3rd Cycle Draft
Tralee Bay-Feale Catchment Report
(HA 23)

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 Tralee Bay-Feale 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 Tralee Bay-Feale 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 Tralee Bay-Feale catchment includes the area drained by the River Feale and all streams entering tidal water in Tralee Bay and between Clogher Head and Kilconly Point, Co. Kerry, draining a total area of 1,784km² (Figure 1). The largest urban centre in the catchment is Tralee. The other main urban centres in this catchment are Listowel, Abbeyfeale and Ballybunnion. The total population of the catchment is approximately 77,832 with a population density of 44 people per km². The catchment is characterised by an inland upland area underlain by shales and sandstones with low-lying coastal area underlain by relatively pure karsitifed limestones and mountainous peninsular areas which are underlain by old red sandstone.

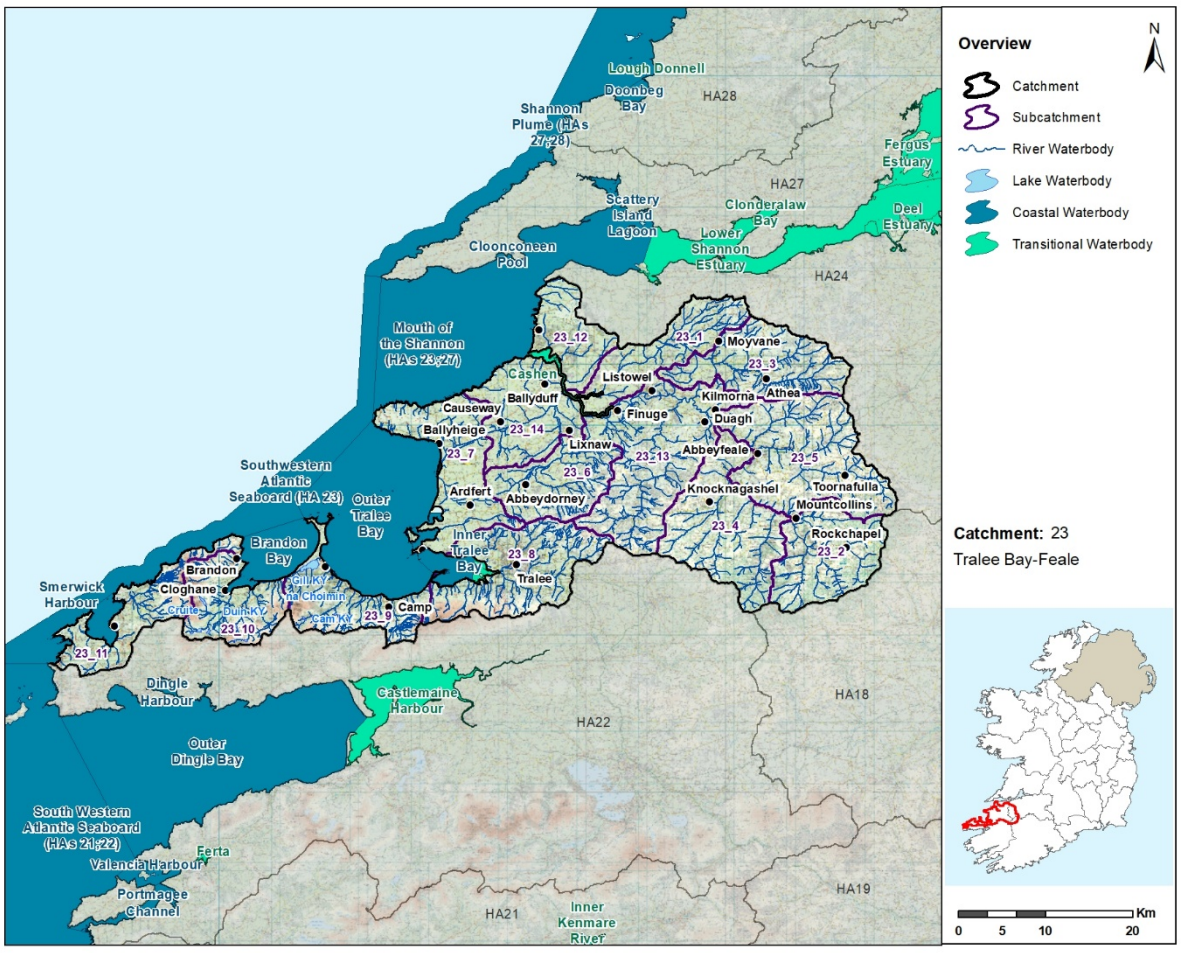


Figure 1: Overview of subcatchments in the Tralee Bay-Feale catchment

The Tralee Bay-Feale catchment is divided into 14 subcatchments (Figure 1) with 80 river waterbodies, 12 lake waterbodies, six transitional waterbodies, seven coastal waterbodies and 12 groundwater bodies (Figure 2).

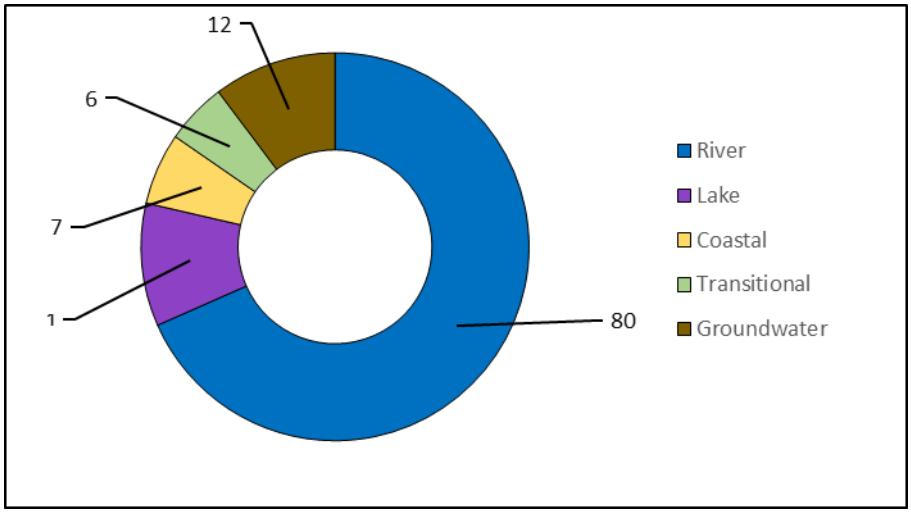


Figure 2: Waterbody types and numbers in the Tralee Bay-Feale Catchment.

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 For Cycle 3, there are two waterbodies achieving at High Status, 51 achieving Good Status, 12 achieving Moderate Status and six achieving Poor Status. There are 46 waterbodies that are currently unassigned. All waterbodies must achieve at least Good Ecological Status.

- There are four river waterbodies (Feohanagh_010, Finglas (Tralee Bay)_010, Scorid_010 & Smearlagh_020) and one coastal waterbody (Outer Tralee Bay) that must achieve High Ecological Status (HES) in this catchment. These waterbodies are listed in Appendix 1. Of the six HES Environmental Objective waterbodies, two waterbodies are achieving High Status (one river waterbody and one coastal waterbody) while three waterbodies are at Good Status and one waterbody is at Moderate Status.

- There has been an increase of one waterbody (coastal waterbody) achieving High Status and six waterbodies (five river waterbodies and one coastal waterbody) achieving Good Status between Cycle 2 and Cycle 3. There has been a reduction of six waterbodies (four river waterbodies and two coastal waterbodies) achieving Moderate Status and a reduction of two waterbodies (one river waterbody and one transitional waterbody) achieving Poor Status (Figure 3 & Table 1).

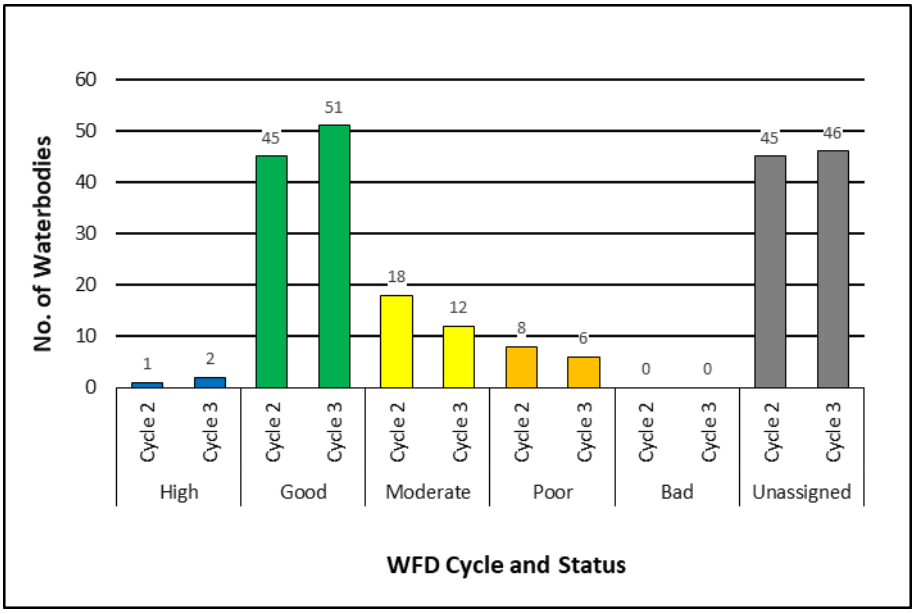


Figure 3: Waterbody Status Breakdown (All waterbodies)

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	1	1	0	0	0	0	0	1	0	0	**1**	**2**
Good	32	37	0	0	0	0	1	2	12	12	**45**	**51**
Moderate	13	9	2	2	1	1	2	0	0	0	**18**	**12**
Poor	5	4	0	0	3	2	0	0	0	0	**8**	**6**
Bad	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Un-assigned	29	29	10	10	2	3	4	4	0	0	**45**	**46**
Total	80	80	12	12	6	6	7	7	12	12	**117**	**117**

- 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 11 (15%) waterbodies have improved in status, 58 (82%) waterbodies have remained unchanged and two (3%) waterbodies have declined in status.[1]

- There is an overall improvement in the status of nine 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.

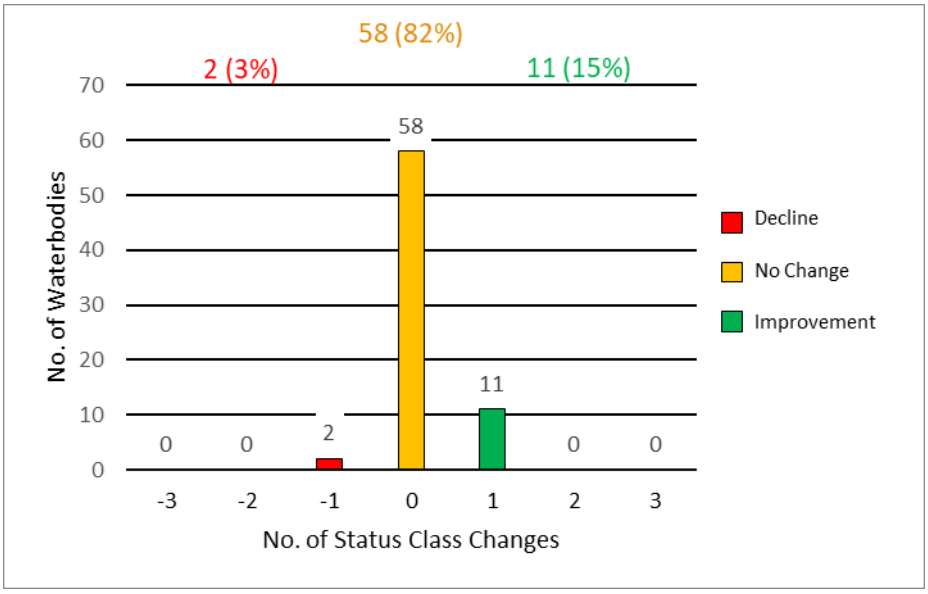


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- There are nine 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 in the catchment did not meet the DWPA objective in 2019:
  - Feale_090 (IE_SH_23F010800) river waterbody is the source for the Listowel Regional Public Water Supply (1300PUB1204) which had MCPA and Glyphosate pesticide exceedances;
  - Smearlagh_030 (IE_SH_23S020500) river waterbody is the source for the Lyreacrompane Regional Public Water Supply (1300PUB1009) which had MCPA pesticide 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 eight bathing waters in or directly adjacent to the catchment identified under the Bathing Water Regulations 2008.

- Seven of the eight bathing waters had an Excellent classification for 2020, the remaining bathing water (Ballybunnion North) had a Good classification.

[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 2020[4].

