3rd Cycle Draft
Mal Bay Catchment Report
(HA 28)

Catchment Science & Management Unit

Environmental Protection Agency

August 2021

Version no. 1

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Preface

This document provides a summary of the water quality assessment outcomes for the Mal Bay 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 Mal Bay 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 Mal Bay catchment includes the area drained by all streams entering tidal water in Mal Bay and between George's Head and Black Head, Co. Clare, draining a total area of 848km². (Figure 1). The largest urban centre in the catchment is Lehinch. The other main urban centres in this catchment are Milltown Malbay, Inagh, Ennistimon and Lisdoonvarna. The total population of the catchment is approximately 18,590 with a population density of 22 people per km².

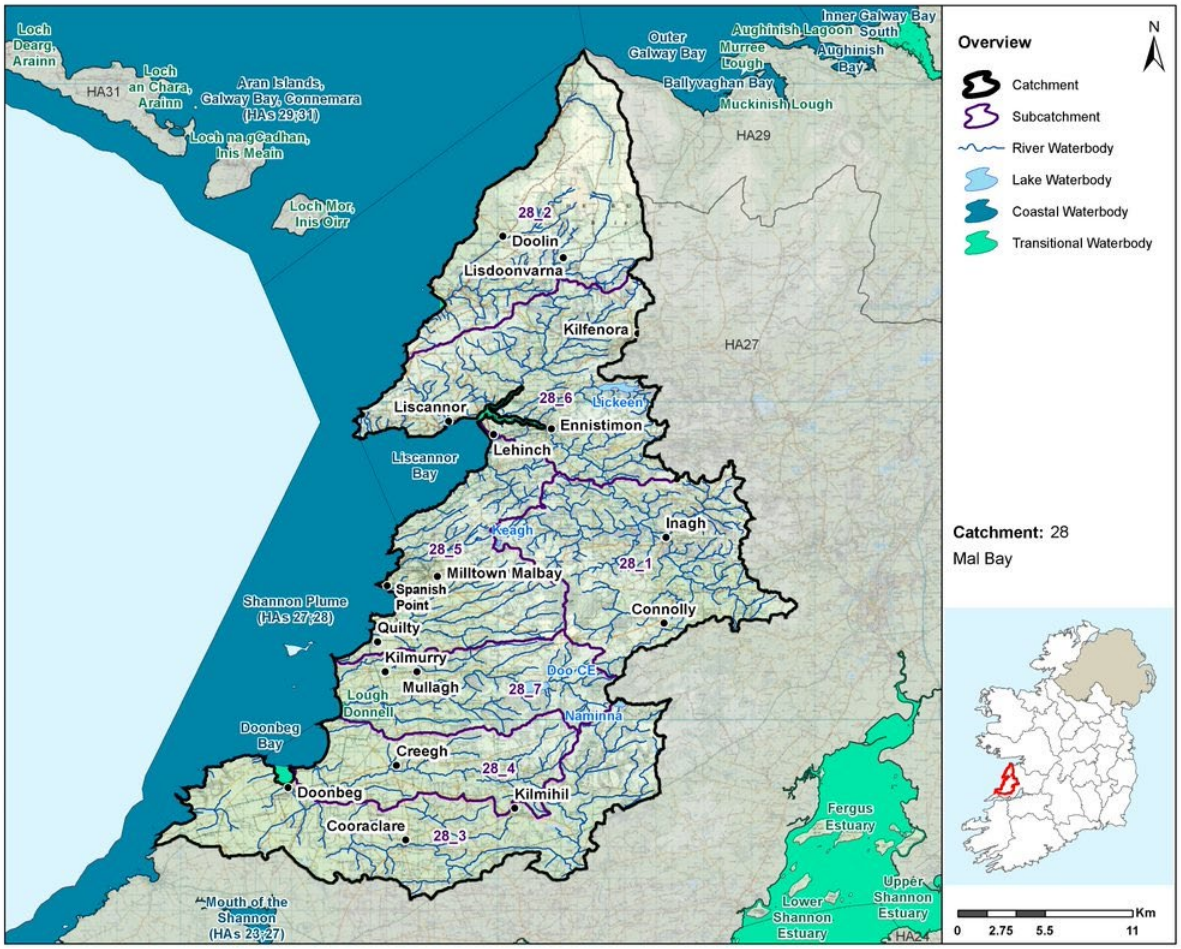


Figure 1: Overview of subcatchments in the Mal Bay catchment

The Mal Bay catchment is divided into seven subcatchments (Figure 1) with 37 river waterbodies, four lakes (Keagh, Doo CE, Lickeen & Naminna) four transitional (Doonbeg Estuary, Lough Donnell, Inagh Estuary & Aille Clare Estuary), four coastal waterbodies (Shannon Plume (HAs 27;28), Doonbeg Bay, Liscannor Bay, Aran Islands & Galway Bay, Connemara (HAs 29;31)) and eight groundwater bodies (Figure 2).

