisation and land drainage are the dominant hydromorphology subcategories in the catchment. Land drainage was identified as an impact in three river waterbodies (Camoge_020, Deel (Newcastle)_040, Morningstar_050) and channelisation was also identified as an impact in two river waterbodies (Camoge_030, Shanagolden Stream_010) and one lake waterbody. Ongoing maintenance drainage in the Camoge_020 is causing heavy siltation, while bank erosion and siltation are additionally impacting the Ahacronane_020 and Deel (Newcastle)_040.

5.1.1.4 Urban Waste Water

- Urban Waste Water Treatment Agglomerations have been identified as a significant pressure in six *At Risk* river waterbodies in Cycle 3 (Table 5). None of the six agglomerations identified as significant pressures are scheduled to be upgraded under Irish Water's Capital investment Programme (2020-2024).

Table 5: Urban 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[7]
Dromcollagher Town and Environs D0316	Agglomeration PE of 1,001 to 2,000	AHAVARRAGA STREAM_010	Bad	N/A
Charleville and Environs D0204	Agglomeration PE of 2,001 to 10,000	CHARLEVILLE STREAM_020	Poor	N/A
Ballingarry D0507	Agglomeration PE of 500 to 1,000	CLONSHIRE_010	Poor	N/A
Askeaton Housing Estate (Lismakeera) A0503	Agglomeration PE < 500	DEEL (NEWCASTLEWEST)_140	Unassigned	N/A
Hospital Town and Environs D0314	Agglomeration PE of 1,001 to 2,000	MAHORE_020	Moderate	N/A
Shanagolden A0219	Agglomeration PE < 500	SHANAGOLDEN STREAM_010	Poor	N/A

- Urban waste water as a significant pressure impacted five less waterbodies than in Cycle 2, a reduction from 11 to six waterbodies impacted. The following Agglomerations were listed as pressures in Cycle 2 but are no longer significant pressures in Cycle 3:
    - Herbertstown (A0224)
    - Kilmeedy (A0212)
    - Tarbert (D0283)
    - Milford (A0321)
    - Charleville & Environs (D0204)
    - Croom (D0307)

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

- Askeaton Housing Estate (Lismakeera) (A0503) has been added to the list of significant pressures in Cycle 3.

5.1.1.5 Forestry

- Forestry has been identified as a significant pressure in three river waterbodies (Deel (Newcastle)_030, Glencorbry_010, Owvane (Limerick)_030) and two groundwater bodies (Bansha, Ballyhoura Kiltorcan) in Cycle 3. The significant issues are arising primarily as a result of clearfelling and associated operations, which results in increased sediment and nutrient loads.

5.1.1.6 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 five river waterbodies from Newcastlewest (Arra_010), Limerick City and Patrickswell (Barnakyle_020), Herbertstown (Camoge_010), Kilfinnane and Kilmallock (Loobagh_010) and Bruff (Morningstar_050). Elevated concentrations of nutrients and organics are the significant issues.

5.1.1.7 Other significant pressures

- *Invasive species*
  Invasive species (i.e. crayfish plague) has been identified as a significant pressure in one waterbody (Deel (Newcastle)_120).

- *Unknown anthropogenic*
  The significant pressures impacting one river waterbody (Deel (Newcastle)_090) and three groundwater bodies (Pallas Green, Bansha & Mitchelstown) are unknown.

5.1.1.8 Industry

- Industry has been identified as a significant pressure in one river waterbody (Maigue_040) and one groundwater body (Industrial Facility (Industrial Facility (P0035-04)). 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 Shannon Estuary South Catchment

Waterbody Code	Waterbody Name	Waterbody Type	Emission Type	Name	Impact
IE_SH_G_252	Industrial Facility (P0035-04)	Groundwater	IPC	Aughinish Alumina Limited	Chemical & Diminution of quality of associated surface waters for chemical reasons

*Name of facility not provided during characterisation

5.1.1.9 Mines & Quarries

- Quarries have remained a significant pressure in two river waterbodies (Ahacronane_020, Deel (Newcastle)_030). The significant issues are a combination of sediment release, nutrient pollution and morphological impacts.

5.1.1.10 Extractive industry

- *Peat*
  Peat drainage and extraction has been identified as a significant pressure in one river waterbody (Dooncaha Stream_010). Altered habitat due to hydrological changes is the impact.

Figure 15 – Figure 18 illustrates the locations of waterbodies for the four most common pressures in order of prevalence (agriculture, hydromorphology, domestic waste water, and urban waste water) within the catchment in Cycle 3.

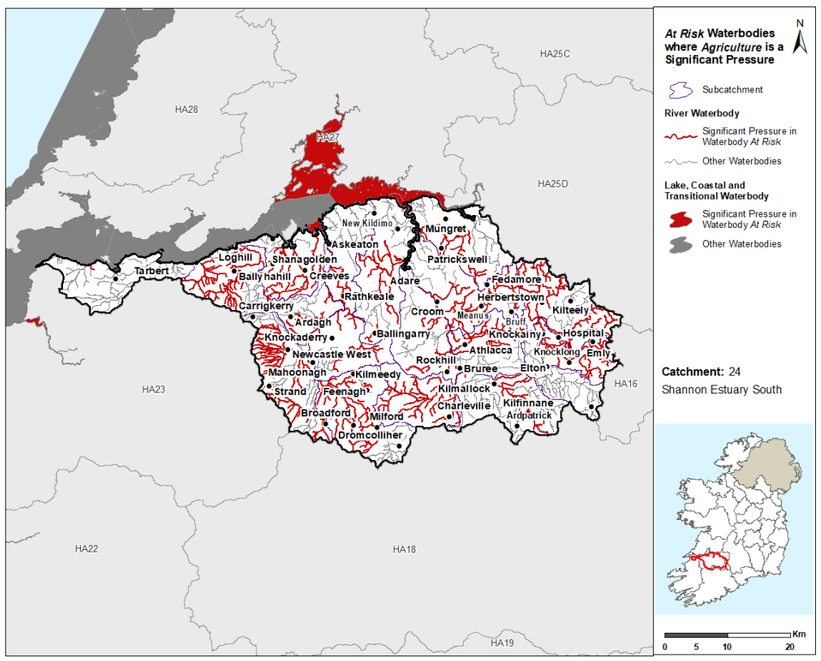


Figure 15: Locations of Waterbodies where Agriculture is a Significant Pressure

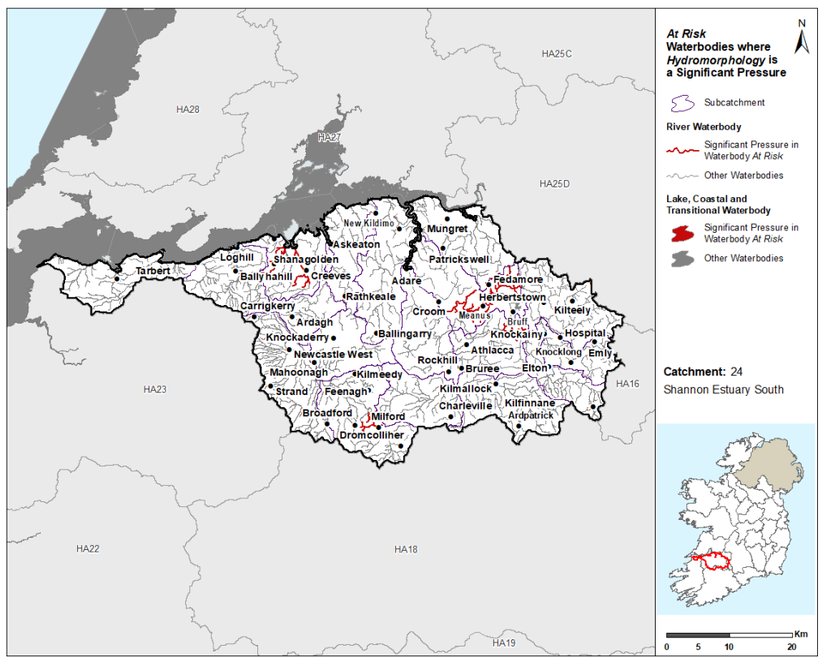


Figure 16: Locations of Waterbodies where Hydromorphology is a Significant Pressure

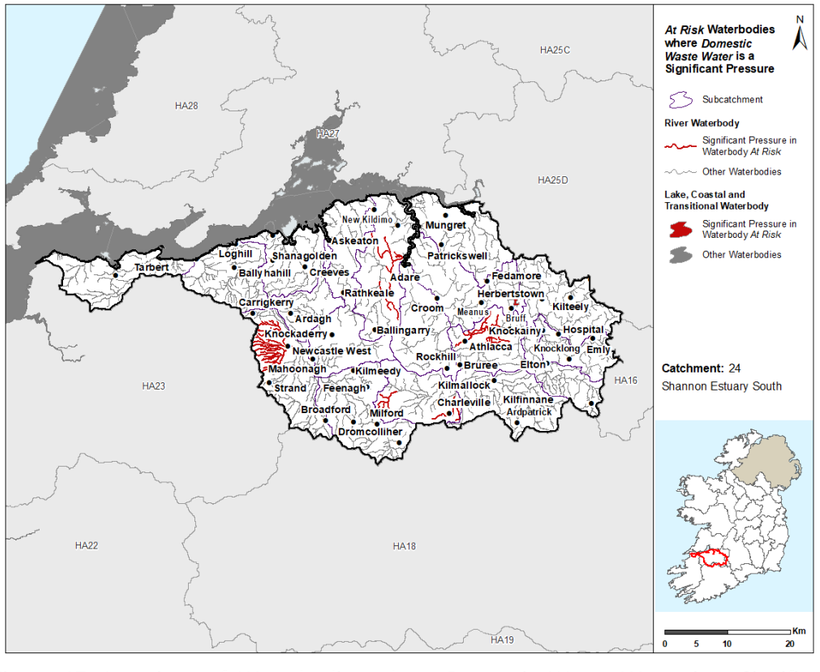


Figure 17: Locations of Waterbodies where Domestic Waste Water is a Significant Pressure