2.2.3 Shellfish Areas

- There are two 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
Inner Bay, Maharees	IEPA2_0009	Outer Tralee Bay	IE_SH_040_0000	✓	
Tralee Bay	IEPA2_0020	Lee K Estuary	IE_SH_050_0100	✓	
		Inner Tralee Bay	IE_SH_050_0000		
		Outer Tralee Bay	IE_SH_040_0000		

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

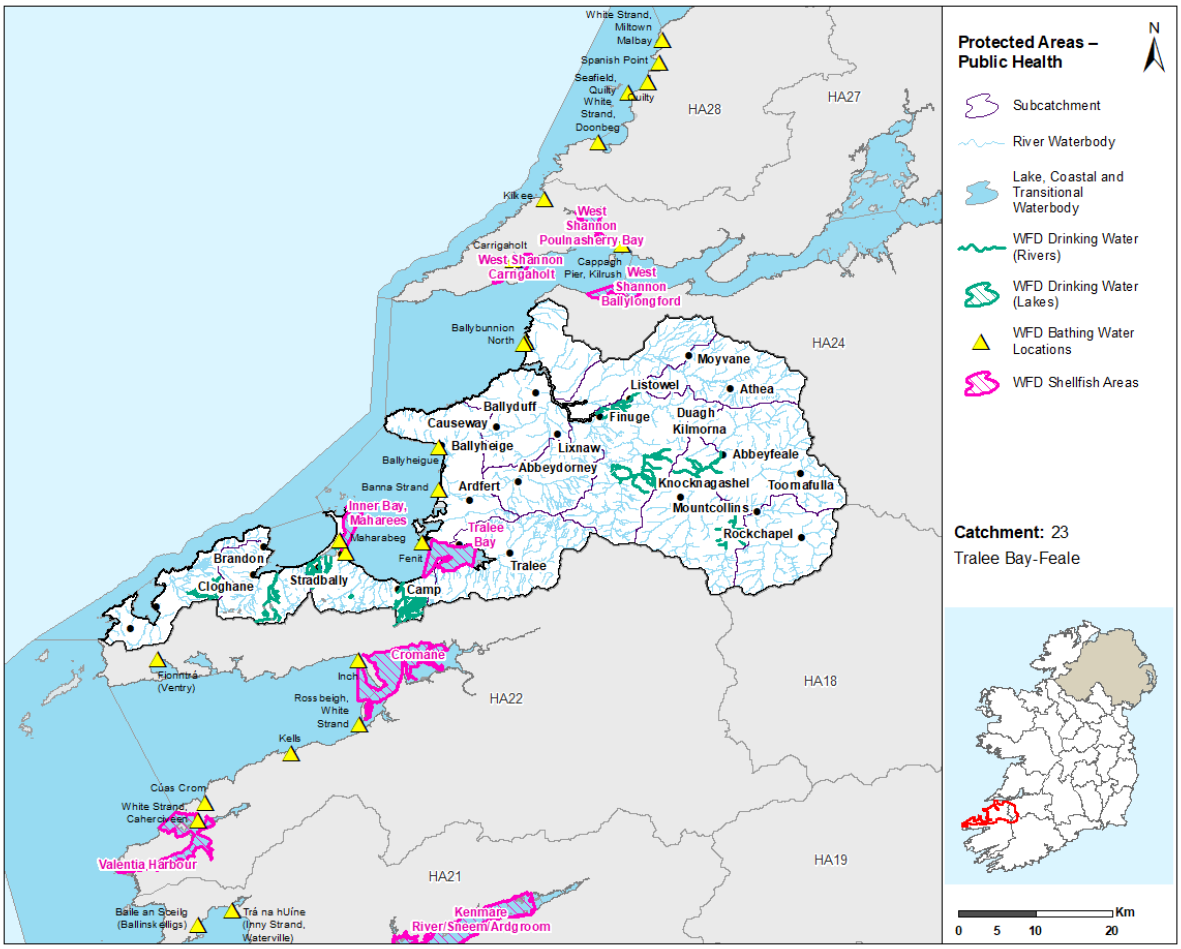


Figure 5: Protected Areas – Public Health

2.2.4 Natura 2000 Sites 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 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	62	32	9	21
Lakes	11	9	2	0
Transitional & Coastal	6	4	1	1

**As the waterbody status was unassigned.*

- There is one river waterbody (Owenmore (Kerry)_010) with FWPM habitats, it did not achieve the required macroinvertebrate standard as set out in the FWPM Regulations.
- There are no groundwater bodies delineated and assessed as Groundwater Dependent Terrestrial Ecosystems for this catchment.
- 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/

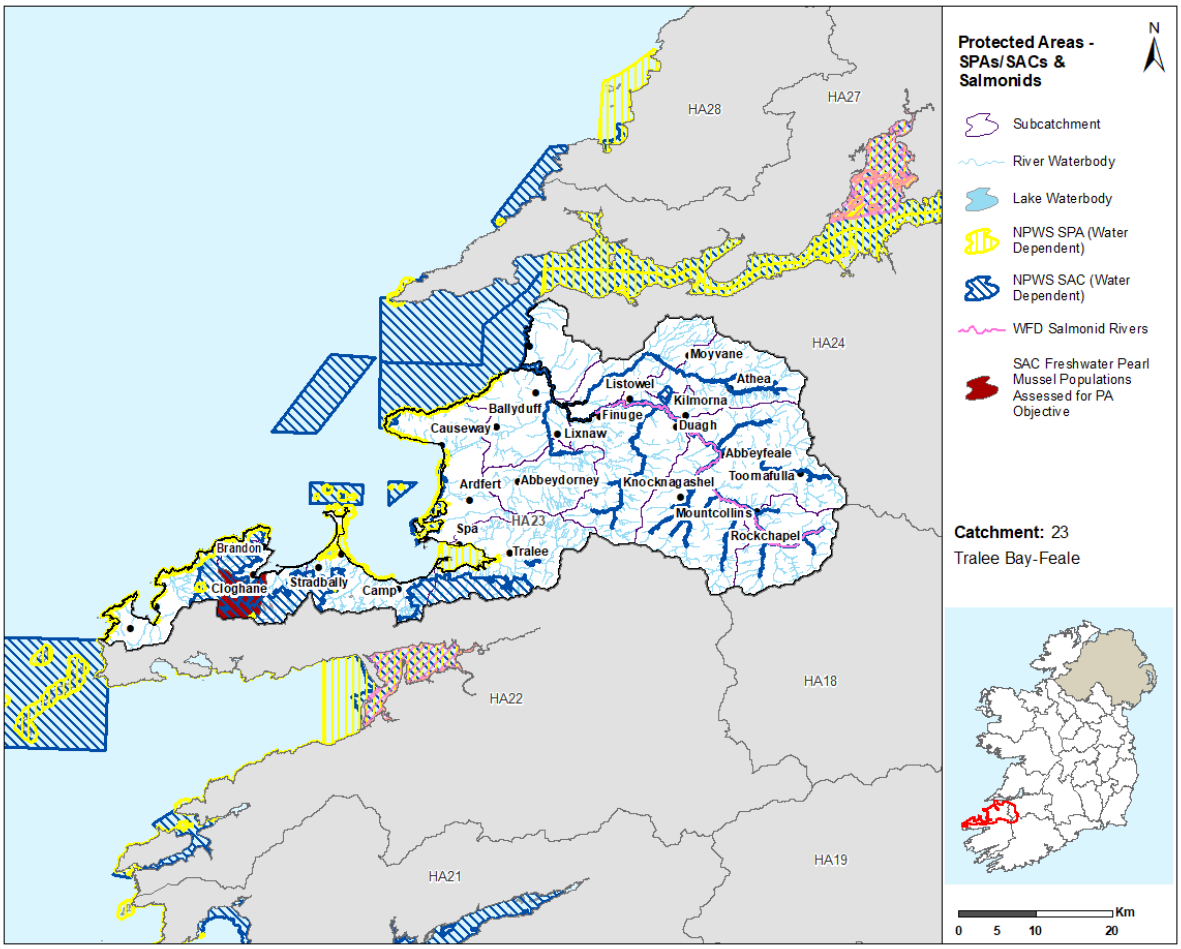


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

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 two 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 one of the two 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	
Lee K Estuary	Tralee	D0040-01	Lee K Estuary	IE_SH_050_0100	✓		Tertiary Treatment in place
Upper Feale Estuary & Cashen Estuary	Listowel	D0179-01	Upper Feale Estuary	IE_SH_060_0200		✓	Secondary Treatment in Place
			Cashen	IE_SH_060_0100			

2.3 Heavily Modified Waterbodies

- Based on the 1st and 2nd RBMPs there are currently no designated heavily modified (HMWB) or artificial water bodies in the catchment.

2.4 Artificial Waterbodies

- There are no Artificial Waterbodies (AWBs) present in the Tralee Bay – Feale 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 117 waterbodies in the Tralee Bay-Feale Catchment and 23 (20%) of these are currently *At Risk*, 39 (33%) in *Review* and 55 (47%) are *Not At Risk*.

3.2 Surface Waters

- For the 80 river waterbodies, 17 (20%) are *At Risk,* 30 (38%) are in *Review* and 33 (41%) are *Not At Risk*.

- For the 12 lake waterbodies, two (17%) are *At Risk*, four (33%) are in *Review* and six (50%) are *Not At Risk.* Gill KY and CAM KY are the lake waterbodies *At Risk.*

- For the six transitional waterbodies, three (50%) are *At Risk* (Lee K Estuary, Cashen and Upper Feale Estuary) and three (50%) are in *Review.*

- For the seven coastal waterbodies, one (14%) is in *Review* and six (86%) are *Not At Risk*.

- The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for 17 (74%) of 23 *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 a decrease in six *At Risk* waterbodies and no change in *Review* waterbodies, and an increase of six *Not At Risk* waterbodies between Cycle 2 and Cycle 3.

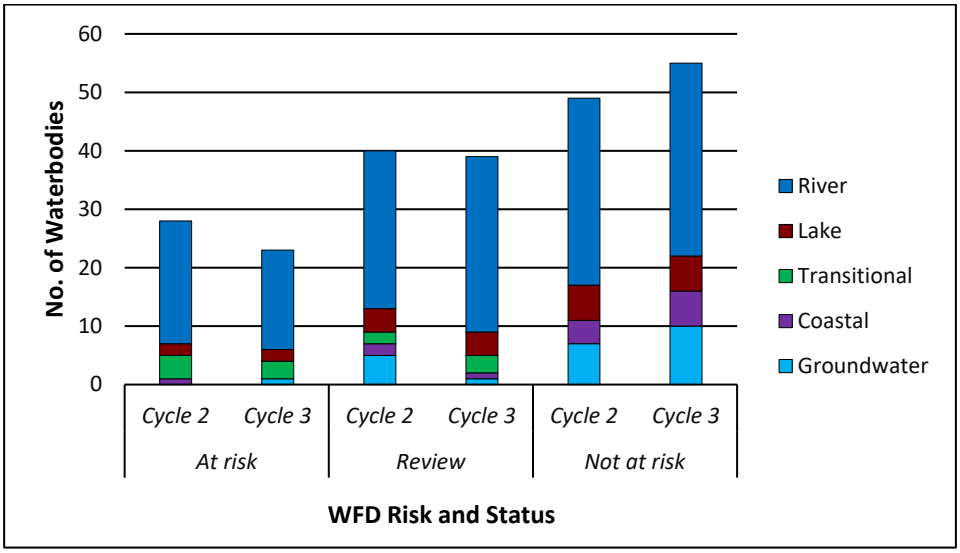


Figure 7: Number of waterbodies in each risk category

- 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.