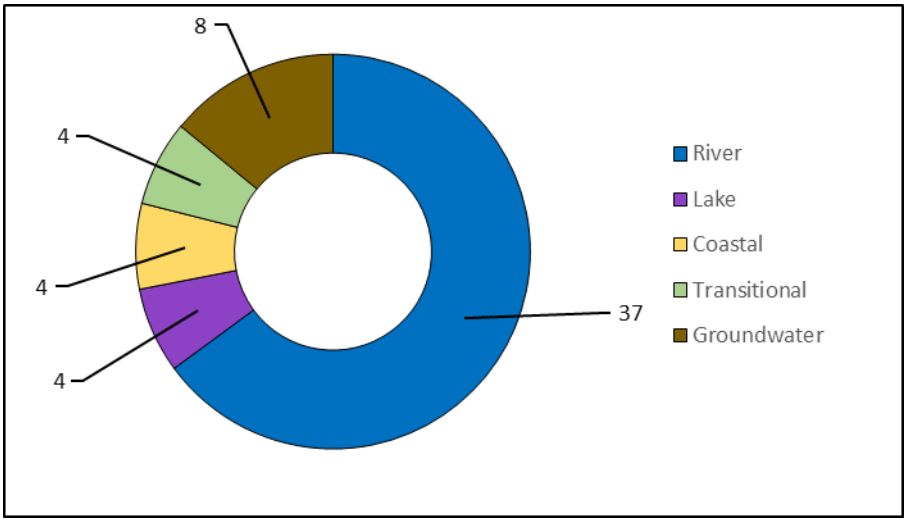


Figure 2: Waterbody types and numbers in the Mal Bay Catchment.

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 19 waterbodies achieving Good Status, 11 achieving Moderate Status,11 at Poor Status and three Bad Status waterbodies (Kilmihil Stream_010, Lickeen & Lough Donnell). 13 waterbodies in the catchment do not have Status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.

- There is one river waterbody (Aughaglanna_010) that must achieve High Ecological Status (HES) in this catchment. The waterbody is currently at Good Status and was previously at High Status in Cycle 2 (Appendix 1).

- The overall number of waterbodies achieving High Status have reduced from one to zero (as detailed above) between Cycle 2 and Cycle 3. The number of waterbodies achieving Good Status has reduced significantly from 30 in Cycle 2 to 19 in Cycle 3. There has been increases in the number of waterbodies at Moderate Status, Poor Status & Bad Status between Cycle 2 and Cycle 3, from five to 11, seven to 11 and one to three, respectively. Figure 3 & Table 1 breakdown the changes in the number of waterbodies in each status class.

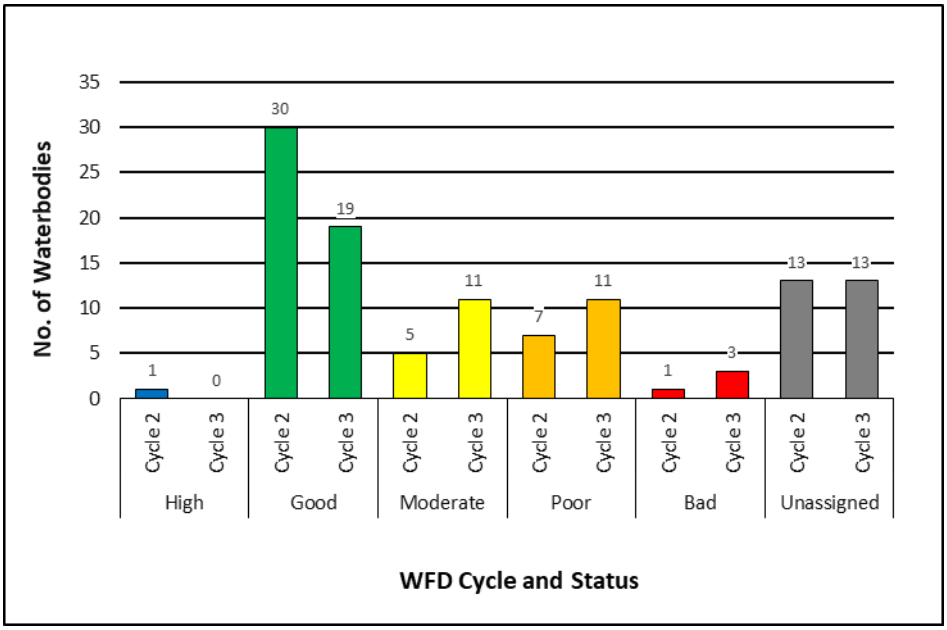


Figure 3: Waterbody Status Breakdown (All waterbodies)

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	0	0	0	0	0	0	0	0	0	**1**	**0**
Good	20	9	2	2	0	0	0	0	8	8	**30**	**19**
Moderate	4	10	1	1	0	0	0	0	0	0	**5**	**11**
Poor	6	11	0	0	1	0	0	0	0	0	**7**	**11**
Bad	0	1	1	1	0	1	0	0	0	0	**1**	**3**
Un-assigned	6	6	0	0	3	3	4	4	0	0	**13**	**13**
Total	37	37	4	4	4	4	4	4	8	8	**57**	**57**

- 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 there were no improvements in status, 27 (61%) waterbodies have remained unchanged and 17 (39%) waterbodies have declined in status.[1]
- There is an overall decline in the status of 17 waterbodies across the catchment since the Cycle 2 assessment.