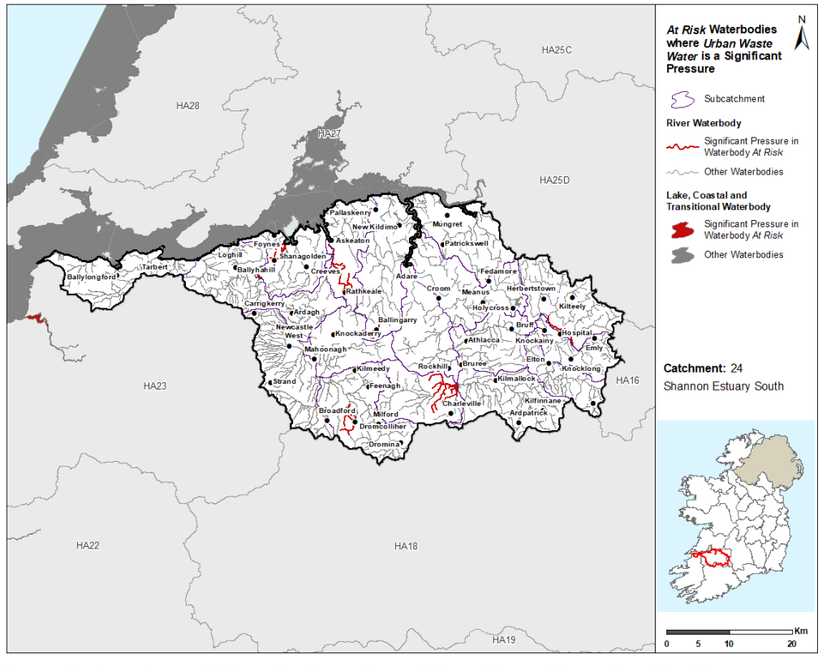
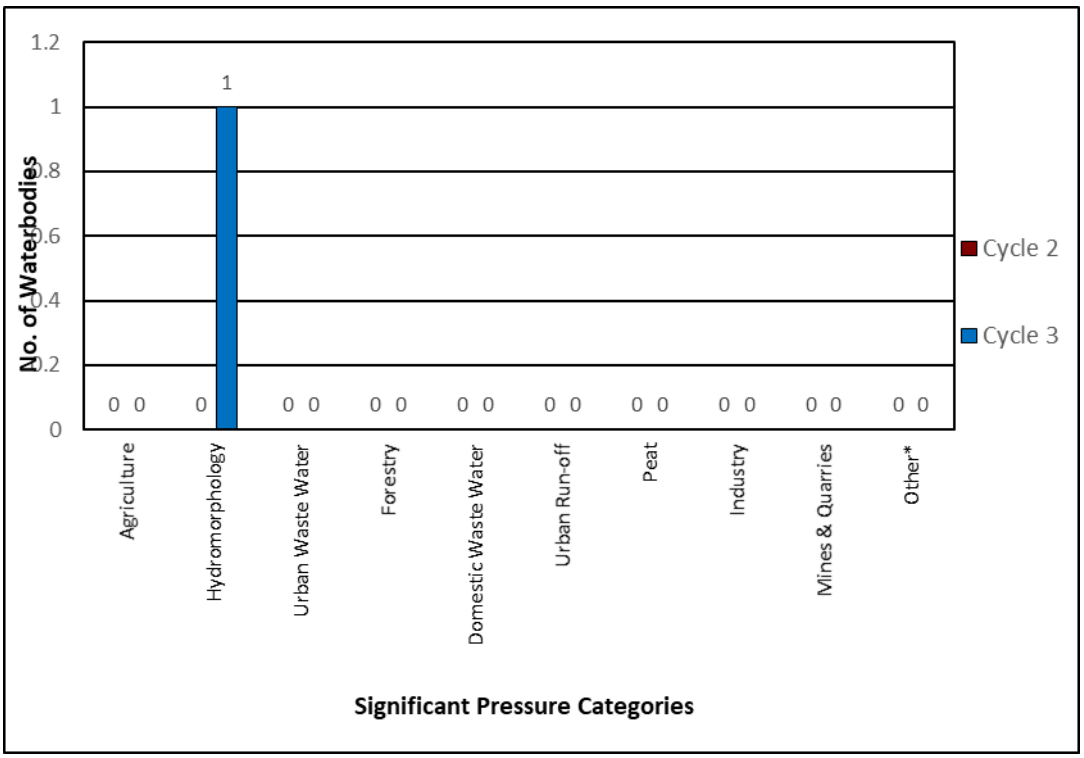


Figure 18: Locations of Waterbodies where Urban Waste Water is a Significant Pressure

5.2 High Status Objective Waterbodies

- In Cycle 3 for the one lake waterbody (Bleach) with a High Status Objective, hydromorphology is the significant pressure (Figure 19).



*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 19: Significant Pressure in *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 discharges from urban waste water is responsible for 89% and 7% of the nitrogen load respectively while discharges from urban waste water and land in pasture contribute 50% and 35% of the phosphorus loadings for the catchment respectively (Figure 17).

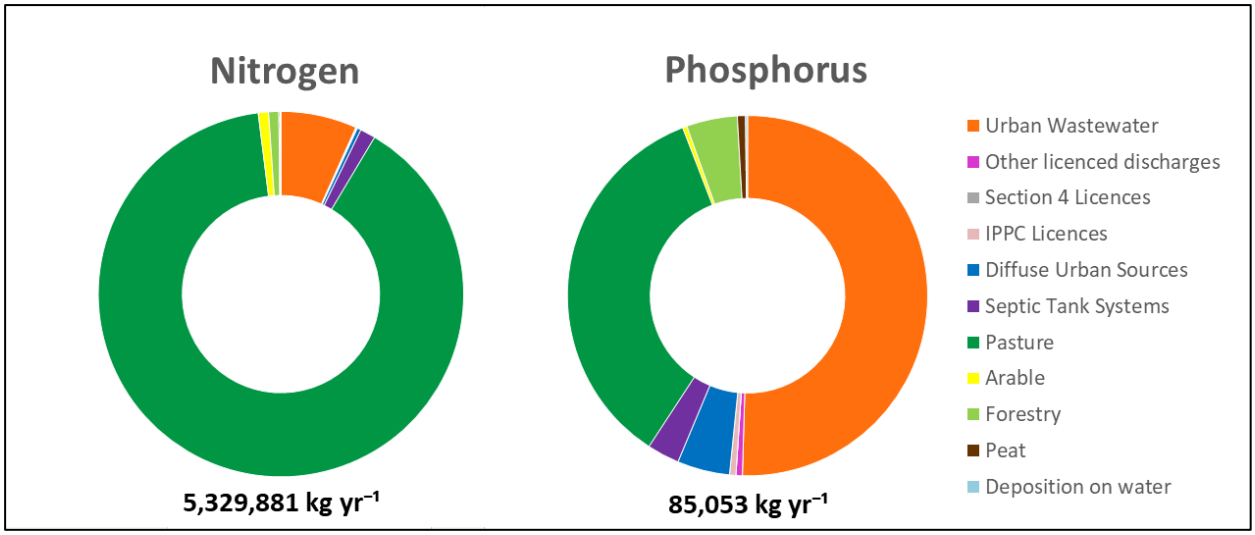


Figure 20: Estimated Proportions of N & P from Each Sector in the Shannon Estuary South Catchment

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 Shannon Estuary South 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 90% pasture, 1% arable, 7% 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 21 highlights areas where agricultural measures for nitrogen, sediment and phosphorus 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.

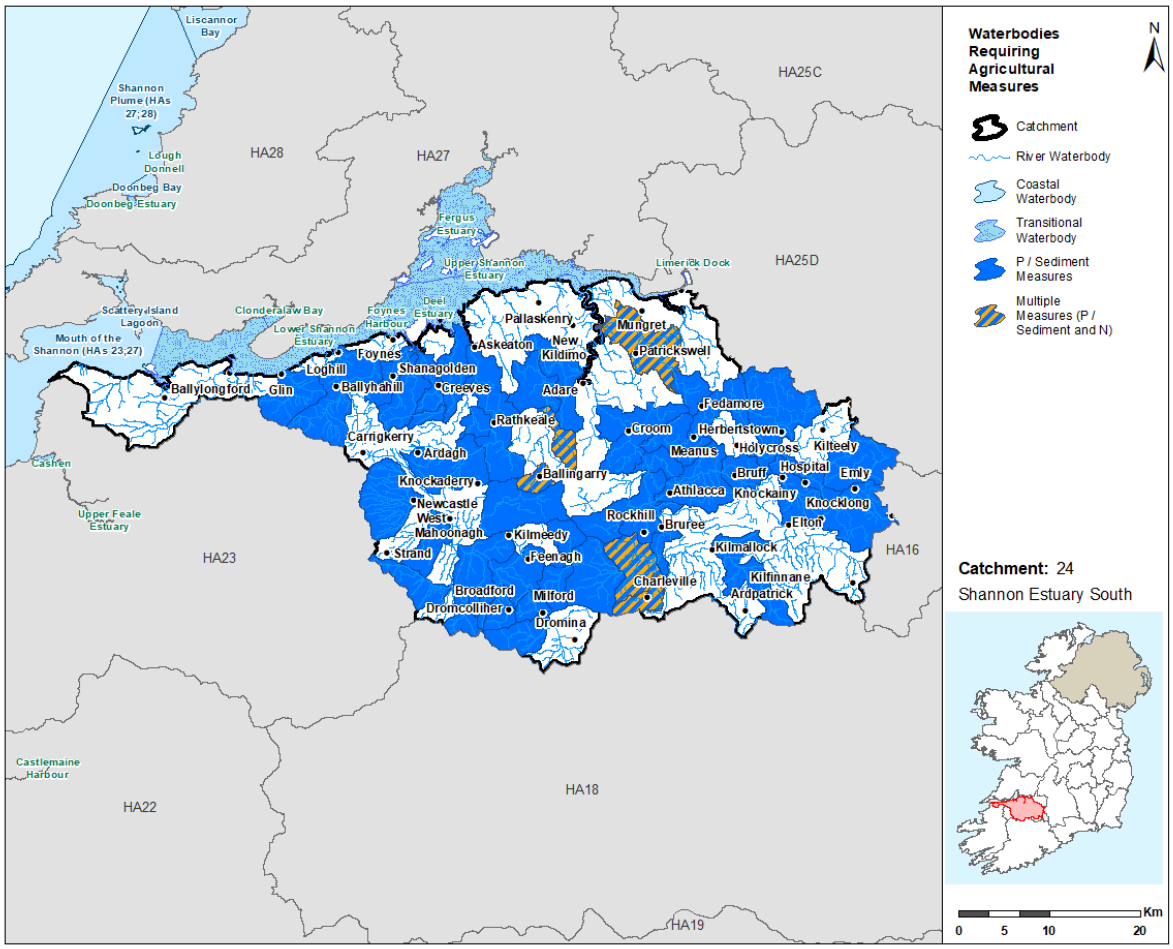


Figure 21: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- There were five Areas for Action, comprising of 15 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 22. LAWPRO, in conjunction with local authorities and stakeholders from the South Eastern and South Western Regional Operational Committees, have been working in these areas since 2018.