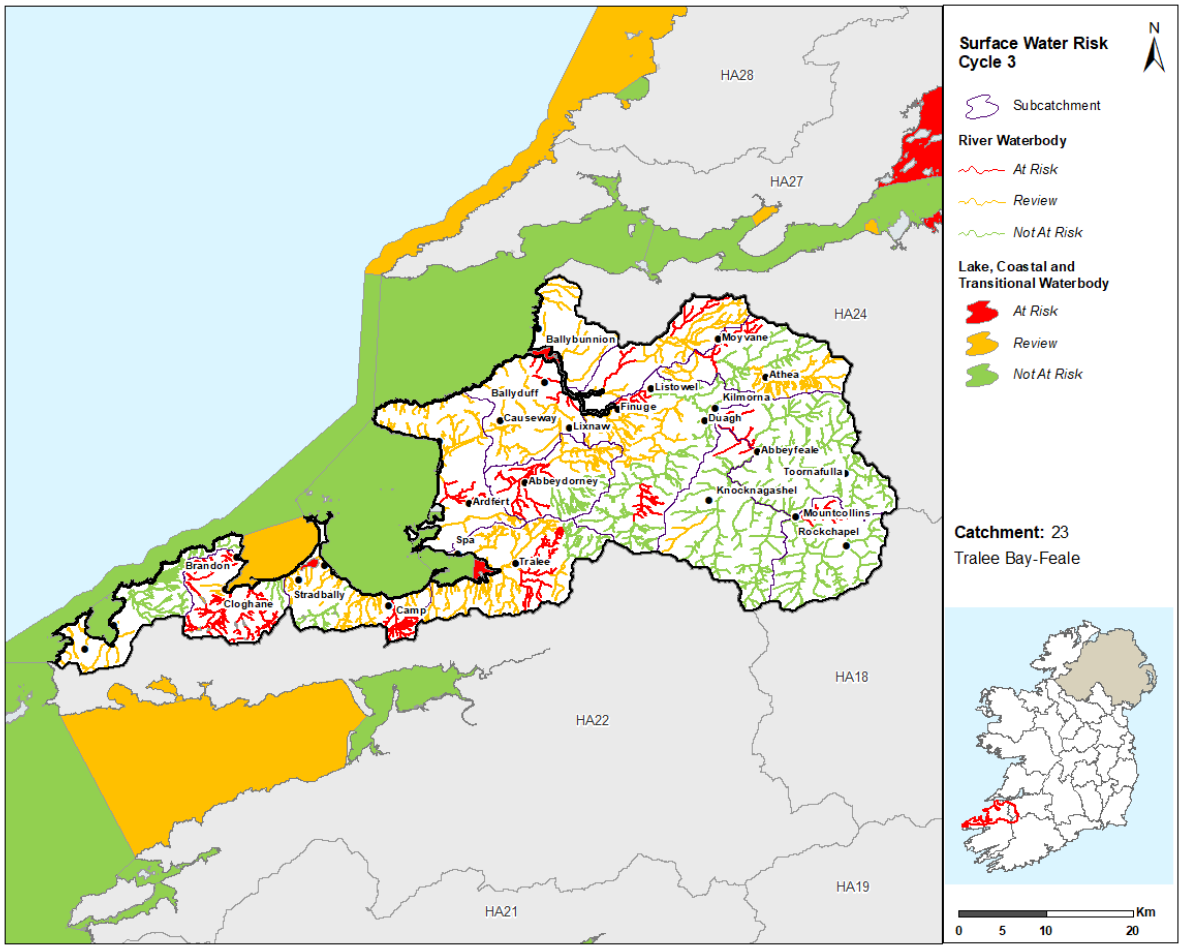


Figure 8: Surface Water Risk Cycle 3

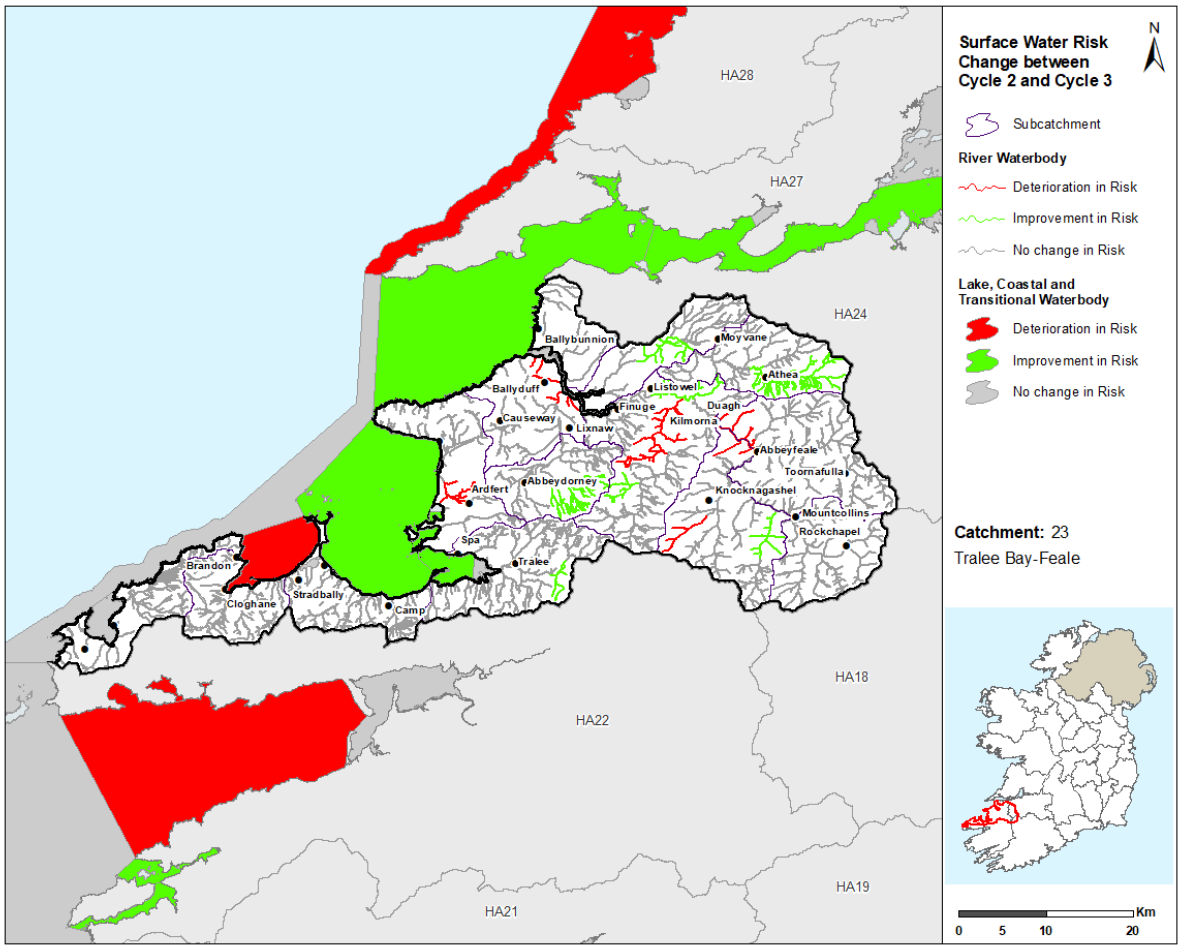


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- For the 12 groundwater bodies, one (8%) is *At Risk* (Ballybunnion), one (8%) is in *Review* and 10 (83%) are *Not At Risk*.

- In Cycle 2 there were five waterbodies in *Review* and seven *Not At Risk* in this catchment.

- 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.

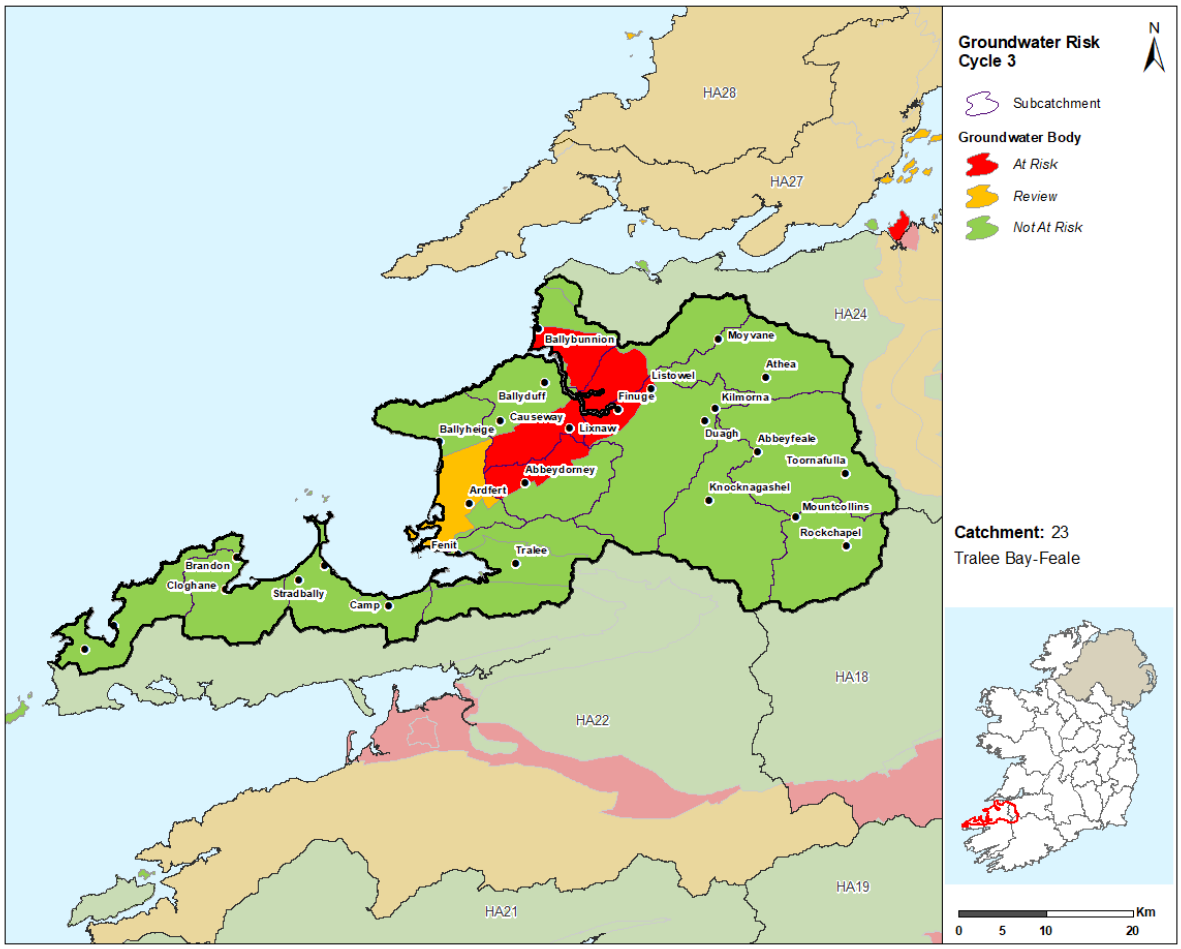


Figure 10: Cycle 3 Groundwater Body Risk

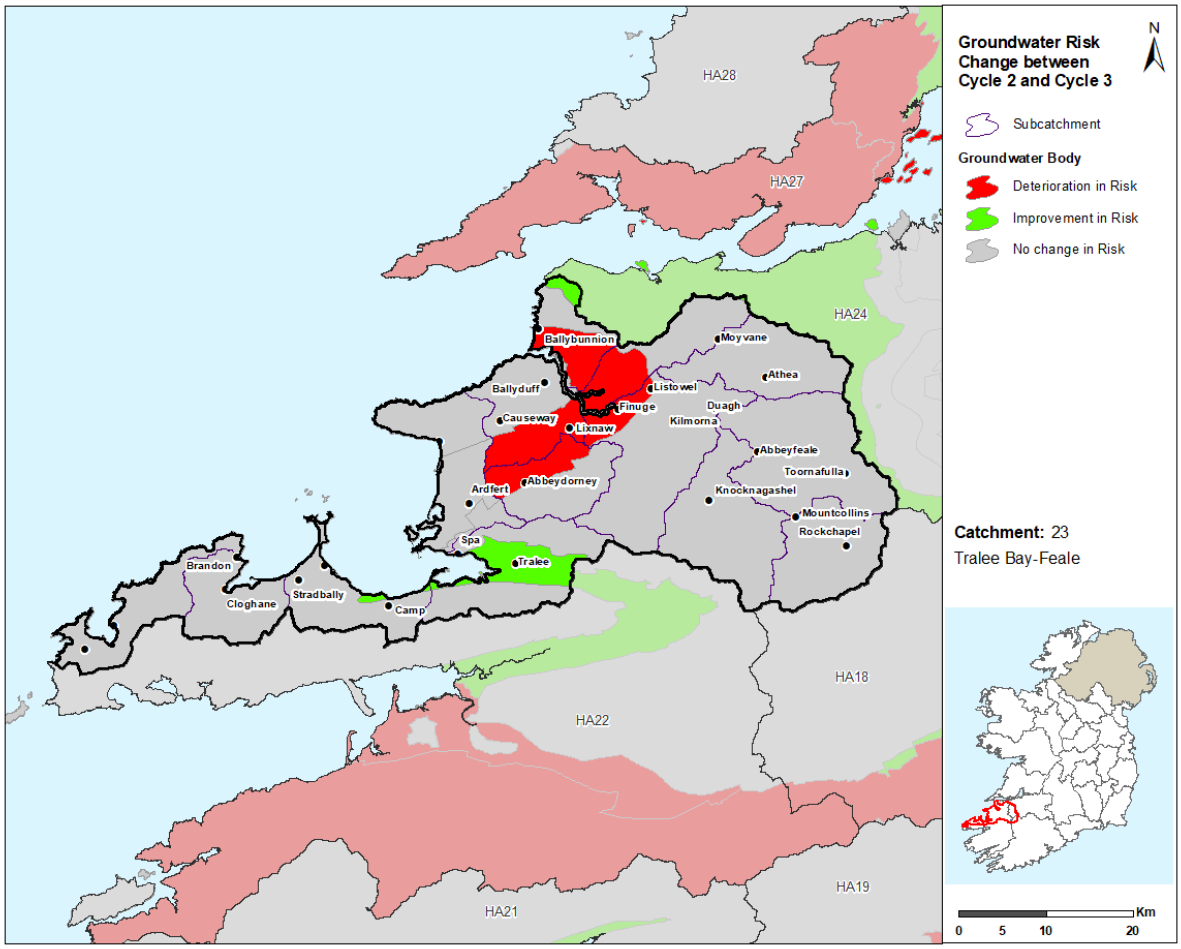


Figure 11: Groundwater Body Risk Change between Cycle 2 & Cycle 3

3.4 Heavily Modified Waterbodies

- There are no designated heavily modified (HMWB) or artificial water bodies in the catchment. 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 Tralee Bay – Feale Catchment.

4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

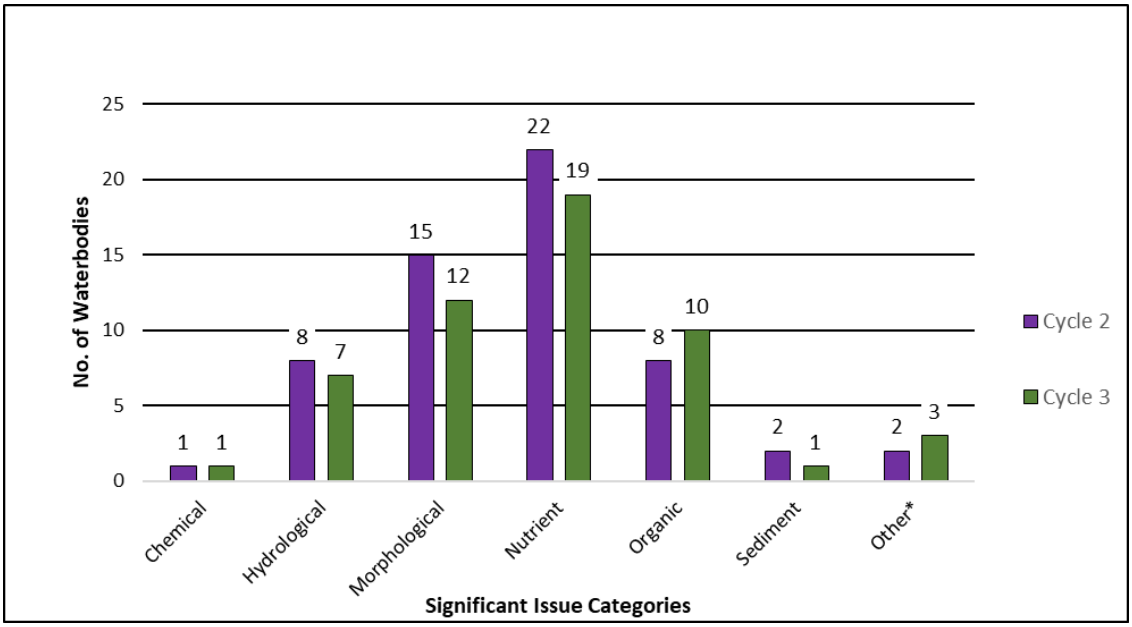
- Excess nutrients and morphological impacts remain the most prevalent issues in the Tralee Bay-Feale Catchment (Figure 12) impacting 19 and 12 waterbodies in Cycle 3, respectively. Organic issues are impacting 10 waterbodies, hydrological issues are impacting seven waterbodies and other (anthropogenic) issues are impacting three waterbodies. Both chemical and sediment issues are impacting one waterbody each.

- For river waterbodies, the main significant issues are nutrient pollution (13), morphological impacts (10), hydrological (7) and organic pollution (7).
- For Lake waterbodies, the main significant issues are nutrient pollution (2), morphological impacts (1) and other impacts (1).
- For the *At Risk* transitional waterbodies the significant issues are organic (3), nutrient pollution (3) and morphological issues (1).
- For the one *At Risk* groundwater body (Ballybunion) the significant issue is nutrient pollution as well as diminution of quality of associated surface waters for chemical reasons.

- Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues has decreased by three from 22 to 19 and the number of waterbodies impacted by morphological issues has decreased by three from 15 to 12.

- The numbers of waterbodies with hydrological issues has reduced from eight to seven while organic issues have increased from eight to 10 between Cycle 2 to Cycle 3.

- The number of waterbodies impacted by sediment issues has decreased to one waterbody, while waterbodies impacted by chemical issues has remained unchanged.