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

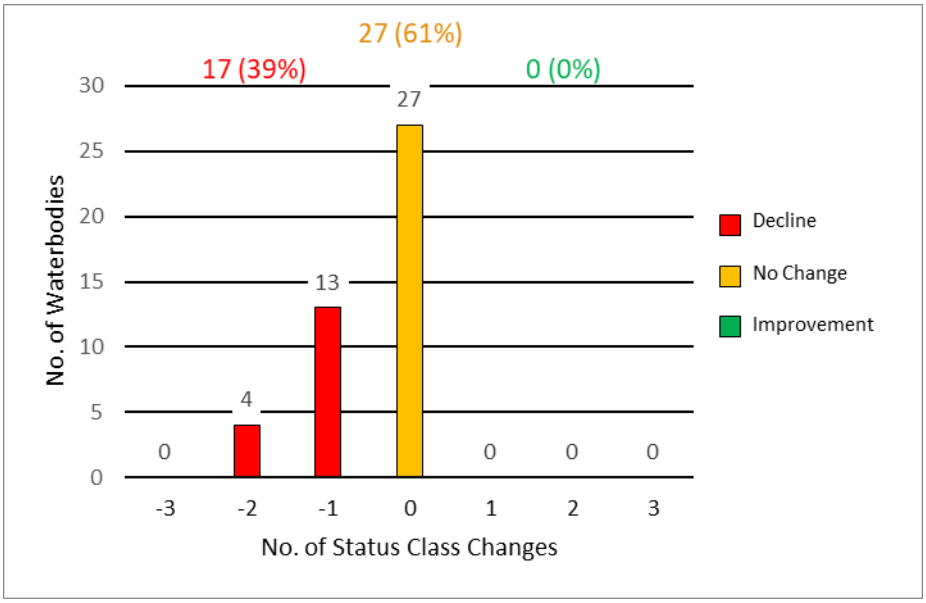


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- There are three 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*.

- All waterbodies in the catchment met the DWPA objective in 2019:

- 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 seven bathing waters in or directly adjacent to the catchment identified under the Bathing Water Regulations 2008.

- Six of the seven bathing waters had an Excellent classification for 2020, the remaining bathing water (Quilty) is newly designated and did not have a classification in 2020.

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

2.2.3 Shellfish Areas

- There are no designated shellfish areas in the catchment.

[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

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

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

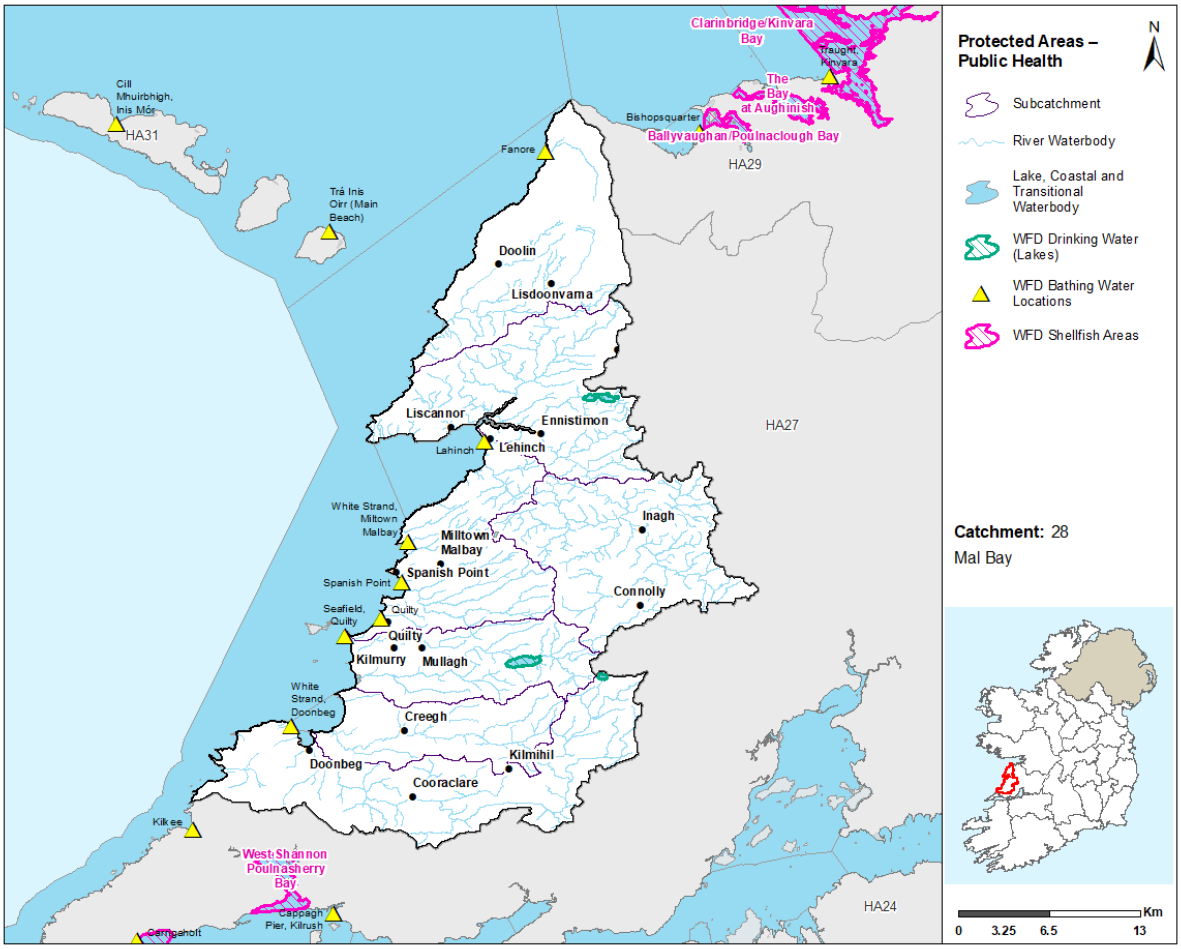


Figure 5: Protected Areas – Public Health

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 2 below, information at a waterbody level can be viewed at Catchments.ie.[5]

Table 2: Natura 2000 Network Assessment Summary

Water Body Type	Total No.	Meeting the Requirements	Did not meet the Requirements	Unknown*
Transitional & Coastal	3	2	1	0

**As the waterbody status was unassigned.*

- There are no river waterbodies with FWPM habitats in the catchment.
- There are no groundwater bodies delineated and assessed as Groundwater Dependent Terrestrial Ecosystems for this catchment.
- Water dependent SACs/ SPAs in the catchment are illustrated in Figure 6.