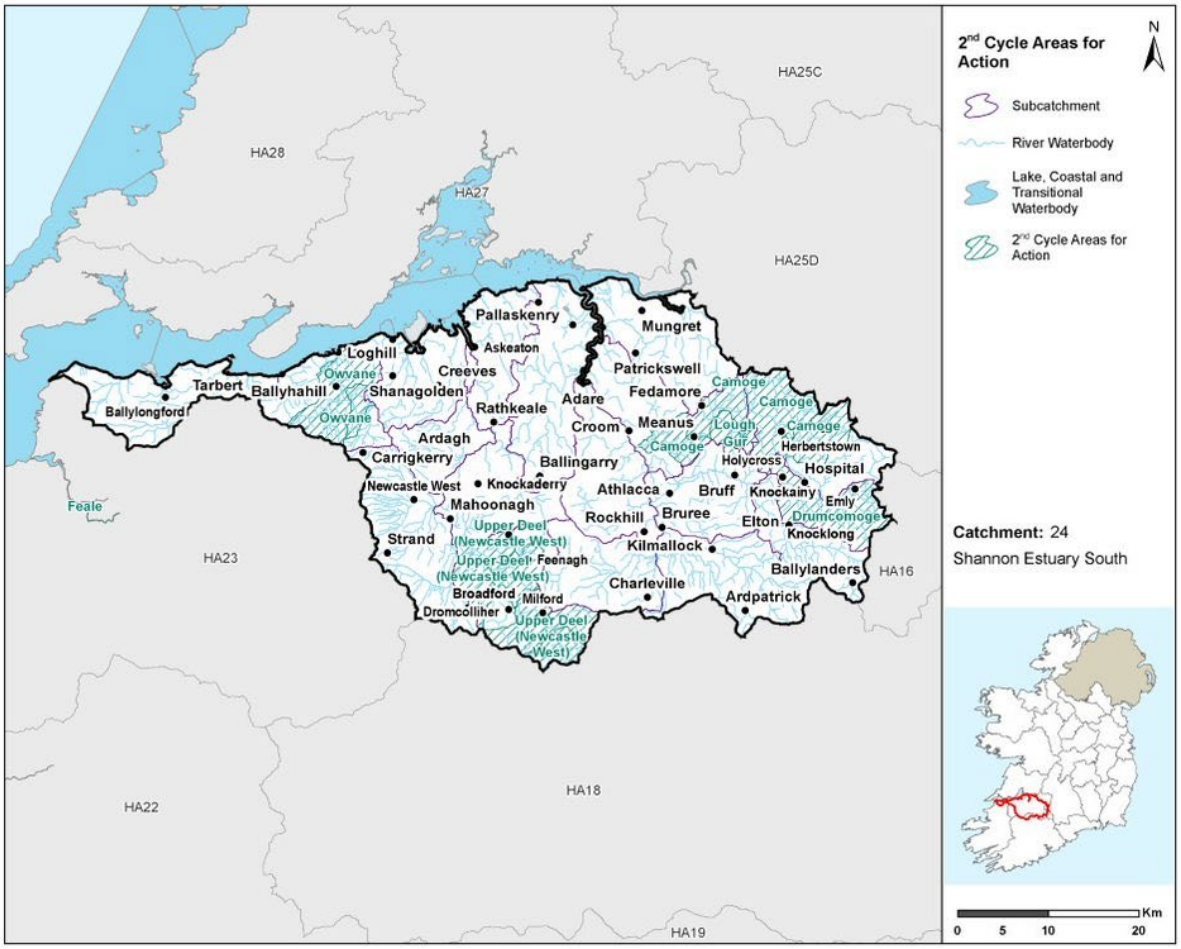


Figure 22: 2nd Cycle Areas for Action Locations

Table 7: 2nd Cycle Areas for Action

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Lough Gur	2	24_13	Limerick	• Opportunity to work with a strong group water scheme here. Many farmers in the area are members of the scheme. • Active community and angling groups. • High recreational and amenity value. • Important for biodiversity and heritage.
Camoge	4	24_12, 24_13	Limerick	• Shared ground with the Corcas. • Build on improvements as a result of in stream works completed by Inland Fisheries Ireland. • Headwaters of the river Camoge. • Active angling clubs. 29 • One potential 'quick win'. • Two deteriorated water bodies.

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Owvane	2	24_7	Limerick	• Potential to build on improvement. works completed by Inland Fisheries Ireland. • Two potential 'quick wins'. • One deteriorated water body.
Drumcomoge	1	24_2	Limerick	• Multi-agency effort/cross county opportunity. • Headwaters to the Camoge which is already a project. • Similar issues to the Arra WRAA. • Another test case for poorly drained soils. • Good tidy towns group that could be incorporated (Emly).
Upper Deel (Newcastle West)	6	24_15	Limerick Cork	• Multi-agency approach between Cork and Limerick. • Pilot project for the very poorly draining soils in Limerick. • There is the potential for a rivers trust here. • Community involvement, including active tidy towns group. • The Deel is a good trout fishery. • Two deteriorated water bodies.

8.2 Status Change in 2nd Cycle Areas for Action

- For Cycle 3, of the 15 waterbodies in the 2nd Cycle Areas for Action, there is one waterbody at Good Status, four waterbodies at Moderate Status, five waterbodies at Poor Status and five waterbodies where status has not been assigned.

- There is an overall decline in the status of one of the 2nd cycle waterbodies across the catchment.[8]

- Of the 10 waterbodies within the 2nd Cycle Areas for Action which had status assigned, seven experienced no change in status between Cycle 2 and Cycle 3, one waterbody experienced an improvement and two were subject to deterioration in status (Figure 23). The one waterbody that improved in status (Gur) is from the Lough Gur Area for Action. The two waterbodies (rivers) that declined in status (Owvane (Limerick)_030, Camoge_010) are from the Owvane and Camoge Areas for Action.

[8] 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 17 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.

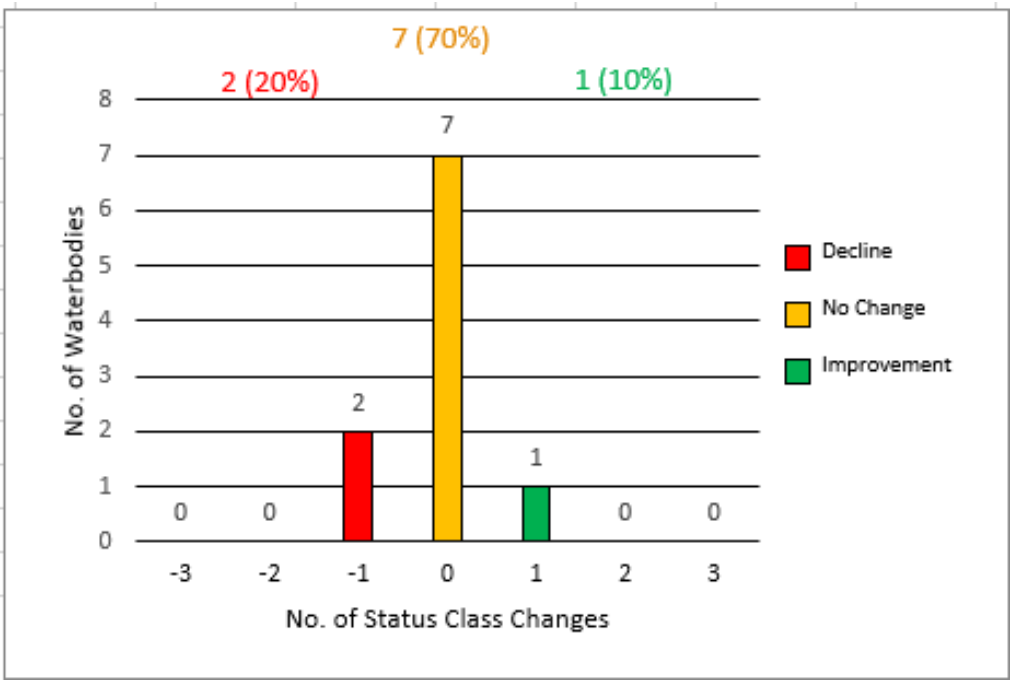


Figure 23: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- For the 15 waterbodies in the 2nd Cycle Areas for Action, 10 (67%) are *At Risk*, four (27%) in *Review* and one (7%) is *Not At Risk* (Figure 24).
    - For the 14 river waterbodies in 2nd Cycle Areas for Action, nine (64%) are *At Risk,* four (29%) are in *Review* and one (7%) is *Not At Risk*.
    - The only lake waterbody (Gur) in 2nd Cycle Areas for Action in the catchment is *At Risk*.

- The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for nine (90%) of the 10 *At Risk* waterbodies.

- Overall, there were 11 waterbodies *At Risk* within 2nd Cycle Areas for Action in Cycle 2, in Cycle 3 there are 10 waterbodies *At Risk*.