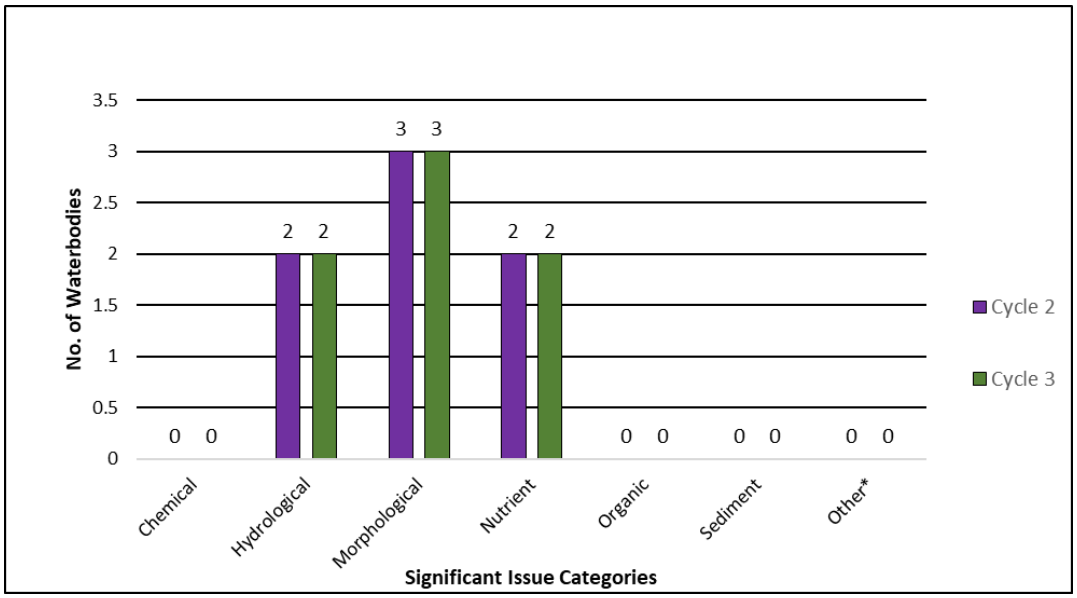
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

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 High Status Objective waterbodies morphological issues are impacting all of the three High Status Objective waterbodies (Smearlagh_020, Scorid_010 & Finglas (Tralee Bay)_010) currently *At Risk* (Figure 13). Nutrients are also impacting Smearlagh_020 & Finglas (Tralee Bay)_010. Hydrological issues are also impacting Scorid_010 & Finglas (Tralee Bay)_010. All HES waterbodies impacted are river waterbodies.

- Between Cycle 2 and Cycle 3 the number of waterbodies with morphological issues, nutrients and hydrological impacts has remained unchanged.



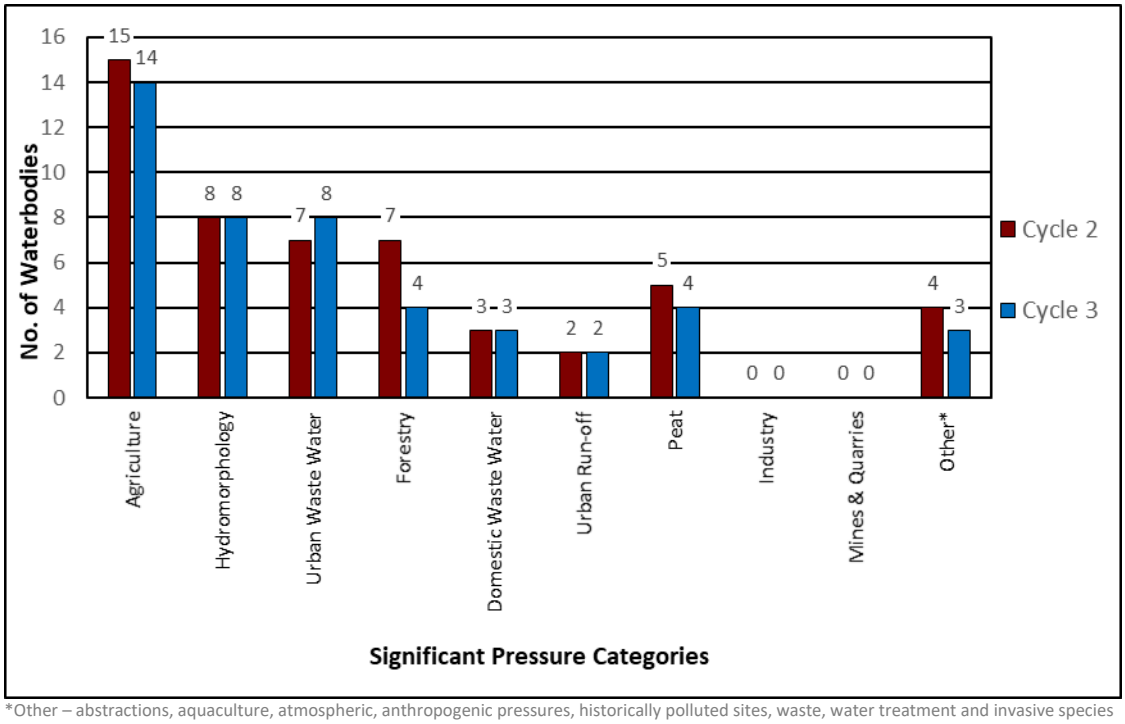
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

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 hydromorphology, urban waste water, forestry, peat, other, domestic waste water and urban run-off.
- When comparing Cycle 2 and Cycle 3 the biggest change is a decrease of three waterbodies where forestry is a significant pressure from seven waterbodies in Cycle 2 to four waterbodies in Cycle 3.



*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 10 river waterbodies, Gill KY lake waterbody, two transitional waterbodies (Upper Feale Estuary & Cashen) and Ballybunnion groundwater body. The issues related to agriculture in this catchment are diffuse phosphorus loss to surface waters due mainly in areas of improved pasture and point discharges from impervious surfaces such as yards and farm tracks, resulting in excess nutrients in surface waters. Dairy and pig farming were noted to be intensive across high PIP areas. Elevated ammonia was also noted in highly saturated areas.

5.1.1.2 Hydromorphology

- Four river waterbodies (Galey_050, Owenmore (Kerry)_010, Scorid_010 & Knoppoge_South_010) are subject to extensive modification due to channelisation, which has led to high levels of siltation. In addition, three river waterbodies (Galey_050, Termon Steam_010 & Knoppoge_South_010) and one transitional waterbody (Upper Feale Estuary) extensive bank modification due to the presence of embankment schemes. Land drainage is impacting three river waterbodies (Feale_090, Galey_030 & Tarmon Stream_010). Barriers are present within one river waterbody (Scorid_010).

5.1.1.3 Urban Waste Water

- Urban Waste Water Treatment Plants (WWTPs) and agglomeration networks have been identified as a significant pressure in eight *At Risk* waterbodies; details are given in
- Table 5. Artfert agglomeration (D0282), which was due to be upgraded in 2020, is the only agglomeration listed on 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[6]
Abbeydorney D0417	Agglomeration PE of 500 to 1,000 PE	Brick_020	Poor	N/A
Moyvane A0026	Agglomeration PE of < 500	Galey_030	Moderate	N/A
Artfert D0282	Agglomeration PE of 1,001 to 2,000	Tyshe_020	Unassigned	2020
Ballybunion D0183	Agglomeration PE of 2,000 to 10,000	Cashen	Poor	N/A
Listowel D0179	Agglomeration PE of 2,001 to 10,000	Upper Feale Estuary	Poor	N/A
Tralee D0040	Combined Sewer Overflows	Lee (Tralee)_030	Moderate	N/A
Tralee D0040	Combined Sewer Overflows	Lee K Estuary	Moderate	N/A
Ballyduff D0418	Agglomeration PE of 500 to 1,000	Knoppoge South_010	Unassigned	N/A

- One waterbody (Clydagh (Feale)_020) from Cycle 2 which was impacted by Brosna (A0078), is no longer significantly impacted by urban waste water.

- In addition, Tyshe_020, has been identified in Cycle 3 as a waterbody impacted by urban waste water from the Artfert (D0282) agglomeration.

5.1.1.4 Forestry

- Forestry has been identified as a significant pressure in three river waterbodies and one lake waterbody. The forestry activities include clear felling in particular for construction of windfarms, which has resulted in heavy siltation and excess nutrients in surface waterbodies.

5.1.1.5 Peat

- Peat drainage and extensive harvesting has been identified as a significant pressure in four river waterbodies – Galey_050, Tarmon Stream_010, Owenmore (Kerry)_010 and Finglas (Tralee Bay) _010. Excess sediment and elevated nutrient concentrations are the significant issues. Since Cycle 2, Lyracrumpane_010 is no longer significantly impacted by pressures as a result of peat activities.

5.1.1.6 Other

- *Unknown anthropogenic*
  Three *At Risk* river waterbodies (Glennahoo_010, Feale_060 and Owenafeanna_010) and Ballybunnion groundwater body, have unknown anthropogenic pressures which have caused deterioration in waterbody status.

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

5.1.1.7 Domestic Waste Water

- Domestic waste water has been identified as a significant pressure in three river waterbodies – Tyshe_010, Tyshe_020 and Lee (Tralee)_030. This is due to clusters of unsatisfactory domestic waste water treatment systems near to surface waters, particularly on poorly draining soils. The significant issue is nutrients entering surface waters. Furthermore, some septic tanks are mapped on areas of high susceptibility to phosphate transport via near surface pathways.

5.1.1.8 Urban Run-off

- Diffuse urban pressures, caused by misconnections, leaking sewers and runoff from paved and unpaved areas in Listowel, have been identified as a significant pressure in Feale_090 river waterbody and Lee (Tralee)_030. Nutrient and organic pollution are the significant issues.

Figure 15 – Figure 17 illustrates the locations of waterbodies for the three most common pressures in order of prevalence (agriculture, hydromorphology and urban waste water) within the catchment in Cycle 3.

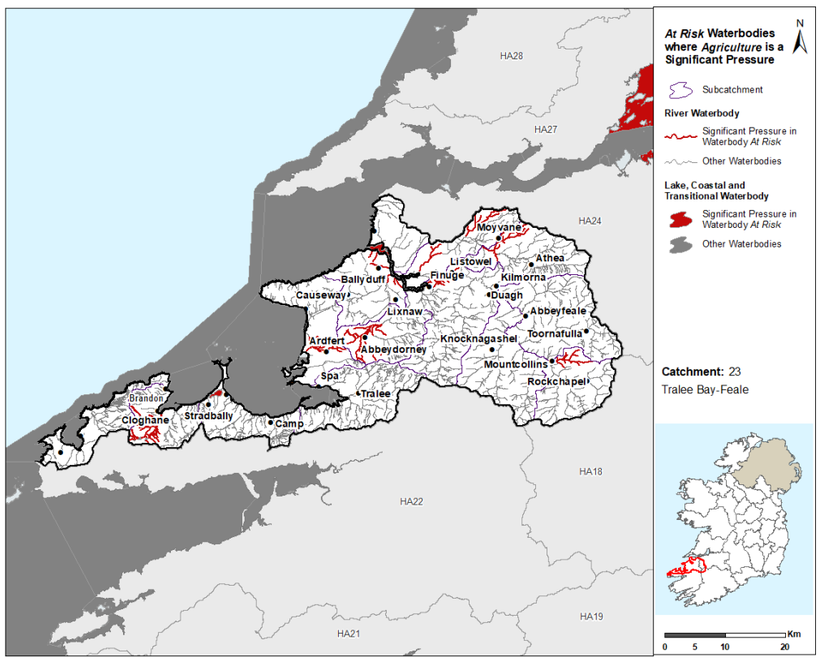


Figure 15: Locations of Waterbodies where Agriculture is a Significant Pressure

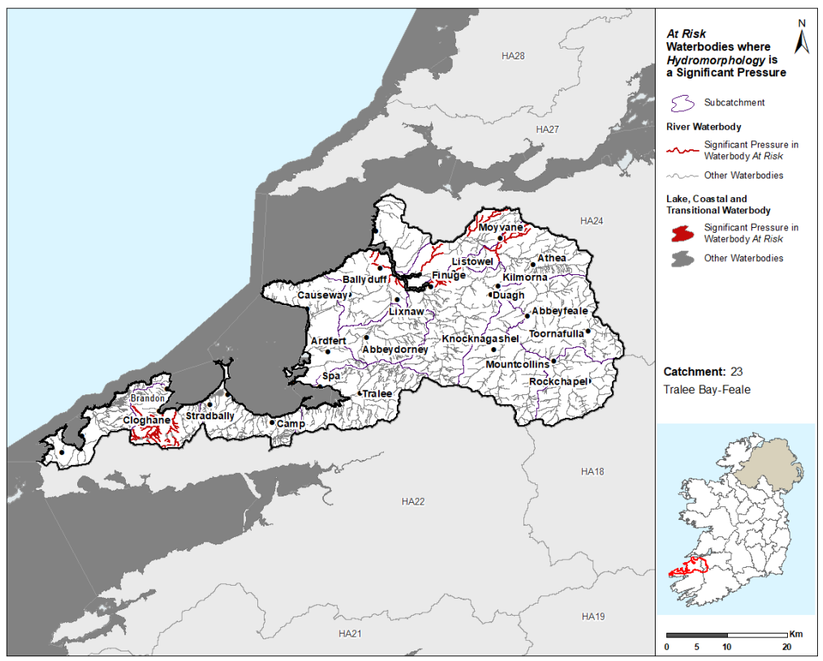


Figure 16: Locations of Waterbodies where Hydromorphology is a Significant Pressure