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

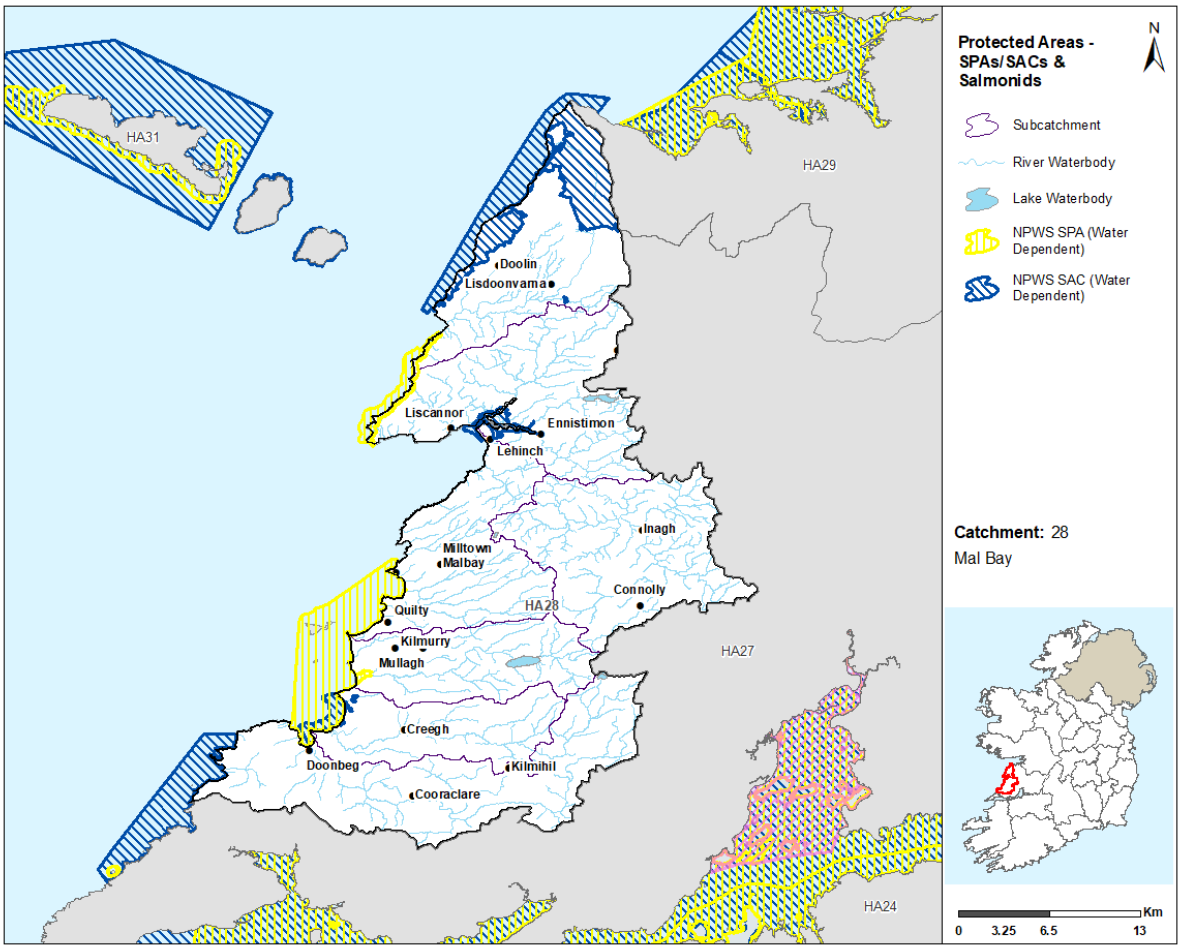


Figure 6: Water Dependent SPAs / SACs

2.2.5 Nutrient Sensitive Areas

- There are no Nutrient Sensitive Areas in the catchment.

2.3 Heavily Modified Waterbodies

- Based on the 1st and 2nd RBMPs there is currently one designated heavily modified water body (HMWB) in the catchment – Doo (CE) Lough due to drinking water supply. It was classified as having Good Ecological Potential in 2013-15 and remained Good in 2016 - 2018. 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 Mal Bay 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 57 waterbodies in the Mal Bay Catchment and 25 (44%) are *At Risk*, 20 (35%) in *Review* and 12 (21%) are *Not At Risk*.

3.2 Surface Waters

- For the 37 river waterbodies in the catchment, 23 (62%) are *At Risk*, six (16%) are in *Review* and eight (22%) are *Not At Risk*.

- For the four lake waterbodies in the catchment, two (50%) are *At Risk*, one (25%) is in *Review* and one (25%) is *Not At Risk*.

- All four (100%) transitional waterbodies in the catchment are in *Review*.

- For the four coastal waterbodies in the catchment, three (75%) are in *Review* and one (25%) is *Not At Risk*.

- The largest proportion of *At Risk* waterbodies are found in rivers, accounting for 23 (92%) of 25 *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 are increases in *12 At Risk* waterbodies and six *Review* waterbodies. These increases are reflected by a decrease of 18 *Not At Risk* waterbodies between Cycle 2 and Cycle 3.