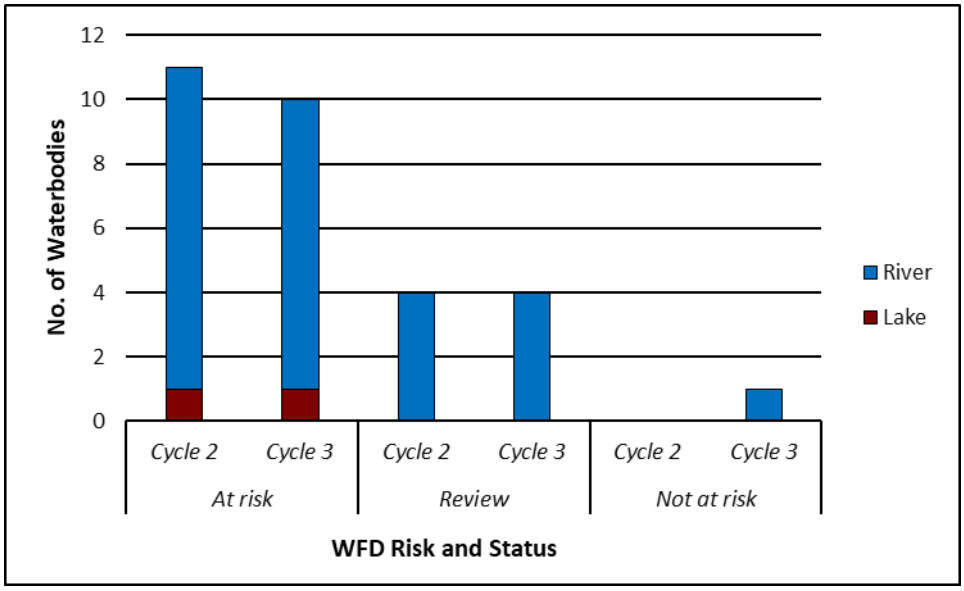
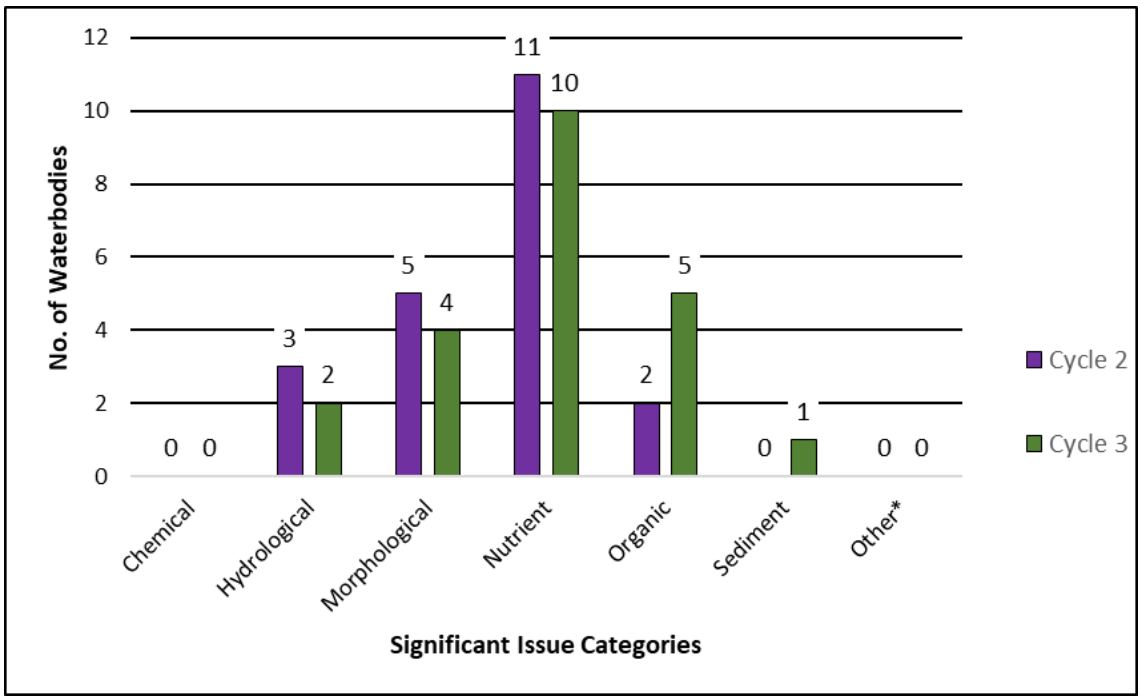


Figure 24: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

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 10 waterbodies (Figure 25). This is followed by organic pollution impacting five waterbodies, morphological impacts affecting four waterbodies and hydrological and sediment issues impacting two and one waterbodies, respectively.

- The number of 2nd Cycle Areas for Action waterbodies associated with each of the significant issues categories has reduced between Cycle 2 and Cycle 3 except for organic pollution and sediment which have increased from two and zero waterbodies in Cycle 2 to five and one in Cycle 3.



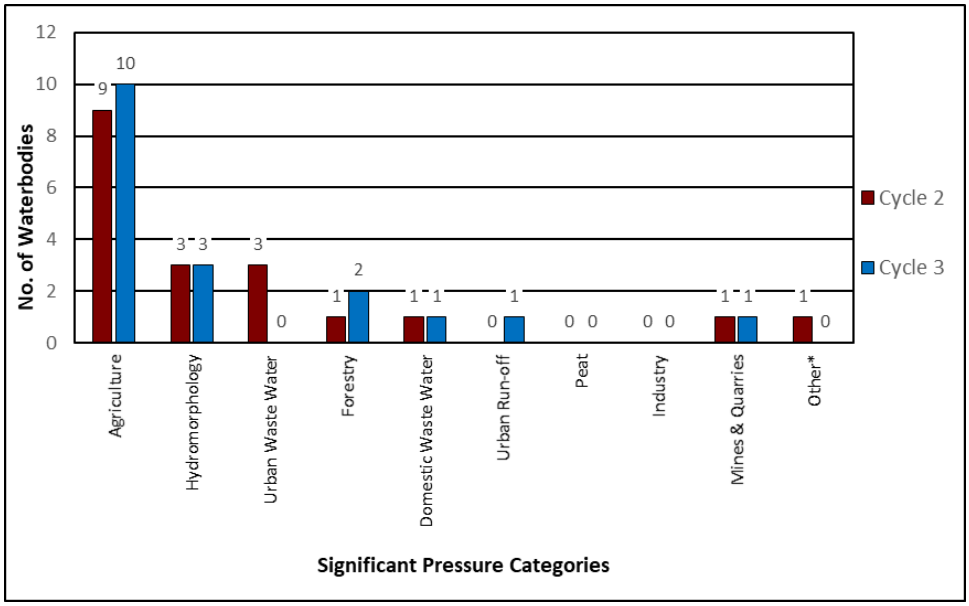
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 25: 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 – 10 waterbodies are impacted compared to nine impacted in Cycle 2.
  - Hydromorphology – has remained a significant pressure in three waterbodies.
  - Forestry – two waterbodies are impacted compared to one impacted in Cycle 2.
  - Urban Waste Water – All three waterbodies within 2nd Cycle Areas for Action where urban waste water was identified as a significant pressure in Cycle 2 are no longer impacted by urban waste water.
  - Domestic Waste Water – has remained a significant pressure in one waterbody.
  - Mines & Quarries – has remained a significant pressure in one waterbody.
  - Urban run-off - one waterbody is impacted compared to zero impacted in Cycle 2.

- When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has either been a decrease or no change in all significant pressure categories with the exception of agriculture, forestry and urban run-off which have increased 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 26: 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 15 Areas for Action, comprising of 66 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 40 of the 66 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, 16 are in *Review* and 10 are *Not At Risk.* The 15 Recommended Areas for Action consist of two Areas for Protection, 12 Areas for Restoration and one Catchment Project. LAWPRO are the proposed lead organisation in eight Recommended Areas for Action, Limerick City and County Council are the proposed lead organisation in five Recommended Areas for Action, Maigue Rivers Trust are the proposed lead organisation in one Recommended Area for Action and NFGWS is the proposed lead on the remaining Recommended Area for Action. The Recommended Areas for Action in the catchment are listed in Table 8 and shown in Figure 27. The reason for selection for each waterbody in the catchment included as part of a Recommended Area for Action is provided in Appendix 3.