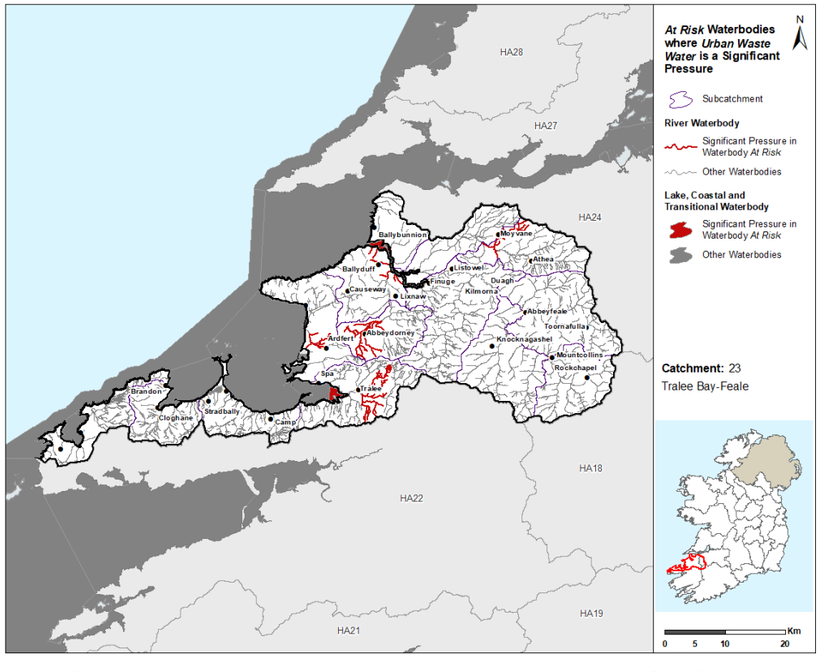
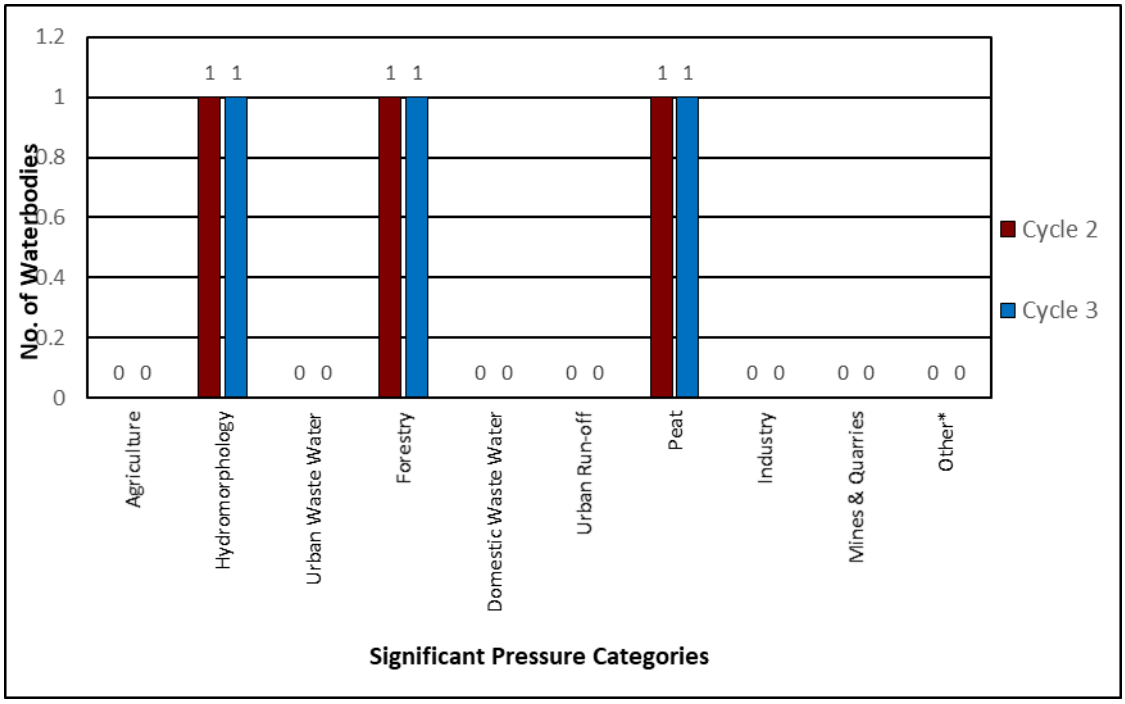


Figure 17: Locations of Waterbodies where Urban Waste Water is a Significant Pressure

5.2 High Status Objective Waterbodies

- There are currently three *At Risk* High Status Objective waterbodies. Smearlagh_020 is impacted by forestry, scored_010 is impacted by hydromorphological pressures and Finglas (Tralee Bay)_010 is impacted by peat.



*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 18: 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 land is responsible for 82% of the nitrogen load while land in pasture, discharges from urban waste water and forestry contribute 38%, 20% and 20% of the phosphorus loadings for the catchment respectively (Figure 17).

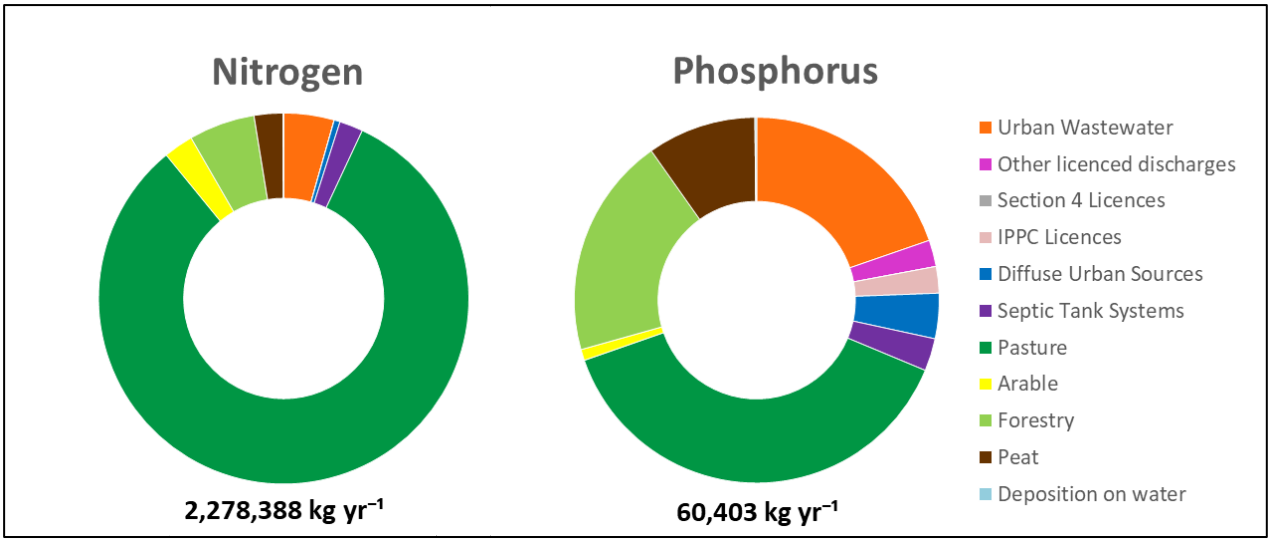


Figure 19: Estimated Proportions of N & P from Each Sector in the Tralee Bay-Feale Catchment

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. Nitrogen load reduction to meet TRAC WFD objectives are not required in the Tralee Bay-Feale Catchment.

7.2 Phosphorous / Sediment Load Reduction

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

Figure 20 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.

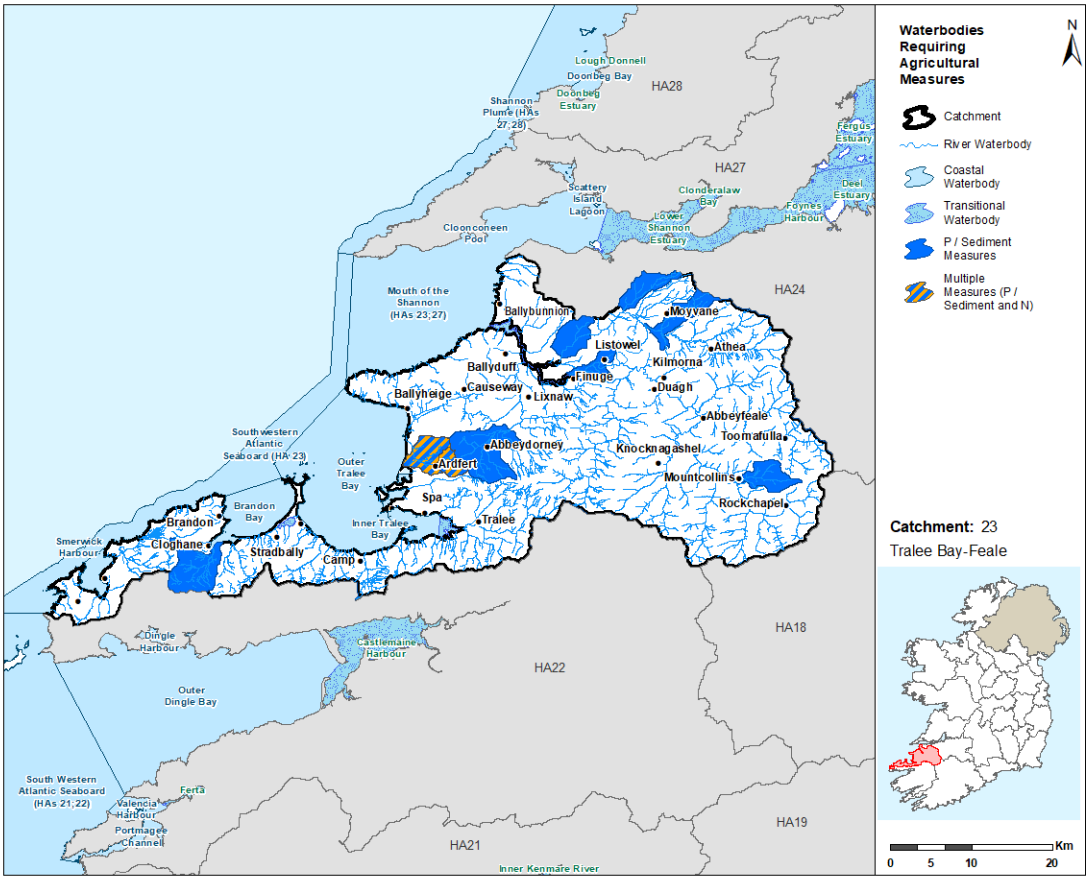


Figure 20: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- There were four Areas for Action, comprising of 13 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 6 and shown in Figure 21. LAWPRO, in conjunction with local authorities and stakeholders from the South West Regional Operational Committee, have been working in these areas since 2018.

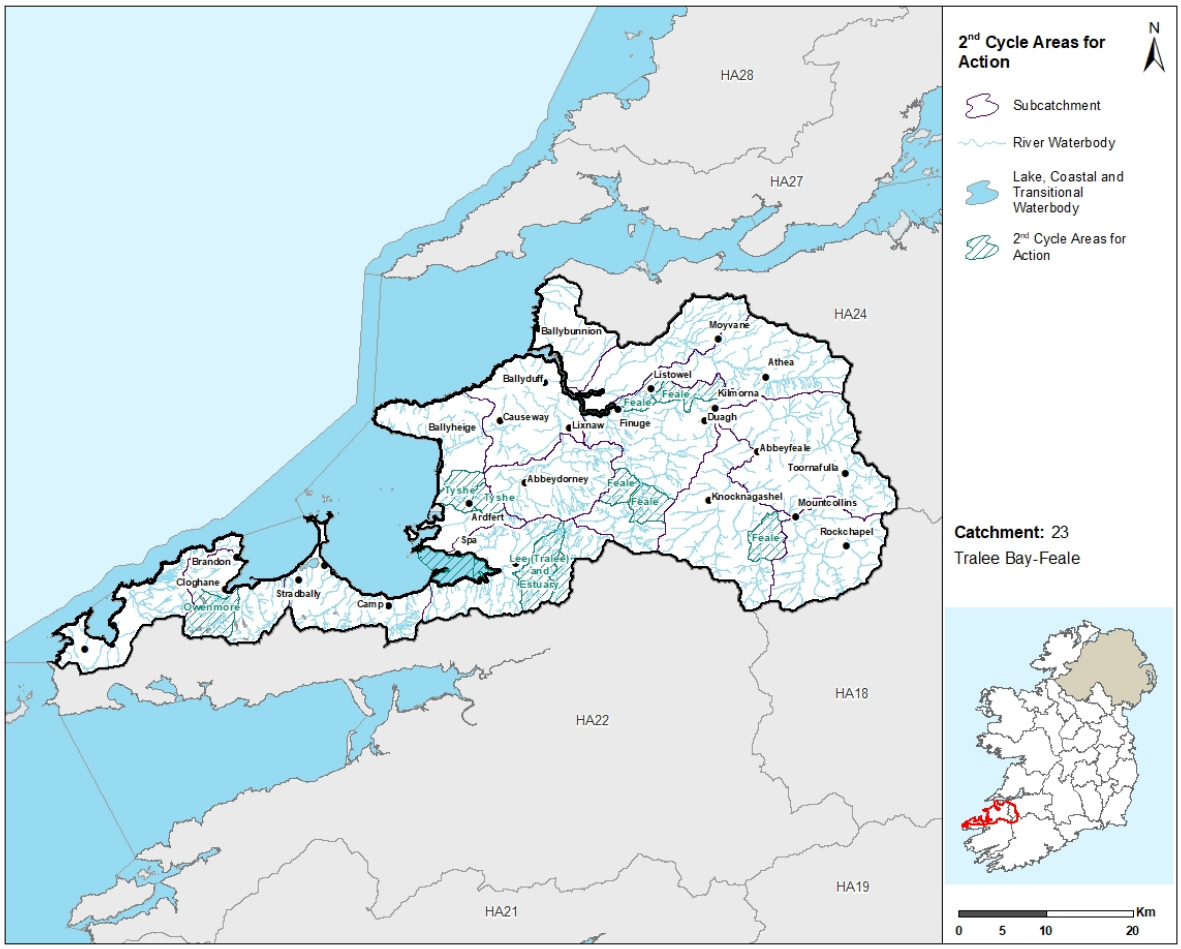


Figure 21: 2nd Cycle Areas for Action Locations

Table 6: 2nd Cycle Areas for Action

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Owenmore	1	23_10	Kerry	• Failing protected area objectives for Freshwater Pearl Mussels (populations listed in S.I. 296 of 2009). • Inland Fisheries Ireland reported that this is an important salmonid fishery. • Important for tourism. • Active community group. • One deteriorated waterbody.
Lee (Tralee) & Estuary	4	23_8	Kerry	• Headwaters to the Lee K and Tralee estuaries. • Tralee estuary is an important designated Shellfish area. • Potential project to address urban diffuse pressures and suitable measures. • Important for tourism - the possibility of opening a blueway is being examined. • Tralee Wetlands are an important tourism and environmental amenity. • Building on improvements at Tralee WWTP.