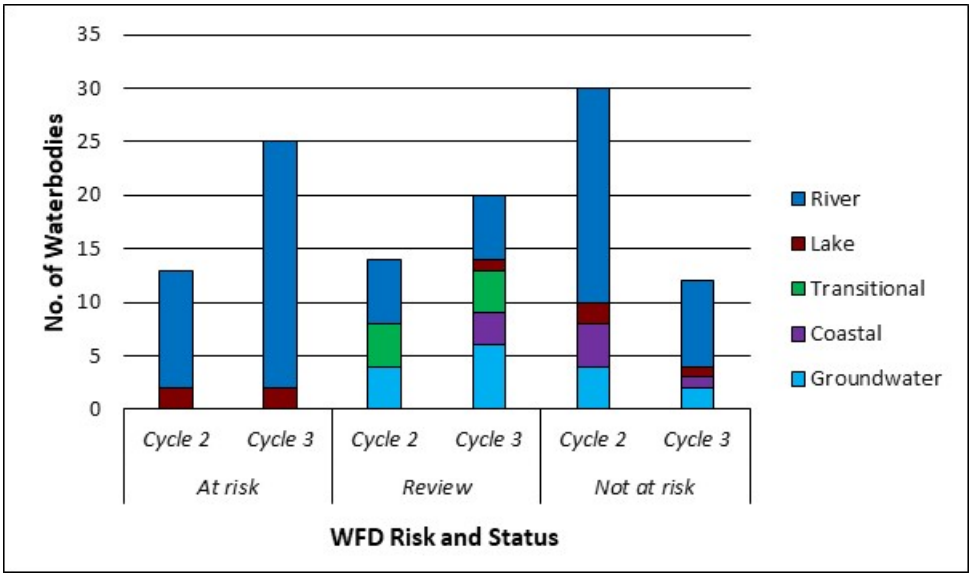


Figure 7: Number of waterbodies in each risk category

- 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.