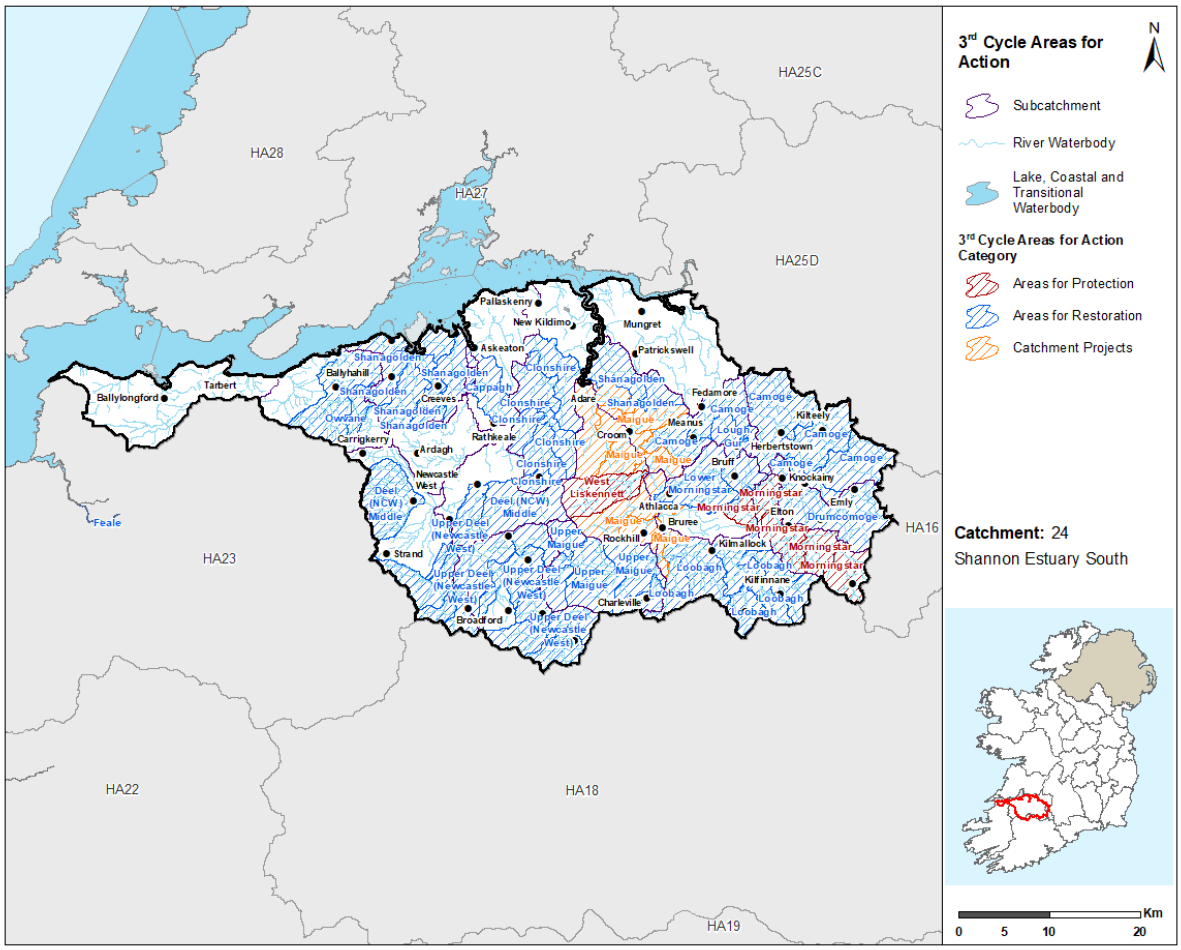


Figure 27: 3rd Cycle Recommended Areas for Action Locations

Table 8: 3rd Cycle Recommended Areas for Action Breakdown

3rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Shanagolden	9	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Deel (NCW) Middle	5	Restoration	LA Areas for Restoration Local Authorities	Limerick City and County Council
Camoge	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Loobagh	6	Restoration	LA Areas for Restoration Local Authorities	Limerick City and County Council
Lough Gur	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Upper Maigue	5	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Clonshire	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Upper Deel (Newcastle West)	8	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Cappagh	1	Restoration	Public Health Areas for Restoration NFGWS, IW, HSE, LAs, SFPA	NFGWS
Drumcomoge	1	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Morningstar	5	Protection	LA Areas for Protection Local Authorities	Limerick City and County Council
Maigue	7	Catchment Projects	Rivers Trust	Maigue Rivers Trust
Lower Morningstar	2	Restoration	LA Areas for Restoration Local Authorities	Limerick City and County Council
Owvane	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
West Liskennett	1	Protection	LA Areas for Protection Local Authorities	Limerick City and County Council

10 Catchment Summary

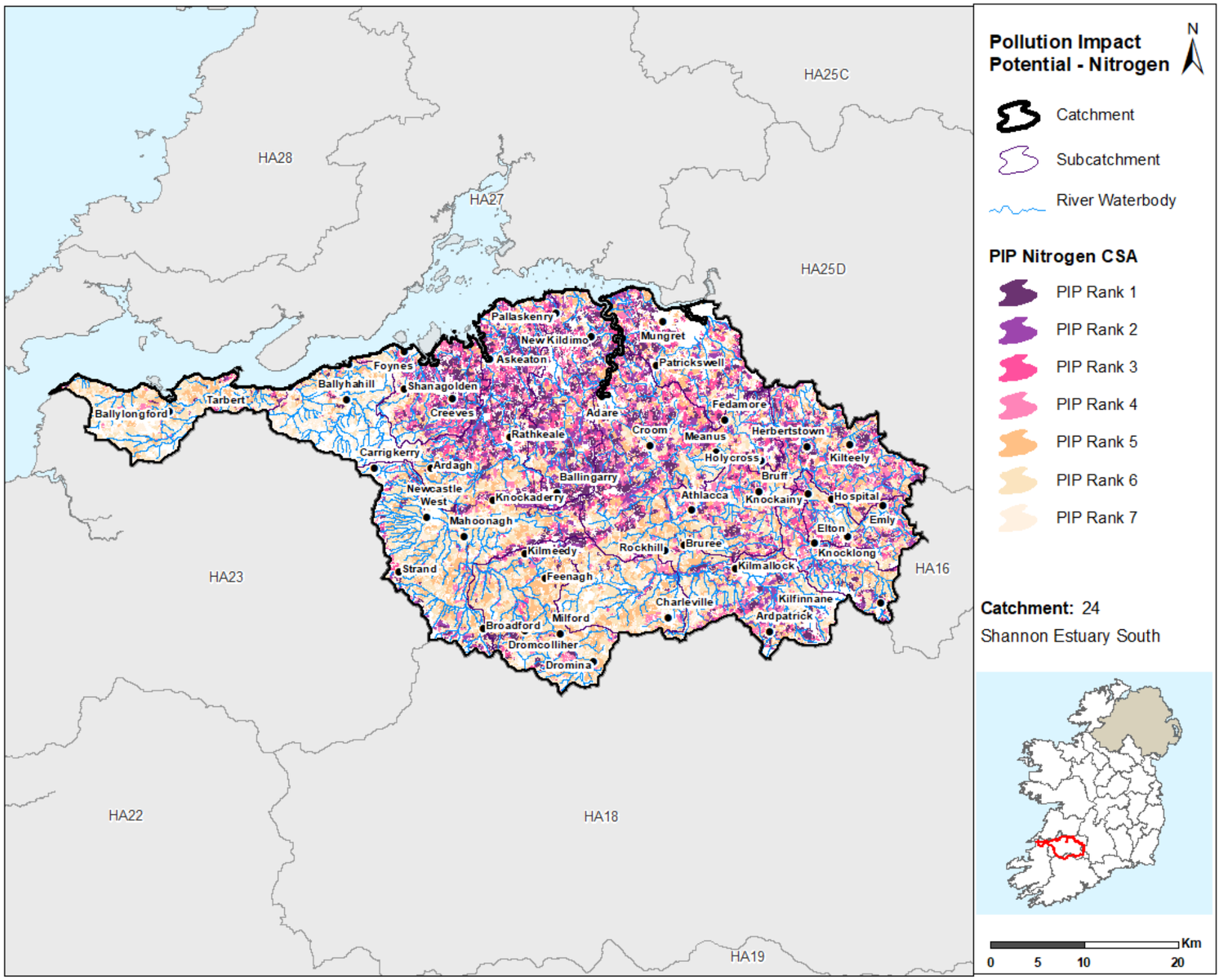
- Of the 95 river waterbodies, 48 are *At Risk* of not meeting their WFD objectives.
- For the two lake waterbodies in the catchment, both are *At Risk* of not meeting their WFD objectives.

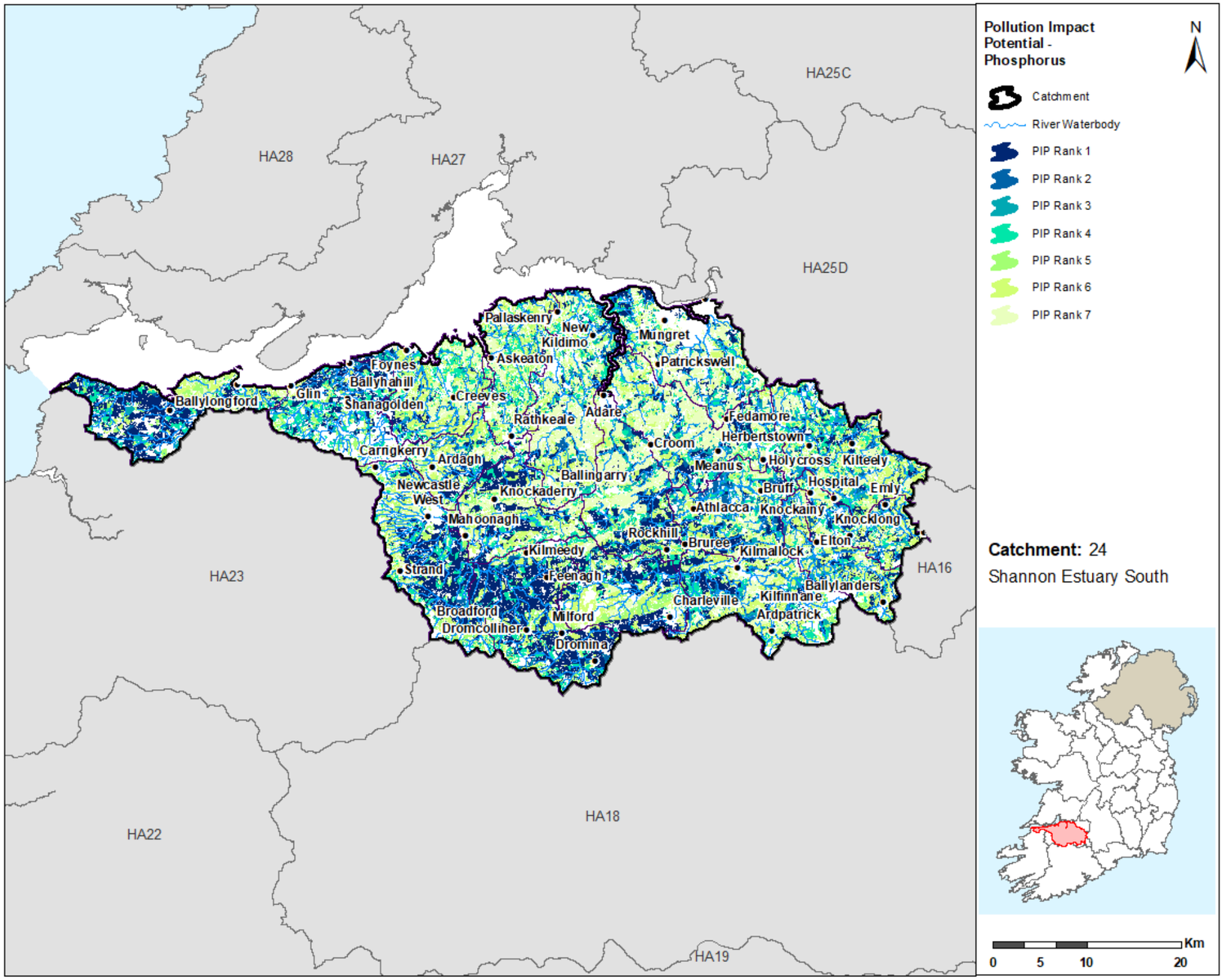
- Three out of seven transitional waterbodies are *At Risk* of not meeting their WFD objectives.
- There are no coastal waterbodies *At Risk* of not meeting their WFD objectives.
- There are 13 groundwater bodies *At Risk* of not meeting their WFD objectives.
- 66 waterbodies are *At Risk* in Cycle 3 compared to 63 waterbodies *At Risk* in Cycle 2.
- The main significant issue is nutrient pollution followed by organic pollution, morphological impacts, hydrological impacts and sediment.
- The main significant pressure is agriculture, followed by hydromorphology, domestic waste water, forestry, urban waste water, mines & quarries and urban run-off.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by nutrients, sediment and organics. These increases are largely associated with agriculture.
- In the 2nd Cycle Areas for Action, 11 waterbodies were *At Risk* in Cycle 2 and 10 waterbodies are *At Risk* in Cycle 3.
- There are 15 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 66 waterbodies with 40 waterbodies *At Risk*, 16 in *Review* and 10 *Not At Risk*.