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
				• Lee K Estuary is failing to meet protected area objectives for Nutrient Sensitive Areas. • Two deteriorated waterbodies.
Feale	6	23_13 23_4	Kerry	• Would bring entire 23_4 subcatchment to Good Status. • Potential to work with local community groups that received LEADER Group funding. • One river waterbody is failing to meet protected area objectives for salmon. • One river waterbody is failing to meet protected area objectives for drinking water. • One transitional waterbody is failing to meet protected area objectives for Nutrient Sensitive Areas. • Headwaters to Upper Feale estuary. • Four deteriorated waterbodies. • One At Risk High Ecological Status Objective water body.
Tyshe	2	23_7	Kerry	• Discharges into designated bathing waters (Banna strand). • Building on improvements from upgrade to Ardfert WWTP. • Headwaters to *At Risk* High Ecological Status objective coastal waterbody.

8.2 Status Change in 2nd Cycle Areas for Action

- For Cycle 3, of the 13 waterbodies in the 2nd Cycle Areas for Action, there are six waterbodies at Good Status, four waterbodies at Moderate Status, two waterbodies at Poor Status, and one waterbody where status has not been assigned.

- There is an overall improvement in the status of five of the 2nd cycle Areas for Action waterbodies across the catchment.[7]

- Of the 12 waterbodies within the 2nd Cycle Areas for Action which had status assigned, experienced no change in status between Cycle 2 and Cycle 3, five waterbodies experienced an improvement and none were subject to deterioration in status (Figure 22). Of the four waterbody improvements three were across Feale Areas for Action and two in Lee (Tralee) and Estuary Areas 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.

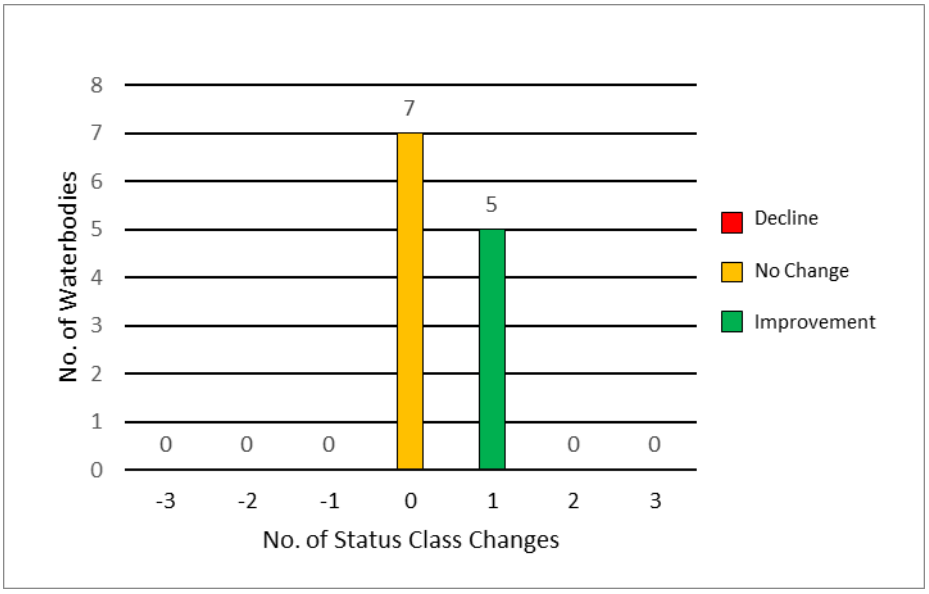


Figure 22: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- For the 13 waterbodies in the 2nd Cycle Areas for Action, eight (62%) of these are currently *At Risk,* one (8%) in *Review* and four (31%) are *Not At Risk*.

- For the 10 river waterbodies, three (30%) are *Not At Risk*, one (10%) is in *Review* and six (60%) are *At Risk.*

- Both of the transitional waterbodies (Lee K Estuary and Upper Feale Estuary) in the 2nd Cycle Areas for Action are *At Risk*.

- The only coastal waterbody in a 2nd Cycle Area for Action in the catchment, Inner Tralee Bay, is *Not At Risk*.

- The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for six (75%) of eight *At Risk* waterbodies. Figure 23 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 12 to eight *At Risk* waterbodies in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3.

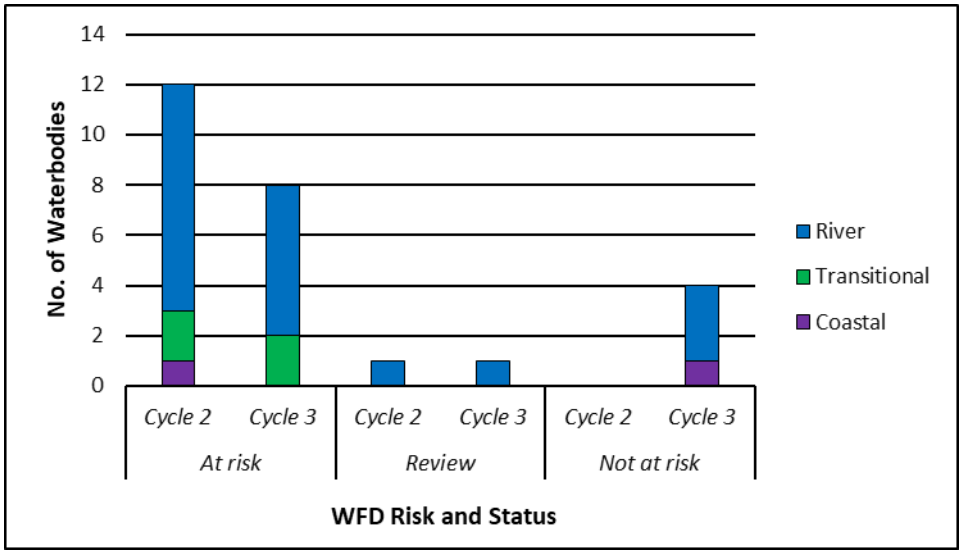
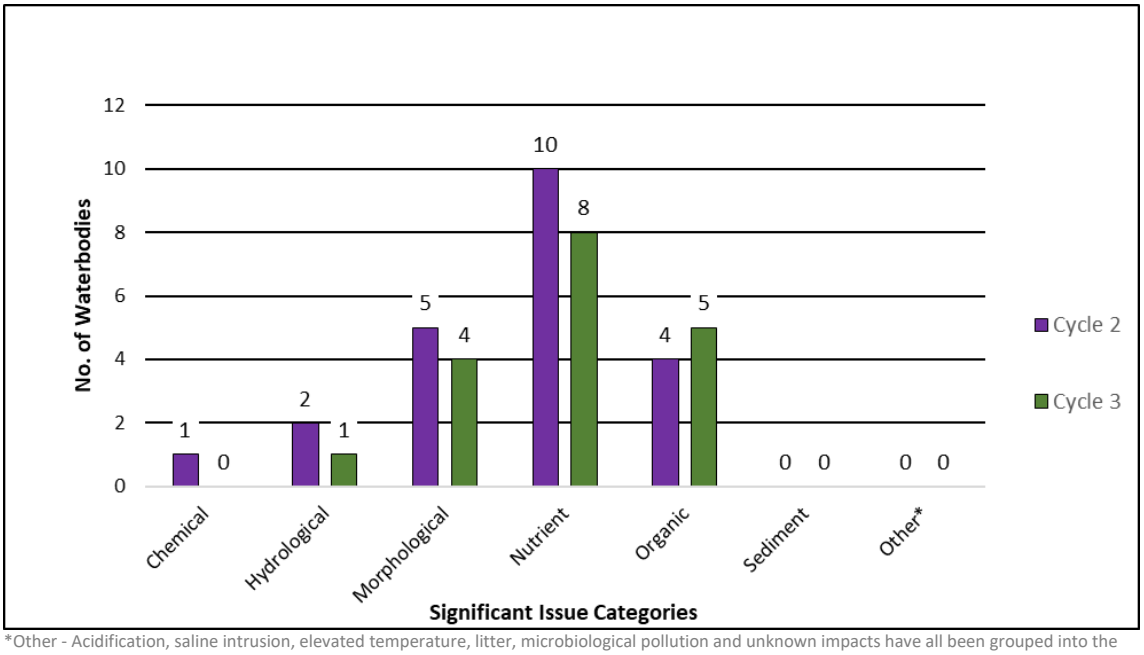


Figure 23: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

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 eight waterbodies (Figure 24). This is followed by organic which is impacting five waterbodies and morphological impacts impacting four waterbodies.

- 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 which has increased from four to five waterbodies.

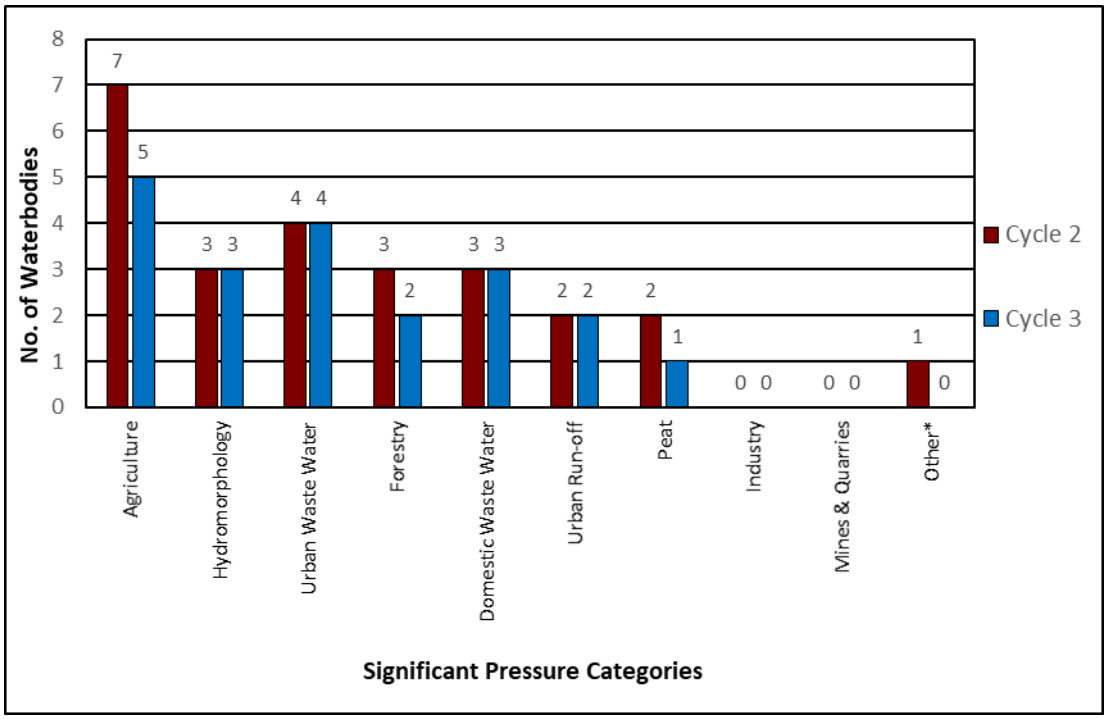


*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 24: 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 - five waterbodies are impacted compared to seven impacted in Cycle 2.
  - Urban Waste Water – has remained unchanged since Cycle 2, impacting four waterbodies.
  - Hydromorphology and domestic waste water – remain unchanged since Cycle 2, both are impacting three waterbodies.
  - Forestry - two waterbodies are impacted compared to three impacted in Cycle 2.
  - Peat - one waterbody is impacted compared to two waterbodies impacted in Cycle 2.
- When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has been a decrease or no change in all significant pressure categories in the catchment.



*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 25: Significant Pressures in 2nd Cycle Areas 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 nine Areas for Action, comprising of 38 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 14 of the 38 waterbodies in the 3rd Cycle Recommended Areas for Action are *At risk*, 13 are in *Review* and 11 are *Not At Risk.* The nine Recommended Areas for Action consist of two Areas for Protection and seven Areas for Restoration. LAWPRO are the proposed lead organisation in six Recommended Areas for Action, Limerick CoCo is the proposed lead organisation for two waterbodies and NFGWS are the proposed lead on the remaining one Recommended Area for Action. The Recommended Areas for Action in the catchment are listed in Table 7 and shown in Figure 26. The reason for selecting each waterbody in a Recommended Area for Action is provided in Appendix 3.

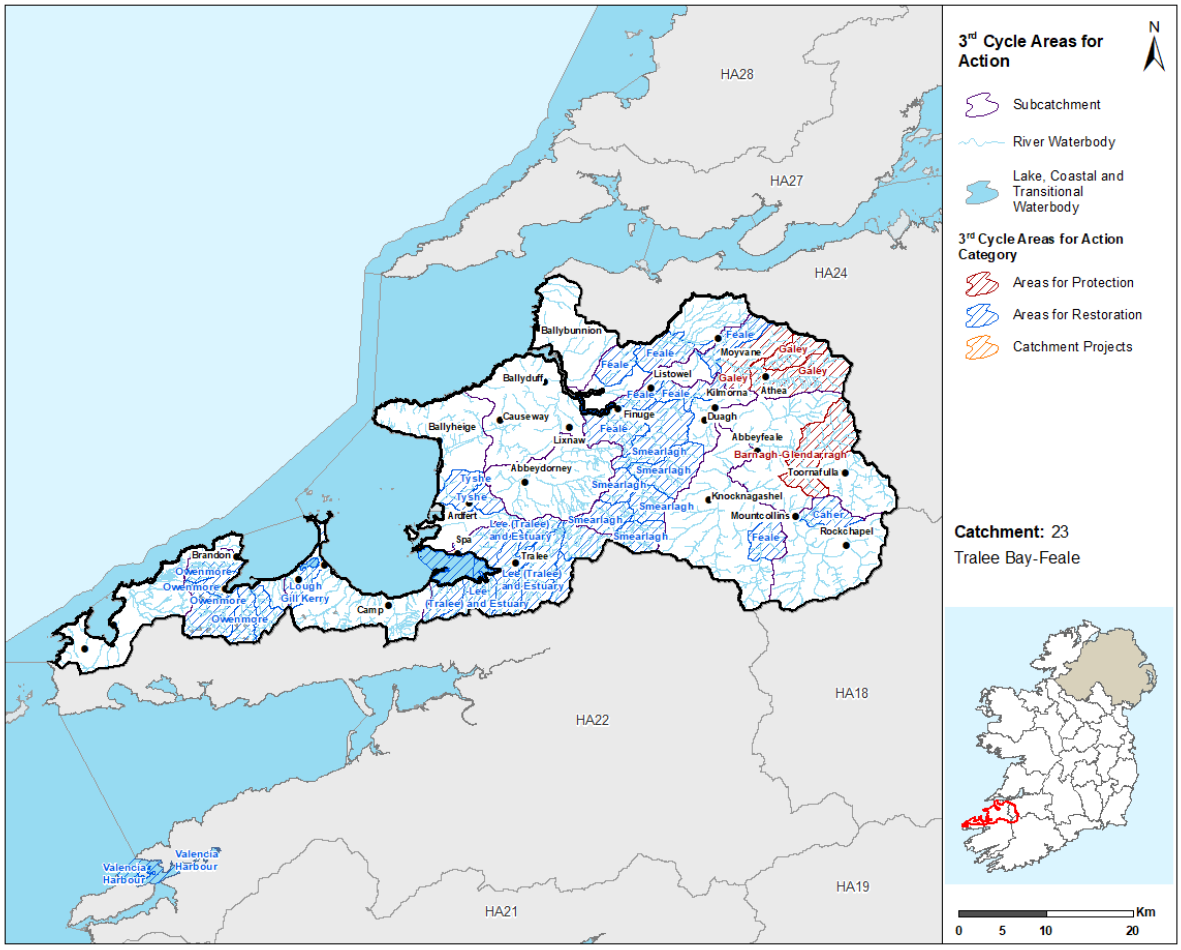


Figure 26: 3rd Cycle Recommended Areas for Action Locations

Table 7: 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
Barnagh-Glendarragh	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Lee (Tralee) and Estuary	10	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Caher	1	Restoration	LA Areas for Restoration Local Authorities	Limerick City and County Council
Feale	8	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Owenmore	5	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Galey	3	Protection	LA Areas for Protection Local Authorities	Limerick City and County Council
Smearlagh	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Lough Gill	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Tyshe	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