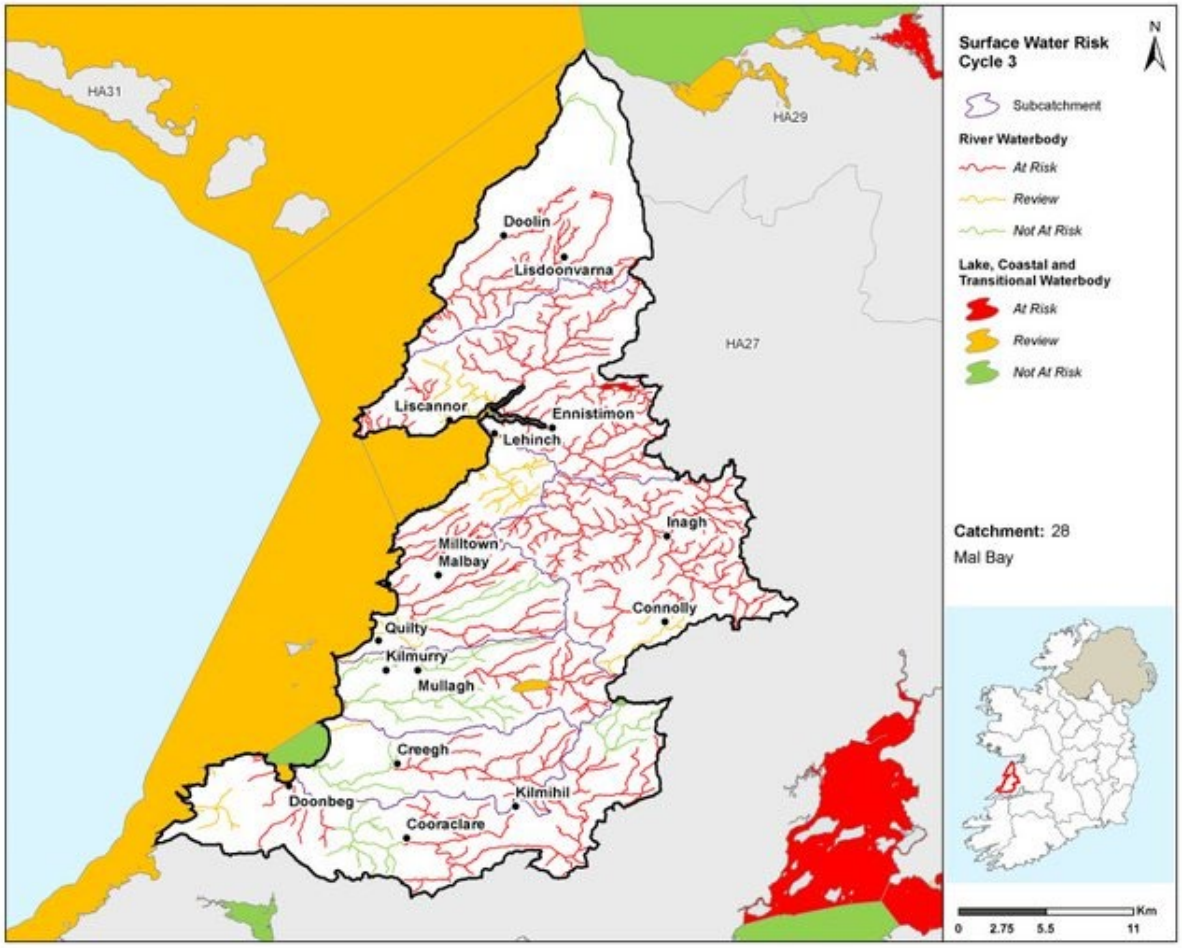


Figure 8: Surface Water Risk Cycle 3

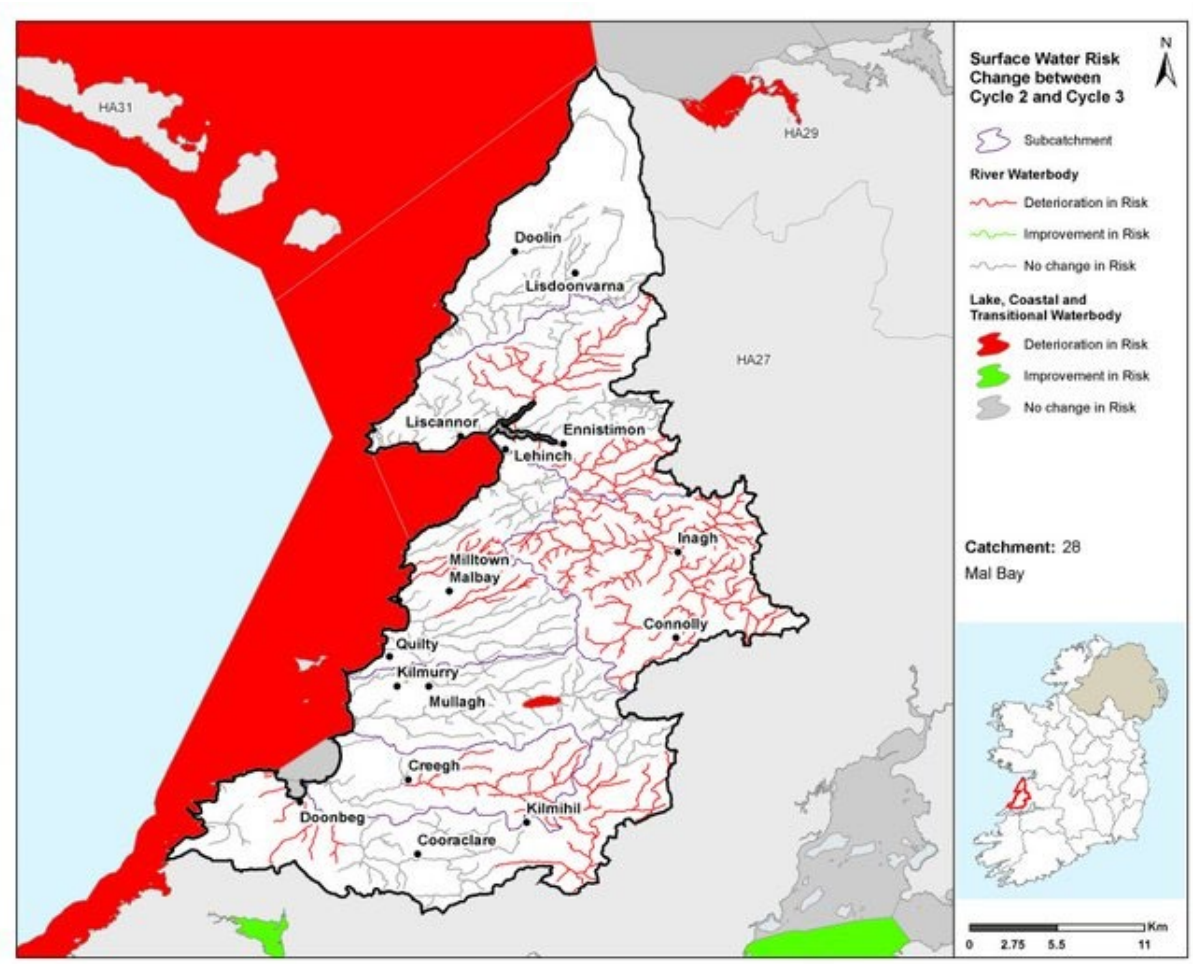


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- For the eight groundwater bodies, six (75%) are in *Review* and two (25%) are *Not At Risk*.
- In Cycle 2, there were also no groundwater bodies *At Risk* in this catchment, four were in *Review* and four were *Not At Risk*.

3.4 Heavily Modified Waterbodies

- The one designated heavily modified water body (HMWB) in the catchment (Doo (CE) Lough) was classified as being *Not At Risk* of meeting its Environmental Objective for Cycle 2 but it has been moved to *Review* for Cycle 3. 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 Mal Bay Catchment.