Appendix 1
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
Bleach	Lake	IE_SH_24_90	Good

Appendix 2
Pollution Impact Potential Mapping




HA28
HA27
HA25C
HA25D
HA23
HA16
HA22
HA18
HA19
Pallaskenry
New Kildimo
Askeaton
Foynes
Ballyhahill
Glin
Ballylongford
Shanagolden
Creeves
Rathkeale
Adare
Mungret
Patrickswell
Fedamore
Herbertstown
Croom
Carrigkerry
Ardagh
Meanus
Holycross
Kilteely
Ballingarry
Newcastle West
Knockaderry
Bruff
Hospital
Emly
Athlacca
Knockainy
Knocklong
Mahoonagh
Rockhill
Bruree
Elton
Kilmallock
Kilmeedy
Strand
Feenagh
Ballylanders
Charleville
Kilfinnane
Broadford
Milford
Ardpatrick
Dromcolliher
Dromina
Pollution Impact Potential - Phosphorus
N
Catchment
River Waterbody
PIP Rank 1
PIP Rank 2
PIP Rank 3
PIP Rank 4
PIP Rank 5
PIP Rank 6
PIP Rank 7
Catchment: 24
Shannon Estuary South
Km
0
5
10
20

Appendix 3
Summary information on all waterbodies in the Shannon Estuary South 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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_5	IE_SH_24A010400	AHACRONANE_010	River	At risk	At risk	Poor	Poor	No	Ag	Shanagolden	Shanagolden[Stream]_SC_010 includes several At Risk waterbodies like the Ahacronane and Lismakeery stream. Tributaries of the Lower Shannon SAC. Builds on existing work of LCCC NPWS priority habitat/species groundwater abstraction sources proposed for inclusion as an area for action
24_5	IE_SH_24A010900	AHACRONANE_020	River	At risk	At risk	Poor	Poor	No	Ag, Hymo, M+Q	Shanagolden	Shanagolden[Stream]_SC_010 includes several At Risk waterbodies like the Ahacronane and Lismakeery stream. Tributaries of the Lower Shannon SAC. Builds on existing work of LCCC NPWS priority habitat/species groundwater abstraction sources proposed for inclusion as an Area for Action
24_15	IE_SH_24A020800	AHAVARRAGA STREAM_010	River	At risk	At risk	Poor	Bad	No	Ag, UWW		
24_14	IE_SH_24A040500	ARRA_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW, UR	Deel (NCW) Middle	include under SC approach for Deel (NCW) Middle
24_9	IE_SH_24A270640	ASTEE_WEST_010	River	Review	Review	Unassigned	Unassigned	No			
24_17	IE_SH_24B010890	Ballyania stream_010	River	Review	Review	Unassigned	Unassigned	No			
24_9	IE_SH_24B030400	BALLYLONGFORD_010	River	At risk	Review	Poor	Good	No			
24_9	IE_SH_24B030700	BALLYLONGFORD_020	River	At risk	Review	Moderate	Good	No			
24_9	IE_SH_24B030860	BALLYLONGFORD_030	River	Review	Review	Unassigned	Unassigned	No			
24_10	IE_SH_24B040800	BALLYNACLOGH_010	River	Review	Review	Unassigned	Unassigned	No			
24_10	IE_SH_24B050300	BARNAKYLE_010	River	At risk	At risk	Poor	Poor	No	Ag		
24_10	IE_SH_24B050600	BARNAKYLE_020	River	At risk	At risk	Poor	Moderate	No	Ag, UR		
24_14	IE_SH_24B060100	BUNOKE_010	River	At risk	At risk	Poor	Moderate	No	Ag	Deel (NCW) Middle	Moderate status; At Risk. Area for restoration. Headwater catchment groundwater abstraction sources proposed for inclusion as an Area for Action
24_14	IE_SH_24B060200	BUNOKE_020	River	Not at risk	Not at risk	Good	Good	No		Deel (NCW) Middle	Connects waterbodies identified for restoration/ protection

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_14	IE_SH_24B070500	BROADFORD STREAM_010	River	Not at risk	At risk	Good	Moderate	No	Ag	Deel (NCW) Middle	Upstream of Castlemahon SWS. AR waterbody. Include under SC 24_14
24_12	IE_SH_24B080900	BALLYNAMONA_010	River	Review	Review	Unassigned	Unassigned	No		Camoge	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
24_11	IE_SH_24B670530	BALLYSALLAGH_010	River	Review	Review	Unassigned	Unassigned	No		Loobagh	Maigue Rivers Trust. Unassigned - LCCC monitored and determined At Risk. Headwaters.
24_13	IE_SH_24B900440	BALLYCULLANE (Limerick)_010	River	Review	Review	Unassigned	Unassigned	No		Lough Gur	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
24_12	IE_SH_24C010200	CAMOGE_010	River	At risk	At risk	Moderate	Poor	No	Ag, UR	Camoge	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
24_13	IE_SH_24C010400	CAMOGE_020	River	At risk	At risk	Poor	Poor	No	Ag, Hymo	Camoge	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
24_13	IE_SH_24C010600	CAMOGE_030	River	At risk	At risk	Poor	Poor	No	Ag, Hymo	Camoge	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
24_6	IE_SH_24C020780	CHARLEVILLE STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Upper Maigue	Limerick suggested by subcatchment: Maigue_SC_010 -the Maigue headwaters, including the Charleville Stream. Maigue Rivers Trust. Cross border project with Cork. - Ongoing issues with Charleville WWTP and intensive agriculture.
24_6	IE_SH_24C020800	CHARLEVILLE STREAM_020	River	At risk	At risk	Poor	Poor	No	Ag, UWW	Upper Maigue	Include under SC approach for 28_6
24_16	IE_SH_24C030300	CLONSHIRE_010	River	At risk	At risk	Poor	Poor	No	Ag, UWW	Clonshire	At risk waterbody and headwaters to Clonshire 30. Include under SC approach
24_16	IE_SH_24C030600	CLONSHIRE_020	River	Review	Review	Unassigned	Unassigned	No		Clonshire	Review waterbody and headwaters to Clonshire 30. Include under SC approach
24_16	IE_SH_24C030710	CLONSHIRE_030	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Clonshire	Groundwater abstraction sources proposed for inclusion as an Area

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
											for Action At Risk waterbody
24_16	IE_SH_24C030900	CLONSHIRE_040	River	At risk	At risk	Poor	Poor	No	Ag	Clonshire	At risk waterbody. Include under SC approach for Clonshire AFA
24_6	IE_SH_24C280480	COOLAGOWAN_010	River	At risk	At risk	Unassigned	Unassigned	No	Ag	Upper Maigue	Selected by sub-catchment, has number of At Risk waterbodies
24_15	IE_SH_24D020070	DEEL (NEWCASTLEWEST)_010	River	Review	Review	Unassigned	Unassigned	No		Upper Deel (Newcastle West)	Existing PAA waterbody. FC and ASSAP work still ongoing
24_15	IE_SH_24D020090	DEEL (NEWCASTLEWEST)_020	River	Review	Review	Unassigned	Unassigned	No		Upper Deel (Newcastle West)	Existing PAA waterbody. FC and ASSAP work still ongoing
24_15	IE_SH_24D020100	DEEL (NEWCASTLEWEST)_030	River	At risk	At risk	Moderate	Moderate	No	Ag, For, M+Q	Upper Deel (Newcastle West)	Existing PAA waterbody. FC and ASSAP work still ongoing
24_15	IE_SH_24D020200	DEEL (NEWCASTLEWEST)_040	River	At risk	At risk	Moderate	Moderate	No	Ag, Hymo	Upper Deel (Newcastle West)	Existing PAA waterbody. FC and ASSAP work still ongoing
24_15	IE_SH_24D020300	DEEL (NEWCASTLEWEST)_050	River	At risk	At risk	Moderate	Moderate	No	Ag	Upper Deel (Newcastle West)	Existing PAA waterbody. Some further FC still required here and ASSAP work programme won't be complete by Dec 21
24_15	IE_SH_24D020400	DEEL (NEWCASTLEWEST)_060	River	At risk	At risk	Poor	Poor	No	Ag	Upper Deel (Newcastle West)	Existing PAA waterbody. Some further FC still required here and ASSAP work programme won't be complete by Dec 21
24_14, 24_4	IE_SH_24D020600	DEEL (NEWCASTLEWEST)_070	River	Not at risk	Not at risk	Good	Good	No		Upper Deel (Newcastle West)	EPA Pesticide Act and Watch list - Action. Expand the Upper Deel PAA to include this RWB
24_14, 24_4	IE_SH_24D020700	DEEL (NEWCASTLEWEST)_080	River	At risk	At risk	Moderate	Moderate	No	Ag		
24_14, 24_4	IE_SH_24D020800	DEEL (NEWCASTLEWEST)_090	River	At risk	At risk	Moderate	Moderate	No	Other		
24_1, 24_4	IE_SH_24D021000	DEEL (NEWCASTLEWEST)_100	River	At risk	At risk	Moderate	Moderate	No	Ag		
24_1, 24_4	IE_SH_24D021100	DEEL (NEWCASTLEWEST)_110	River	At risk	At risk	Poor	Poor	No	Ag		
24_1, 24_18	IE_SH_24D021300	DEEL (NEWCASTLEWEST)_120	River	At risk	At risk	Poor	Poor	No	Ag, Other		
24_1, 24_18	IE_SH_24D021320	DEEL (NEWCASTLEWEST)_130	River	Review	Review	Unassigned	Unassigned	No			
24_1, 24_18	IE_SH_24D021400	DEEL (NEWCASTLEWEST)_140	River	Review	At risk	Unassigned	Unassigned	No	Ag, UWW	Cappagh	EPA Pesticide Act and Watch list - Watch. WTPs large population served.