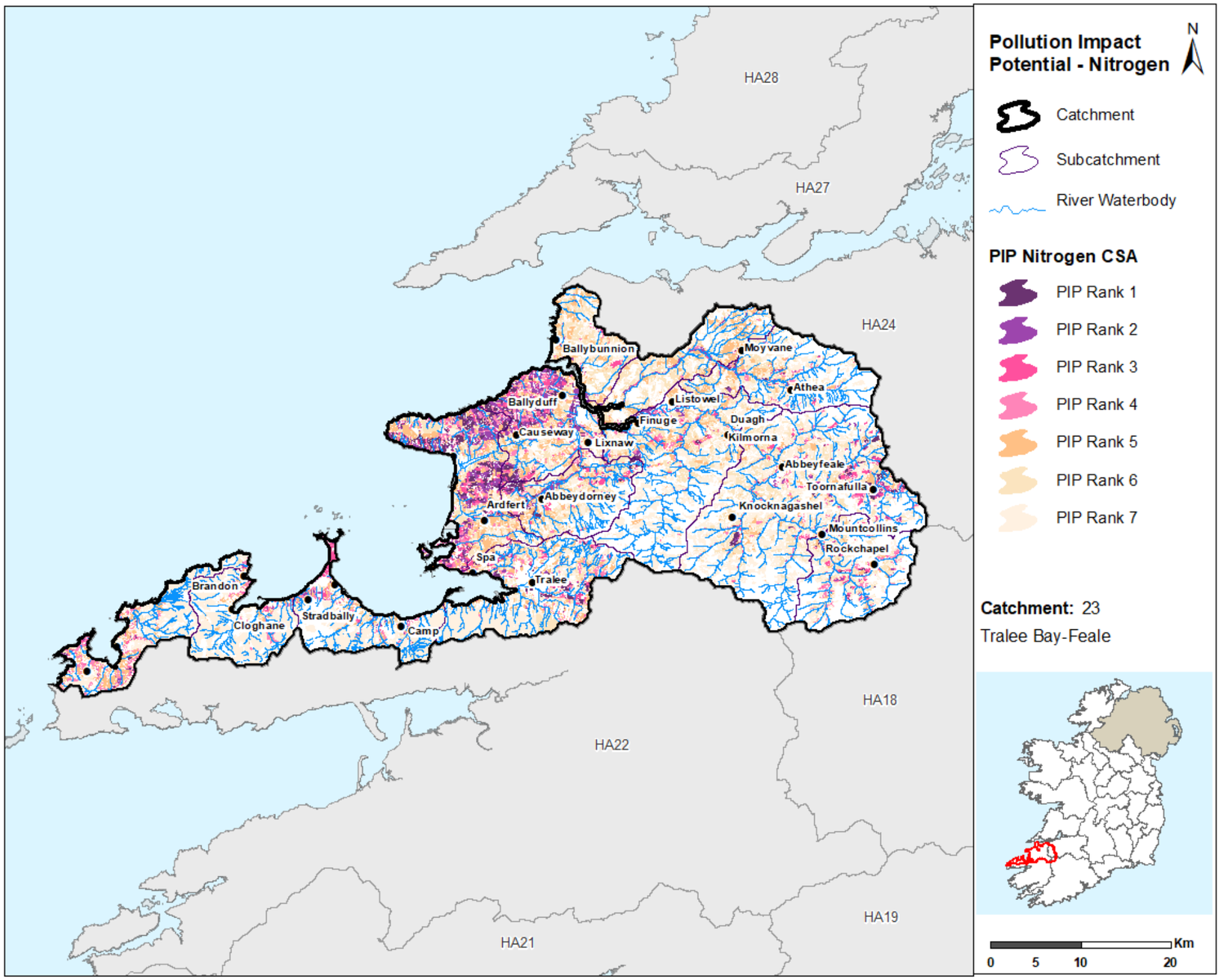
10 Catchment Summary

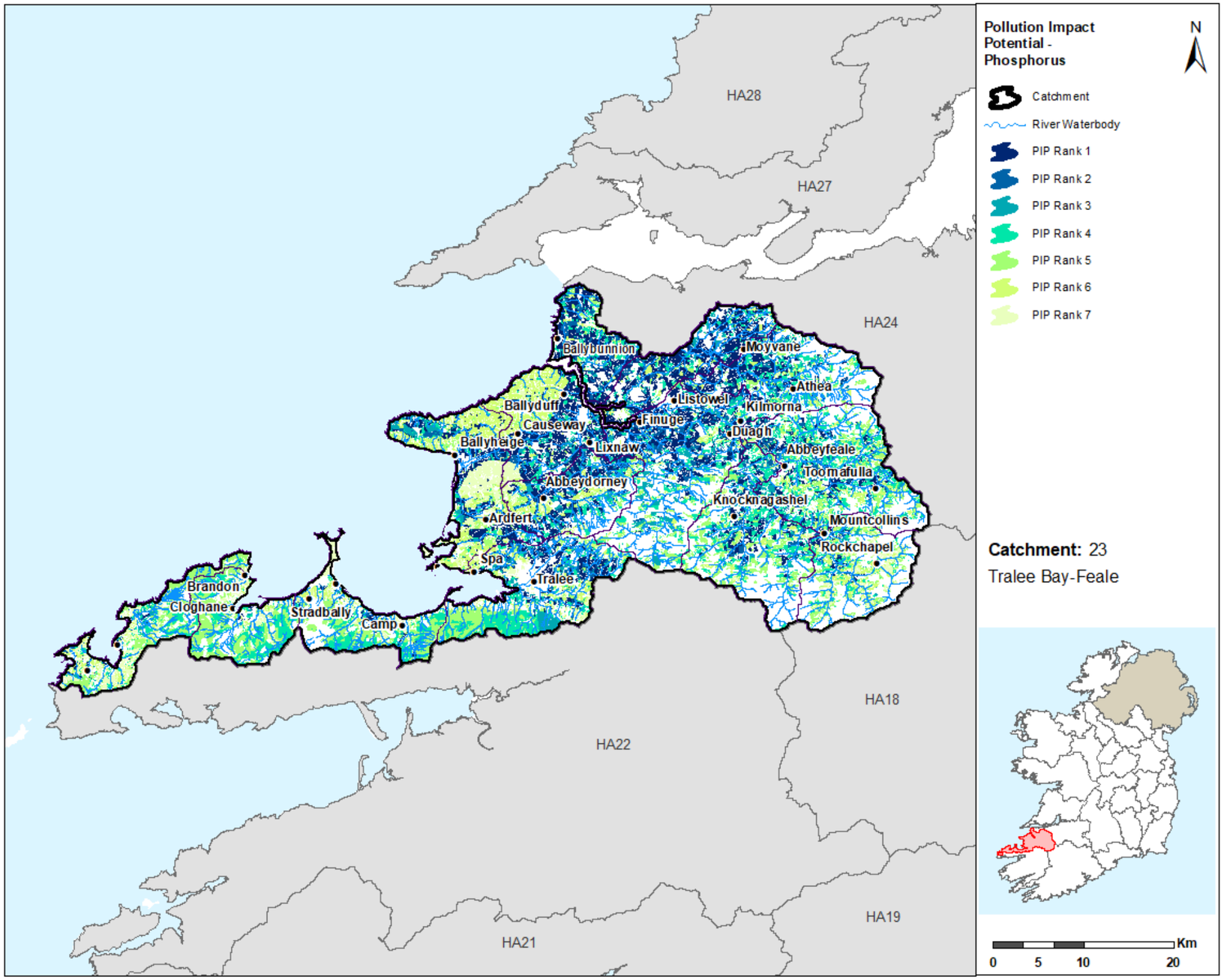
- Of the 80 river waterbodies, 17 are *At Risk* of not meeting their WFD objectives.
- Two out of 12 lake waterbodies are *At Risk* of not meeting their WFD objectives.
- Three out of the six transitional waterbodies are *At Risk* of not meeting their WFD objectives.
- Of the seven coastal waterbodies, none are *At Risk* of not meeting their WFD objectives
- Of the 12 groundwater bodies, one is *At Risk*.
- There are 23 waterbodies *At Risk* in Cycle 3 compared to 28 waterbodies *At Risk* in Cycle 2.
- The main significant issues are from nutrients pollution and morphological impacts, followed by organics and hydrological impacts.
- The main significant pressures are agriculture pressures followed by hydromorphological pressures, urban waste water, forestry and peat.
- In the 2nd Cycle Areas for Action, 12 waterbodies were *At Risk* in Cycle 2 and eight waterbodies are *At Risk* in Cycle 3. Risk Changes occurred in waterbodies where agriculture, urban waste water, peat and urban run-off were a significant pressure in Cycle 2 but are no longer a significant pressure in Cycle 3.
- There are nine 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 38 waterbodies with 14 waterbodies *At Risk*, 13 in *Review* and 11 *Not At Risk*.

Appendix 1
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
FEOHANAGH_010	**River**	IE_SH_23F020100	High
FINGLAS (TRALEE BAY)_010	**River**	IE_SH_23F030400	Good
Outer Tralee Bay	**Coastal**	IE_SH_040_0000	High
SCORID_010	**River**	IE_SH_23S010200	Good
SMEARLAGH_020	**River**	IE_SH_23S020400	Good