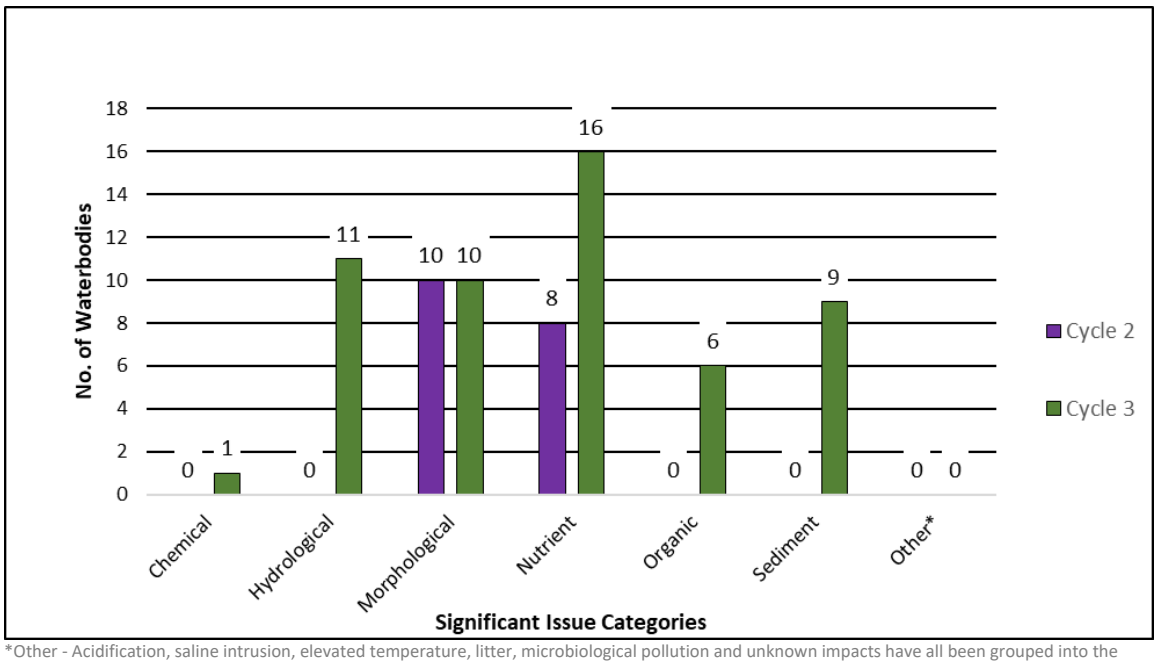
4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

- Excess nutrients remain the most prevalent issue in the Mal Bay Catchment (Figure 10) impacting 16 waterbodies in Cycle 3. Hydrological issues are impacting 11 waterbodies, morphological issues are impacting 10 waterbodies. Sediment and organic impacts are affecting nine and six waterbodies, respectively. Chemical pollution is impacting one waterbody (Glendine (Clare)_010).
    - For rivers, the main significant issues are nutrient pollution (14), hydrological impacts (11), morphological impacts (9), sediment (9), organic pollution (6) and chemical pollution (1).
    - For Lakes, the significant issues are nutrient pollution (2) and morphological impacts (1).

- Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues have increased by eight from eight to 16. In Cycle 2 hydrological, sediment, organic and chemical impacts were not considered issues in any waterbodies but are deemed to be impacting 11, nine, six and one waterbody respectively in Cycle 3.

- The numbers of waterbodies with morphological issues have remained at 10 between Cycle 2 and 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 10: Significant Issues across all *At Risk* WBs between Cycle 2 and Cycle 3

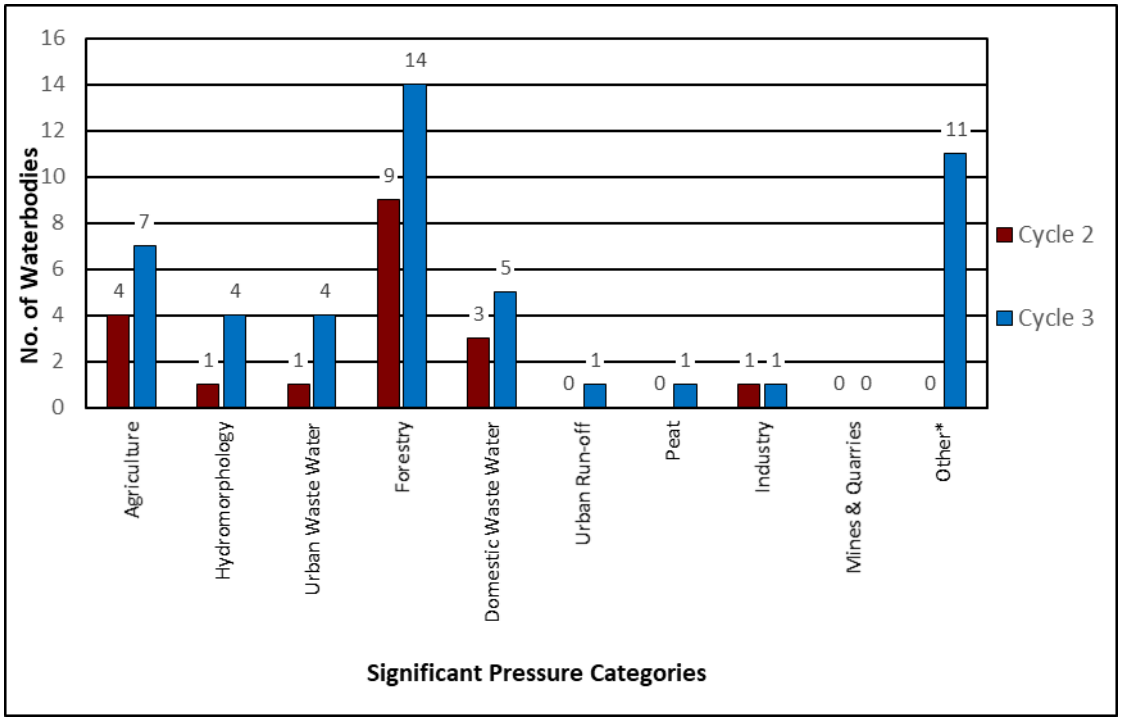
4.2 High Status Objective Waterbodies

- There are no *At Risk* High Status Objective waterbodies in the catchment in Cycle 3.