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
											GW abstraction sources proposed for inclusion as an AFA
24_2	IE_SH_24D040400	DRUMCOMOGE_010	River	At risk	At risk	Unassigned	Unassigned	No	Ag	Drumcomoge	Existing PAA waterbody. LCA just commenced here; ASSAP work unlikely to be complete by Dec 21
24_5	IE_SH_24D071200	DOONCAHA STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, Peat	Shanagolden	Poor status; At Risk. Flows into Lower Shannon SAC. Entire subcatchment (incl. 4x Poor WB's) could be included in this area for action. Builds on existing work of LCCC
24_18	IE_SH_24D320860	DEEGERTY_010	River	Review	Review	Unassigned	Unassigned	No			
24_18	IE_SH_24D320950	DEEGERTY_020	River	Review	Review	Unassigned	Unassigned	No			
24_18	IE_SH_24D330670	DROMLOHAN_010	River	Review	Review	Unassigned	Unassigned	No			
24_15	IE_SH_24F010410	Finglasha stream_010	River	Review	Review	Unassigned	Unassigned	No		Upper Deel (Newcastle West)	Expand PAA to include inputting waterbodies
24_11	IE_SH_24F030500	FLEMINGSTOWN STREAM_010	River	Not at risk	Not at risk	Good	Good	No		Loobagh	Building on existing LCCC work programme. Include under SC approach for 24_11
24_11	IE_SH_24F050850	FAIRYFIELD_GLEBE_010	River	Review	Review	Unassigned	Unassigned	No		Loobagh	Building on existing LCCC work programme. Include under SC approach for 24_11
24_5	IE_SH_24F230770	FOYNES_010	River	Review	Review	Unassigned	Unassigned	No		Shanagolden	Shanagolden[Stream]_SC_010 includes several At Risk waterbodies like the Ahacronane and Lismakeery stream. Tributaries of the Lower Shannon SAC. Builds on existing work of LCCC NPWS priority habitat/species
24_9	IE_SH_24F320750	FARRANMILLER_010	River	Review	Review	Unassigned	Unassigned	No			
24_7	IE_SH_24G030400	GLENCORBRY_010	River	Not at risk	At risk	Good	Moderate	No	Ag, For		
24_16	IE_SH_24G050600	GREANAGH_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Clonshire	Include under SC approach for Clonshire AFA NPWS priority habitat/species
24_5	IE_SH_24G060100	GLENBANE WEST STREAM_010	River	Review	Review	Unassigned	Unassigned	No		Shanagolden	Shanagolden[Stream]_SC_010 includes several At Risk waterbodies like the Ahacronane and Lismakeery stream. Tributaries of the Lower Shannon SAC. Builds on existing work of LCCC NPWS priority habitat/species
24_16	IE_SH_24G070400	GREANAGH STREAM_010	River	Review	Review	Unassigned	Unassigned	No		Clonshire	Groundwater abstraction sources proposed for inclusion as an Area for Action

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
											NPWS priority habitat/species Include under SC approach Clonshire AFA
24_17	IE_SH_24G200860	GOATISLAND_010	River	Review	Review	Unassigned	Unassigned	No		Morningstar	Unassigned and under Review. LCCC recorded moderate pollution. At Risk. Maigue Rivers Trust.
24_18	IE_SH_24I060560	ISSANE_010	River	Review	Review	Unassigned	Unassigned	No			
24_16	IE_SH_24K620500	KILMOREEN_010	River	Review	Review	Unassigned	Unassigned	No			
24_7	IE_SH_24K670690	KILTEERY_010	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
24_11	IE_SH_24L010200	LOOBAGH_010	River	Not at risk	Not at risk	Good	Good	No		Loobagh	Building on existing LCCC work programme. Include under SC approach for 24_11 Maigue rivers Trust
24_11	IE_SH_24L010400	LOOBAGH_020	River	Review	At risk	Good	Moderate	No	Ag, UR	Loobagh	Building on existing LCCC work programme. Include under SC approach for 24_11 Maigue rivers Trust Groundwater abstraction sources proposed for inclusion as an area for action
24_11	IE_SH_24L010600	LOOBAGH_030	River	Review	Not at risk	Good	Good	No		Loobagh	Building on existing LCCC work programme in this subcatchment. Include under SC approach for 24_11 Maigue rivers Trust
24_5	IE_SH_24L030600	LISMAKEERY STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag	Shanagolden	Shanagolden[Stream]_SC_010 includes several At Risk waterbodies like the Ahacronane and Lismakeery stream. Tributaries of the Lower Shannon SAC. Builds on existing work of LCCC NPWS priority habitat/species
24_6	IE_SH_24M010020	MAIGUE_010	River	At risk	At risk	Poor	Moderate	No	Ag, DWW	Upper Maigue	Proposed for LAWPRO so that the headwaters to the Maigue are included Maigue Rivers Trust. Cross border with Cork.
24_6	IE_SH_24M010050	MAIGUE_020	River	Review	At risk	Good	Moderate	No	Ag	Upper Maigue	Proposed for LAWPRO so that the headwaters to the Maigue are included Maigue Rivers Trust. Cross border with Cork.
24_11, 24_8	IE_SH_24M010300	MAIGUE_030	River	At risk	At risk	Moderate	Moderate	No	Ag	Maigue	The Maigue Rivers Trust (established in 2016) works to protect, enhance and cherish the

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
											rivers and lakes of the Maigue catchment for the benefit and enjoyment of all by working with local communities to ensure the Maigue catchment can achieve its full potential both environmentally and recreationally. It has received CWDF and LEADER funding since its establishment and in 2019 was selected for inclusion in the DHPLG Resilience Fund for river trusts.
24_17, 24_8	IE_SH_24M010400	MAIGUE_040	River	At risk	At risk	Moderate	Moderate	No	Ag	Maigue	Historic Milling Weirs and Weirs - 15 Structures, Migration - Salmon/ River and Sea lamprey Maigue Rivers Trust actively working in the catchment
24_17, 24_8	IE_SH_24M010500	MAIGUE_050	River	Not at risk	At risk	Good	Moderate	No	Ag	Maigue	Historic Milling Weirs and Weirs - 15 Structures, Migration - Salmon/ River and Sea lamprey Maigue Rivers Trust actively working in the catchment
24_13, 24_8	IE_SH_24M010600	MAIGUE_060	River	Review	At risk	Unassigned	Unassigned	No	Ag	Maigue	Maigue Rivers Trust actively working in the catchment
24_13, 24_8	IE_SH_24M010700	MAIGUE_070	River	Not at risk	At risk	Good	Moderate	No	Ag	Maigue	Maigue Rivers Trust actively working in the catchment
24_13, 24_8	IE_SH_24M010900	MAIGUE_080	River	At risk	At risk	Moderate	Moderate	No	Ag	Maigue	Maigue Rivers Trust actively working in the catchment
24_13, 24_8	IE_SH_24M010980	MAIGUE_090	River	Review	Review	Unassigned	Unassigned	No		Maigue	Maigue Rivers Trust actively working in the catchment
24_3	IE_SH_24M020200	MORNINGSTAR_010	River	Not at risk	Not at risk	Good	Good	No		Morningstar	To reduce impact on Lower Morningstar. Headwaters. Maigue Rivers Trust. Community engagement groundwater abstraction sources proposed for inclusion as an Area for Action
24_3	IE_SH_24M020300	MORNINGSTAR_020	River	Not at risk	Not at risk	Good	Good	No		Morningstar	To reduce impact on Lower Morningstar. Headwaters. Maigue Rivers Trust. Connects waterbodies identified for protection/restoration
24_3	IE_SH_24M020400	MORNINGSTAR_030	River	Not at risk	Not at risk	Good	Good	No		Morningstar	Builds on existing work of LCCC groundwater abstraction sources proposed for inclusion as an Area for Action Community engagement