Appendix 2
Pollution Impact Potential Mapping





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: 23
Tralee Bay-Feale

0 5 10 20 Km

Appendix 3
Summary information on all waterbodies in the Tralee Bay-Feale 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)
23_5	IE_SH_23A010400	ALLAGHAUN_010	River	Not at risk	Not at risk	Good	Good	No			
23_5	IE_SH_23A010500	ALLAGHAUN_020	River	Not at risk	Not at risk	Good	Good	No			
23_5	IE_SH_23A010700	ALLAGHAUN_030	River	Not at risk	Not at risk	Good	Good	No		Barnagh-Glendarragh	Groundwater abstraction sources proposed for inclusion as an Area for Action. NPWS priority habitat/species
23_5	IE_SH_23A010900	ALLAGHAUN_040	River	Not at risk	Not at risk	Good	Good	No			
23_8	IE_SH_23A060890	ANNAGH (Kerry)_010	River	Review	Review	Unassigned	Unassigned	No		Lee (Tralee) and Estuary	NPWS priority habitat/species Expand PAA under SC approach SC 23_8
23_1	IE_SH_23A150660	AHALAHANA_010	River	Review	Review	Unassigned	Unassigned	No			
23_7	IE_SH_23A190800	ARDFERT_OUGHTER_010	River	Review	Review	Unassigned	Unassigned	No			
23_11	IE_SH_23A250940	AN DUN RUA_010	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_2	IE_SH_23B020300	BREANAGH_010	River	Not at risk	Not at risk	Good	Good	No			
23_6	IE_SH_23B030300	BRICK_010	River	At risk	Not at risk	Moderate	Good	No			
23_6	IE_SH_23B030400	BRICK_020	River	At risk	At risk	Poor	Poor	No	Ag, UWW		
23_6	IE_SH_23B030500	BRICK_030	River	Review	Review	Unassigned	Unassigned	No			
23_14	IE_SH_23B030700	BRICK_040	River	Review	Review	Unassigned	Unassigned	No			
23_8	IE_SH_23B040150	Big River (Tralee)_010	River	Review	Review	Unassigned	Unassigned	No		Lee (Tralee) and Estuary	NPWS priority habitat/species Flows into Lee (K) estuary so would need to be included in the assessment of this. Expand PAA
23_3	IE_SH_23B600860	BALLAGHADIGUE_010	River	Review	Review	Unassigned	Unassigned	No			
23_7	IE_SH_23B910900	BALLYNOE_010	River	Review	Review	Unassigned	Unassigned	No			
23_2	IE_SH_23C010300	CAHER (LIMERICK)_010	River	At risk	At risk	Moderate	Moderate	No	Ag, For	Caher	Proposed by LCCC NPWS priority habitat/species
23_4	IE_SH_23C030200	CLYDAGH (FEALE)_010	River	Not at risk	Not at risk	Good	Good	No			
23_4	IE_SH_23C030500	CLYDAGH (FEALE)_020	River	At risk	Not at risk	Moderate	Good	No		Feale	Existing PAA waterbody. Improved in 2013-2018 and now meeting its WFD objective. NAR. Transition strategy?
23_9	IE_SH_23C190920	CARRIGAHA_010	River	Review	Review	Unassigned	Unassigned	No			
23_10	IE_SH_23C300980	Cloghane (Kerry)_010	River	Review	Review	Unassigned	Unassigned	No		Owenmore	Review waterbody. Include under SC approach 23_10
23_9	IE_SH_23C400610	CLOOSGUIRE_010	River	Review	Review	Unassigned	Unassigned	No			
23_1	IE_SH_23D090580	DERRA_WEST_010	River	Review	Review	Unassigned	Unassigned	No			
23_7	IE_SH_23D160380	DOONAMONTANE_010	River	Review	Review	Unassigned	Unassigned	No			
23_8	IE_SH_23D420880	Derryquay River_010	River	Review	Review	Unassigned	Unassigned	No		Lee (Tralee) and Estuary	NPWS priority habitat/species Expand PAA under SC approach SC 23_8
23_2	IE_SH_23F010020	FEALE_010	River	Not at risk	Not at risk	Good	Good	No			
23_2	IE_SH_23F010040	FEALE_020	River	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
23_2	IE_SH_23F010120	FEALE_030	River	Not at risk	Not at risk	Good	Good	No			
23_4, 23_5	IE_SH_23F010200	FEALE_040	River	Not at risk	Not at risk	Good	Good	No			
23_4, 23_5	IE_SH_23F010310	FEALE_050	River	Not at risk	Not at risk	Good	Good	No			
23_4, 23_5	IE_SH_23F010500	FEALE_060	River	Not at risk	At risk	Good	Moderate	No	Other		
23_13	IE_SH_23F010550	FEALE_070	River	Not at risk	Not at risk	Good	Good	No			
23_13	IE_SH_23F010600	FEALE_080	River	At risk	Not at risk	Moderate	Good	No		Feale	Existing PAA waterbody but improved in 2013-2018 cycle and now meeting it's WFD objective and NAR. Transition strategy?
23_13	IE_SH_23F010800	FEALE_090	River	At risk	At risk	Moderate	Moderate	No	Ag, Hymo, UR	Feale	Existing PAA waterbody. FC not complete but local pressure suspected
23_11	IE_SH_23F020100	FEOHANAGH_010	River	Not at risk	Not at risk	High	High	Yes			
23_11	IE_SH_23F020500	FEOHANAGH_020	River	Not at risk	Not at risk	Good	Good	No			
23_9	IE_SH_23F030400	FINGLAS (TRALEE BAY)_010	River	At risk	At risk	Good	Good	Yes	Peat		
23_10	IE_SH_23F080770	FEARANN_DEALÃšIGH_010	River	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_3	IE_SH_23G010200	GALEY_010	River	At risk	Review	Moderate	Good	No		Galey	Good status but At Risk. SAC. Headwaters and At Risk. NPWS priority habitat/species
23_3	IE_SH_23G010300	GALEY_020	River	Not at risk	Not at risk	Good	Good	No		Galey	
23_3	IE_SH_23G010400	GALEY_030	River	At risk	At risk	Moderate	Moderate	No	Ag, Hymo, UWW	Feale	AR waterbody Expand PAA to pick up rivers contributing greatest P load
23_1	IE_SH_23G010500	GALEY_040	River	At risk	Review	Moderate	Good	No		Feale	Expand PAA to pick up rivers contributing greatest P load
23_1	IE_SH_23G010700	GALEY_050	River	At risk	At risk	Poor	Poor	No	Ag, Hymo, Peat	Feale	Significant inputting waterbody to estuary. Expand PAA
23_4	IE_SH_23G020200	GLASHACOONCORE_010	River	Not at risk	Not at risk	Good	Good	No			
23_13	IE_SH_23G030200	GLASHOREAG_010	River	Not at risk	Not at risk	Good	Good	No		Smearlagh	NPWS priority habitat/species Include under SC approach 23_13
23_10	IE_SH_23G050200	GLENNAHOO_010	River	At risk	At risk	Poor	Poor	No	Other	Owenmore	AR waterbody. Expand Owenmore PAA under SC approach
23_2	IE_SH_23G060300	GLENACARNEY_010	River	Not at risk	Not at risk	Good	Good	No			
23_9	IE_SH_23G160300	GOWLANE_010	River	Review	Review	Unassigned	Unassigned	No		Lough Gill Kerry	Inputting waterbody to Lough Gill, which was proposed by KCC NPWS priority habitat/species
23_12	IE_SH_23G750710	GLOURIA_010	River	Review	Review	Unassigned	Unassigned	No			
23_12	IE_SH_23I100800	Island Sack Little_010	River	Review	Review	Unassigned	Unassigned	No			
23_3	IE_SH_23K020100	KNOCKFINNISK_010	River	Not at risk	Not at risk	Good	Good	No		Galey	Include in Galey AFA NPWS priority habitat/species
23_12	IE_SH_23K030850	KILCONLY_SOUTH_010	River	Review	Review	Unassigned	Unassigned	No			
23_14	IE_SH_23K120820	KNOPPOGE_SOUTH_010	River	Review	At risk	Unassigned	Unassigned	No	Ag, Hymo, UWW		

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)
23_9	IE_SH_23K130870	KNOCKGLASS_BEG_010	River	Review	Review	Unassigned	Unassigned	No			
23_8	IE_SH_23L010030	LEE (TRALEE)_010	River	Not at risk	Not at risk	Good	Good	No		Lee (Tralee) and Estuary	Expand PAA to include inputting waterbodies
23_8	IE_SH_23L010050	LEE (TRALEE)_020	River	At risk	Review	Moderate	Good	No		Lee (Tralee) and Estuary	Existing PAA waterbody. FC not complete
23_8	IE_SH_23L010100	LEE (TRALEE)_030	River	At risk	At risk	Moderate	Moderate	No	DWW, UR, UWW	Lee (Tralee) and Estuary	Existing PAA waterboy. FC not complete
23_8	IE_SH_23L010200	LEE (TRALEE)_040	River	Review	Review	Unassigned	Unassigned	No		Lee (Tralee) and Estuary	NPWS priority habitat/species Expand PAA under SC approach SC 23_8
23_13	IE_SH_23L020100	LYRACRUMPANE_010	River	At risk	Not at risk	Moderate	Good	No		Smearlagh	Existing PAA waterbody but improved in 2013-2018 cycle and now meeting it's WFD objective and NAR. Transition strategy?
23_14	IE_SH_23M080580	MEENOGAHANE_010	River	Review	Review	Unassigned	Unassigned	No			
23_13	IE_SH_23M440980	MOUNTCOAL_010	River	Review	Review	Unassigned	Unassigned	No		Feale	Flows into the upper feale estuary (PAA waterbody) so assessment would be required in order to quantify load to estuary. Expand PAA
23_11	IE_SH_23M460840	Marthain_010	River	Review	Review	Unassigned	Unassigned	No			
23_5	IE_SH_23O010200	OOLAGH_010	River	Not at risk	Not at risk	Good	Good	No			
23_5	IE_SH_23O010500	OOLAGH_020	River	Not at risk	Not at risk	Good	Good	No			
23_9	IE_SH_23O020300	OWENCASHLA_010	River	Not at risk	Not at risk	Good	Good	No			
23_10	IE_SH_23O030300	OWENMORE (KERRY)_010	River	At risk	At risk	Moderate	Moderate	No	Ag, For, Hymo, Peat	Owenmore	Existing PAA waterbody. FC not commenced
23_10	IE_SH_23O040100	OWENAFEANNA_010	River	At risk	At risk	Poor	Moderate	No	Other	Owenmore	AR waterbody. Expand Owenmore PAA under SC approach
23_4	IE_SH_23O050200	OWVEG (KERRY)_010	River	Not at risk	Not at risk	Good	Good	No			
23_4	IE_SH_23O050500	OWVEG (KERRY)_020	River	Not at risk	Not at risk	Good	Good	No			
23_8	IE_SH_23P160880	PINURE_010	River	Review	Review	Unassigned	Unassigned	No		Lee (Tralee) and Estuary	NPWS priority habitat/species Expand PAA under SC approach SC 23_8
23_10	IE_SH_23S010200	SCORID_010	River	At risk	At risk	Good	Good	Yes	Hymo	Owenmore	HES objective waterbody not meeting its objective Expand PAA under SC approach 23_10
23_13	IE_SH_23S020300	SMEARLAGH_010	River	Not at risk	Not at risk	Good	Good	No		Smearlagh	Headwaters to an existing PAA waterbody NPWS priority habitat/species
23_13	IE_SH_23S020400	SMEARLAGH_020	River	At risk	At risk	Good	Good	Yes	For	Smearlagh	Existing AR PAA waterbody. LCA not yet commenced so ASSAP work programme is unlikely to be complete by Dec 21 upstream of drinking water intake, MCPA issues, tributary of the River Feale;
23_13	IE_SH_23S020500	SMEARLAGH_030	River	Not at risk	Not at risk	Good	Good	No		Smearlagh	NPWS priority habitat/species Lyreacrompane RWSS 057E. EPA pesticide action and watch list-WATCH Expand PAA

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23_13	IE_SH_23S020700	SMEARLAGH_040	River	Not at risk	Review	Good	Moderate	No		Smearlagh	NPWS priority habitat/species Deteriorated waterbody Expand PAA Catchment management project
23_4	IE_SH_23T010100	TULLALEAGUE_010	River	Not at risk	Review	Good	Good	No			
23_7	IE_SH_23T020400	TYSHE_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Tyshe	Existing PAA waterbody and one of the Proof of Concept waterbodie. ASSAP work programme won't be complete
23_7	IE_SH_23T020500	TYSHE_020	River	Review	At risk	Unassigned	Unassigned	No	Ag, DWW, UWW	Tyshe	Existing PAA. Transition strategy
23_1	IE_SH_23T030500	TARMON STREAM_010	River	At risk	At risk	Moderate	Moderate	No	Ag, Hymo, Peat		
23_7	IE_SH_23T120500	TIERSHANAGHAN_010	River	Review	Review	Unassigned	Unassigned	No			
23_9	IE_SH_23_59	Acummeen	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_10	IE_SH_23_60	Dubh Mullaghveal	Lake	Review	Review	Unassigned	Unassigned	No			
23_10	IE_SH_23_61	Ui Fhiannachta or Clogharee	Lake	Review	Review	Unassigned	Unassigned	No			
23_9	IE_SH_23_62	na Choimin	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_10	IE_SH_23_65	Iarthair	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_10	IE_SH_23_67	Duin KY	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_10	IE_SH_23_69	Cruite	Lake	Review	Review	Unassigned	Unassigned	No			
23_10	IE_SH_23_71	Geal	Lake	Review	Review	Unassigned	Unassigned	No			
23_9	IE_SH_23_72	Gill KY	Lake	At risk	At risk	Moderate	Moderate	No	Ag		
23_10	IE_SH_23_73	Chom Callain	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_9	IE_SH_23_74	Cam KY	Lake	At risk	At risk	Moderate	Moderate	No	For		
23_10	IE_SH_23_75	Dubh Slievenalecka	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
22_19, 23_11, 23_7, 23_9, 27_8	IE_SH_010_0000	Southwestern Atlantic Seaboard (HA 23)	Coastal	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_11	IE_SH_020_0000	Smerwick Harbour	Coastal	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_10, 23_11, 23_9	IE_SH_030_0000	Brandon Bay	Coastal	Not at risk	Review	Unassigned	Unassigned	No			
23_7, 23_9	IE_SH_040_0000	Outer Tralee Bay	Coastal	Review	Not at risk	Good	High	Yes			
23_7, 23_8, 23_9	IE_SH_050_0000	Inner Tralee Bay	Coastal	At risk	Not at risk	Moderate	Good	No		Lee (Tralee) and Estuary	Existing PAA waterbody. FC not complete Shellfish Designated Area; Largest Native Oyster Bed in Ireland; Elevated Norovirus levels detected; Class B- E coli testing; WFD- At Risk
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			

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20_3, 21_1, 21_11, 21_2, 21_3, 21_9, 22_10, 22_11, 22_19, 23_11	IE_SW_150_0000	South Western Atlantic Seaboard (HAs 21;22)	Coastal	Not at risk	Not at risk	Unassigned	Unassigned	No			
23_9	IE_SH_040_0100	Lough Gill	Transitional	At risk	Review	Poor	Unassigned	No		Lough Gill Kerry	At risk, good community-group structure, bathing water and shellfish catchments in vicinity; NPWS priority habitat/species
23_8	IE_SH_050_0100	Lee K Estuary	Transitional	At risk	At risk	Moderate	Moderate	No	UWW	Lee (Tralee) and Estuary	Existing PAA with measures already proposed (DAP underway). Need to wait for measures to be in place here before assessing.
23_8	IE_SH_050_0200	Blennerville Lake East	Transitional	Review	Review	Unassigned	Unassigned	No			
23_8	IE_SH_050_0300	Blennerville Lake West	Transitional	Review	Review	Unassigned	Unassigned	No			
23_1, 23_12, 23_14	IE_SH_060_0100	Cashen	Transitional	At risk	At risk	Poor	Poor	No	Ag, UWW		
23_1, 23_13, 23_14	IE_SH_060_0200	Upper Feale Estuary	Transitional	At risk	At risk	Poor	Poor	No	Ag, Hymo, UWW	Feale	Existing PAA waterbody Further characterisation not complete - include in 3rd cycle NPWS priority habitat/species
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			
23_14, 23_6, 23_7	IE_SH_G_008	Ardfert	Groundwater	Review	Review	Good	Good	No			
23_1, 23_12, 23_13, 23_14, 23_6, 23_7	IE_SH_G_027	Ballybunnion	Groundwater	Review	At risk	Good	Good	No	Ag		
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			
22_17, 22_18, 22_19, 22_4, 23_10, 23_11, 23_8, 23_9	IE_SH_G_044	Brandon Head	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 Areas for Action Name	Recommended Areas for Action (reasons for selection)
23_1, 23_12, 23_14, 23_7	IE_SH_G_118	Kerry Head	Groundwater	Not at risk	Not at risk	Good	Good	No			
22_17, 23_13, 23_6, 23_7, 23_8	IE_SH_G_223	Spa	Groundwater	Not at risk	Not at risk	Good	Good	No			
22_17, 23_8, 23_9	IE_SH_G_226	Tralee	Groundwater	Review	Not at risk	Good	Good	No			
22_12, 22_17, 22_2, 22_4, 22_5, 22_9, 23_8	IE_SW_G_026	Castlemaine	Groundwater	Review	Not at risk	Good	Good	No			
22_17, 22_18, 22_19, 22_4, 22_9, 23_10, 23_11, 23_8, 23_9	IE_SW_G_033	Dingle	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_12, 22_1, 22_12, 22_14, 22_15, 22_16, 22_17, 22_2, 22_5, 22_6, 22_9, 23_13, 23_4, 23_8	IE_SW_G_073	Scartaglin	Groundwater	Not at risk	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 waterbodies have not been included as they will need to be confirmed as part of an Investigative Assessment.