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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_3	IE_SH_24M020500	MORNINGSTAR_040	River	Not at risk	Not at risk	Good	Good	No		Morningstar	Builds on existing work of LCCC groundwater abstraction sources proposed for inclusion as an Area for Action Community engagement
24_17	IE_SH_24M020600	MORNINGSTAR_050	River	At risk	At risk	Moderate	Poor	No	Ag, Hymo, UR	Lower Morningstar	Poor status; At Risk. Area for restoration. Maigue Rivers Trust. Community engagement.
24_17	IE_SH_24M020800	MORNINGSTAR_060	River	At risk	At risk	Good	Moderate	No	Ag, DWW	Lower Morningstar	Moderate status; At Risk. Area for restoration. Maigue Rivers Trust. Community engagement.
24_12	IE_SH_24M040500	MAHORE_010	River	Not at risk	At risk	Good	Moderate	No	Ag	Camoge	Expanding Camoge PAA to include inputting waterbodies
24_12	IE_SH_24M040900	MAHORE_020	River	At risk	At risk	Good	Moderate	No	Ag, UWW	Camoge	Expand PAA to include inputting AR waterbody
24_13	IE_SH_24M440880	Mondellihy_010	River	Review	Review	Unassigned	Unassigned	No		Shanagolden	groundwater abstraction sources proposed for inclusion as an Area for Action NPWS priority habitat/species
24_10	IE_SH_24N150630	EAST CARRIG_010	River	Review	Review	Unassigned	Unassigned	No			
24_4	IE_SH_24O010790	OWENSKAW_010	River	At risk	At risk	Unassigned	Unassigned	No	Ag	Deel (NCW) Middle	Unassigned. LCCC recorded poor status and needs to restore to protect SWS downstream. Upstream of Castlemahon SWS.
24_7	IE_SH_24O020070	OWVANE (LIMERICK)_010	River	Not at risk	Not at risk	Good	Good	No			
24_7	IE_SH_24O020090	OWVANE (LIMERICK)_020	River	At risk	Not at risk	Good	Good	No		Owvane	Existing PAA waterbody. Transition strategy
24_7	IE_SH_24O020200	OWVANE (LIMERICK)_030	River	At risk	At risk	Moderate	Poor	No	Ag, For	Owvane	Existing PAA waterbody. Transition strategy
24_9	IE_SH_24R300270	RALAPPANE_010	River	Review	Review	Unassigned	Unassigned	No			
24_5	IE_SH_24S022000	SHANAGOLDEN STREAM_010	River	At risk	At risk	Moderate	Poor	No	Ag, Hymo, UWW	Shanagolden	Poor status; At Risk. Flows into Lower Shannon SAC. Entire subcatchment (incl. 4x Poor WB's) could be included in this area for action. NPWS priority habitat/species
24_1	IE_SH_24S030780	Slewaun stream (North Branch)_010	River	Review	Review	Unassigned	Unassigned	No			
24_13	IE_SH_24S270530	South Drumloughan_010	River	Review	Review	Unassigned	Unassigned	No		Shanagolden	No. of waterbodies proposed for LAWPRO by LCCC in this subcatchment. Include under SC approach 24_13
24_9	IE_SH_24T010100	TARBERT_010	River	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_16	IE_SH_24T240890	TONLEGEE_010	River	Review	Review	Unassigned	Unassigned	No			
24_16	IE_SH_24T250670	TOBERMURRY_010	River	Review	Review	Unassigned	Unassigned	No			
24_8	IE_SH_24W060910	West Liskennett_010	River	Review	Review	Unassigned	Unassigned	No		West Liskennett	groundwater abstraction sources proposed for inclusion as an Area for Action. Proposed by LCCC under SC approach for 24_8
24_16	IE_SH_24_90	Bleach	Lake	Not at risk	At risk	High	Good	Yes	Hymo		
24_13	IE_SH_24_99	Gur	Lake	At risk	At risk	Poor	Moderate	No	Ag, DWW	Lough Gur	Existing PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21
23_12, 23_14, 23_7, 24_9, 27_4, 27_5, 27_8	IE_SH_060_0000	Mouth of the Shannon (HAs 23;27)	Coastal	Review	Not at risk	Moderate	Good	No			
24_18, 24_5, 24_7, 24_9, 27_2, 27_5	IE_SH_060_0300	Lower Shannon Estuary	Transitional	At risk	Not at risk	Moderate	Good	No			
24_5	IE_SH_060_0350	Foynes Harbour	Transitional	Review	Review	Unassigned	Unassigned	No			
24_5, 24_7	IE_SH_060_0400	Poulaweala Lough / Quayfield Lough	Transitional	Review	Review	Unassigned	Unassigned	No			
24_1, 24_18, 24_5	IE_SH_060_0600	Deel Estuary	Transitional	At risk	At risk	Moderate	Moderate	No	Ag		
24_10, 24_13, 24_16, 24_8	IE_SH_060_0700	Maigue Estuary	Transitional	At risk	At risk	Moderate	Moderate	No	Ag		
24_10, 24_16, 24_18, 25D_3, 27_11, 27_12	IE_SH_060_0800	Upper Shannon Estuary	Transitional	At risk	At risk	Poor	Poor	No	Ag		
24_10, 25D_3, 25D_9	IE_SH_060_0900	Limerick Dock	Transitional	At risk	Review	Moderate	Good	No			
16_11, 16_13, 16_20, 24_3	IE_SE_G_016	Bansha	Groundwater	At risk	At risk	Good	Good	No	Ag, Other		
16_14, 16_20, 16_26, 18_17, 18_22, 24_3	IE_SE_G_087	Knockaskallen	Groundwater	Not at risk	Not at risk	Good	Good	No			
16_11, 16_13, 16_14, 16_20, 16_8, 16_9, 24_3	IE_SE_G_091	Lisvarrinane	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
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			
16_10, 16_11, 16_13, 16_18, 16_21, 16_28, 16_4, 24_2	IE_SE_G_145	Tipperary	Groundwater	Review	Review	Good	Good	No			
18_12, 18_18, 18_26, 18_6, 22_17, 22_5, 22_9, 23_1, 23_12, 23_13, 23_2, 23_3, 23_4, 23_5, 23_6, 23_7, 23_8, 24_14, 24_7, 24_9	IE_SH_G_001	Abbeyfeale	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_1, 24_16, 24_18, 24_5	IE_SH_G_010	Askeaton	Groundwater	Review	Review	Good	Good	No			
24_13, 24_15, 24_16, 24_17, 24_4, 24_6, 24_8	IE_SH_G_022	Ballingarry	Groundwater	At risk	At risk	Good	Good	No	Ag		
24_1, 24_16, 24_4	IE_SH_G_024	Ballyallinan	Groundwater	Not at risk	Not at risk	Good	Good	No			
18_13, 18_26, 23_1, 23_12, 23_3, 23_5, 24_1, 24_14, 24_15, 24_5, 24_6, 24_7, 24_9	IE_SH_G_030	Ballylongford	Groundwater	Review	Not at risk	Good	Good	No			
24_10, 24_12, 25D_2, 25D_5, 25D_7, 25D_8, 25D_9	IE_SH_G_036	Ballyneety	Groundwater	Review	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_16, 24_18	IE_SH_G_037	Ballysteen	Groundwater	Review	Not at risk	Good	Good	No			
24_11, 24_17, 24_6, 24_8	IE_SH_G_046	Bruree	Groundwater	At risk	At risk	Good	Good	No	Ag		
16_13, 16_20, 18_10, 18_13, 18_22, 24_11, 24_15, 24_2, 24_3, 24_6	IE_SH_G_055	Charleville	Groundwater	At risk	At risk	Good	Good	No	Ag		
24_10, 24_12, 24_13, 24_16, 24_17, 24_18, 24_4, 24_8, 25D_7, 25D_9	IE_SH_G_084	Fedamore	Groundwater	Review	Review	Good	Good	No			
24_14, 24_15, 24_16, 24_4, 24_6, 24_8	IE_SH_G_088	Feenagh	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_12, 24_13, 25D_7, 25D_8, 25D_9	IE_SH_G_106	Herbertstown	Groundwater	At risk	At risk	Poor	Good	No	Ag		
16_13, 24_11, 24_12, 24_13, 24_15, 24_16, 24_17, 24_2, 24_3, 24_6, 24_8, 25D_2, 25D_7	IE_SH_G_107	Hospital	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_10, 24_16	IE_SH_G_119	Kildimo	Groundwater	Review	Not at risk	Good	Good	No			
24_15, 24_16, 24_4, 24_6, 24_8	IE_SH_G_122	Kilmeedy	Groundwater	At risk	At risk	Good	Good	No	Ag		
24_16, 24_4	IE_SH_G_128	Knockaderry	Groundwater	At risk	At risk	Good	Good	No	Ag		
24_12, 25D_5, 25D_7, 25D_8, 25D_9	IE_SH_G_129	Knockroe East	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_10, 24_12, 24_13, 25D_8, 25D_9	IE_SH_G_130	Knockroe Northwest	Groundwater	Not at risk	Review	Good	Good	No			
24_12, 24_13, 25D_7	IE_SH_G_131	Knockroe Southwest	Groundwater	Not at risk	Review	Good	Good	No			
24_12, 25D_7, 25D_8	IE_SH_G_133	Knockseefin-Longstone East	Groundwater	Not at risk	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
24_12, 25D_7, 25D_8	IE_SH_G_134	Knockseefin-Longstone West	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_10, 25D_3, 25D_9	IE_SH_G_138	Limerick City East	Groundwater	At risk	At risk	Poor	Good	No	Ag		
24_10, 24_13, 24_16, 25D_9	IE_SH_G_141	Limerick City Southwest	Groundwater	At risk	Review	Poor	Good	No			
24_10, 24_13	IE_SH_G_176	GWDTE-Tory Hill Fen (SAC000439)	Groundwater	Review	Review	Good	Good	No			
24_1, 24_14, 24_15, 24_16, 24_18, 24_4, 24_6	IE_SH_G_190	Newcastle West	Groundwater	Review	Review	Good	Good	No			
16_13, 24_11, 24_15, 24_17, 24_2, 24_3, 24_6	IE_SH_G_193	North Kilmallock	Groundwater	At risk	At risk	Good	Good	No	Ag		
24_12, 25D_7, 25D_8, 25D_9	IE_SH_G_196	Pallas Grean	Groundwater	At risk	At risk	Poor	Good	No	Other		
24_10, 24_13, 24_16, 24_18, 24_8, 25D_9	IE_SH_G_197	Patrickswell	Groundwater	Not at risk	Review	Good	Good	No			
24_1, 24_14, 24_15, 24_16, 24_18, 24_4, 24_5, 24_6	IE_SH_G_203	Shanagolden	Groundwater	Review	Review	Good	Good	No			
16_11, 16_13, 16_18, 16_28, 16_4, 24_12, 25C_5, 25D_1, 25D_2, 25D_4, 25D_5, 25D_6, 25D_7, 25D_8, 25D_9	IE_SH_G_213	Slieve Phelim	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_16, 24_18	IE_SH_G_245	GWDTE-Askeaton North Fens (SAC002279)	Groundwater	Review	Not at risk	Good	Good	No			
24_16, 24_18	IE_SH_G_249	GWDTE-Askeaton South Fens (SAC002279)	Groundwater	Review	Review	Good	Good	No			
24_5, 24_7	IE_SH_G_252	Industrial Facility (P0035-04)	Groundwater	At risk	At risk	Poor	Poor	No	Ind		
24_10, 25D_9	IE_SH_G_260	Industrial Facility (P0650-02)	Groundwater	Not at risk	Not at risk	Good	Good	No			
24_14	IE_SH_G_263	Historic Waste Facility (S22-02816)	Groundwater	Review	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
16_20, 16_26, 18_10, 18_13, 18_17, 18_20, 18_22, 24_11, 24_3	IE_SW_G_010	Ballyhoura	Groundwater	Not at risk	Not at risk	Good	Good	No			
16_26, 18_10, 18_13, 18_17, 18_20, 18_22, 24_11	IE_SW_G_011	Ballyhoura Kiltorcan	Groundwater	At risk	At risk	Good	Good	No	Ag, For		
18_13, 24_11	IE_SW_G_068	Newtown Ballyhay	Groundwater	Not at risk	Not at risk	Good	Good	No			
18_1, 18_10, 18_12, 18_13, 18_18, 18_2, 18_20, 18_21, 18_23, 18_26, 18_3, 18_4, 18_6, 18_7, 18_9, 22_16, 22_9, 23_2, 23_4, 23_5, 24_14, 24_15	IE_SW_G_070	Rathmore West	Groundwater	Not at risk	Not at risk	Good	Good	No			
18_13, 24_11, 24_15, 24_6	IE_SW_G_071	Rathnacally	Groundwater	Not at risk	Not at risk	Good	Good	No			
16_1, 16_26, 18_10, 18_13, 18_14, 18_16, 18_17, 18_2, 18_20, 18_21, 18_22, 18_23, 18_26, 18_28, 18_5, 24_15	IE_SW_G_082	Mitchelstown	Groundwater	At risk	At risk	Good	Poor	No	Ag, For, Other		

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.