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 11 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 forestry followed by agriculture, domestic waste water, hydromorphology and urban waste water. Urban run-off, peat and industry are also each impacting one waterbody. There are 11 waterbodies impacted by pressures listed in the other significant pressure category. Within these waterbodies 10 are impacted by an unknown pressure, one impacted by abstraction, one impacted by a windfarm and one impacted by tourism related pressures.
- When comparing Cycle 2 and Cycle 3 the biggest change is an increase of five waterbodies where forestry is a significant pressure from nine waterbodies in Cycle 2 to 14 waterbodies in Cycle 3.
- With the exception of industry, the number of waterbodies impacted by each pressures category identified in Cycle 3 have increased since Cycle 2. This suggests that there are several reasons for the overall decline in status of 17 waterbodies since Cycle 2.



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

Figure 11: Significant Pressure (All *At Risk* Waterbodies)

5.1.1 Pressure Type

5.1.1.1 Forestry

- Forestry is a significant pressure in 12 river waterbodies and two lake bodies (Keagh & Lickeen) in Cycle 3. The issues associated with forestry include sediment and nutrient loss from a range of

forestry activities taking place that include clearfelling temporary road building and drainage for example, which have resulted in heavy siltation and excess nutrients in surface water bodies. Hydromorphological impacts as a result of forest drainage has also been identified. Forestry is no longer considered a significant pressure in Carrigavantry lake waterbody as identified in Cycle 2.

5.1.1.2 Other

- *Unknown Anthropogenic*
  There are 11 waterbodies where the significant pressure is unknown.

- *Tourism*
  Tourism has been identified as a significant contributor to the nutrient load in the Aille (Clare)_020 river water body.

- *Abstractions*
  Abstraction for Liscasey Private Water Supply has been identified as a significant pressure, impacting habitat due to hydrological changes.

5.1.1.3 Agriculture

- Agriculture is a significant pressure in six river waterbodies and Lickeen waterbody in Cycle 3. Phosphorus loss to surface waters from, for example, direct discharges; or runoff from yards, roadways or other compacted surfaces, or runoff from poorly draining soils remains an issue since Cycle 2. Sediment can also be a problem from land drainage works, bank erosion from animal access or stream crossings.

5.1.1.4 Domestic waste water

- Domestic waste water has been identified as a significant pressure in five river waterbodies (Annagh (Clare)_010, Cooleen_010, Dealagh_010, Freagh_010 & Inagh (Ennistymon)_040. This is due to a concentration of domestic waste water treatment systems in close proximity to the water bodies. The significant issue is excess nutrients entering surface waters. Furthermore, some of these locations are located on areas of high susceptibility to phosphate transport via near surface pathways.

5.1.1.5 Hydromorphology

- Hydromorphology is a significant pressure in four river waterbodies (Ballymacravan_010, Creegh_020, Glendine (Clare)_010 & Inagh (Ennistymon)_050. The Lickeen lake outlet is higher than the channel so when the levels in the lake drops, portion of the Ballymacravan_010 channel regularly dries out therefore habitats are altered due to morphological changes. Creegh River is on OPW national drainage scheme programme and channelization has been identified as a significant pressure with the impact of altering habitats due to morphological changes. Inagh (Ennistymon)_050 is also affected by channelization due an upstream drainage scheme with sedimentation being the impact type identified. Glendine (Clare)_010 is impacted by sediment from river bank erosion.

5.1.1.6 Urban waste water

- Urban waste water agglomerations have been identified as a significant pressure in four *At Risk* river waterbodies (Table 3). None of the agglomerations identified as significant pressures are scheduled for upgrades under Irish Water's Capital Investment Programme (2020-2024).

Table 3: 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]
Lisdoonvarna D0077	Agglomeration PE of 2,001 to 10,000	AILLE (CLARE)_010	Poor	N/A
Lisdoonvarna D0077	Agglomeration PE of 2,001 to 10,000	AILLE (CLARE)_020	Poor	N/A
Inagh D0422	Agglomeration PE of 500 to 1,000	INAGH (ENNISTYMON)_030	Poor	N/A
Kilmihil A0091	Agglomeration PE < 500	KILMIHIL STREAM_010	Bad	N/A

- Urban waste water significant pressures impacted three more waterbodies than in Cycle 2 (an increase from one to four waterbodies impacted). The following Agglomerations are listed as pressures in Cycle 3 but not in Cycle 2.
    - Lisdoonvarna (D0077)
    - Inagh (D0422)

5.1.1.7 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 one river waterbody (Inagh (Ennistymon)_050) impacted by Ennistimon urban area. Nutrient and organic pollution are the significant issues.

5.1.1.8 Extractive industry

- *Peat*
  Peat drainage and extraction remains a significant pressure in Doonbeg_050 river waterbody. Increased sedimentation is the deemed the significant issue.

5.1.1.9 Industry

- Industry has been identified as a significant pressure in the Aille (Clare)_020 river waterbody. The point source discharge, causing nutrient issues, arises from a Section 4 industrial discharge (Table 4).

Table 4: Breakdown of Cycle 3 Industry Significant Pressures in the Mal Bay Catchment

Waterbody Code	Waterbody Name	Waterbody Type	Emission Type	Name	Impact
IE_SH_28A010400	AILLE (CLARE)_020	River	Section 4	N/A*	Nutrient

*Name of facility not provided during characterisation

Figure 12 – Figure 16 illustrates the locations of waterbodies for the five most common pressures in order of prevalence (forestry, agriculture, domestic waste water, hydromorphology and urban run-off) within the catchment in Cycle 3.

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

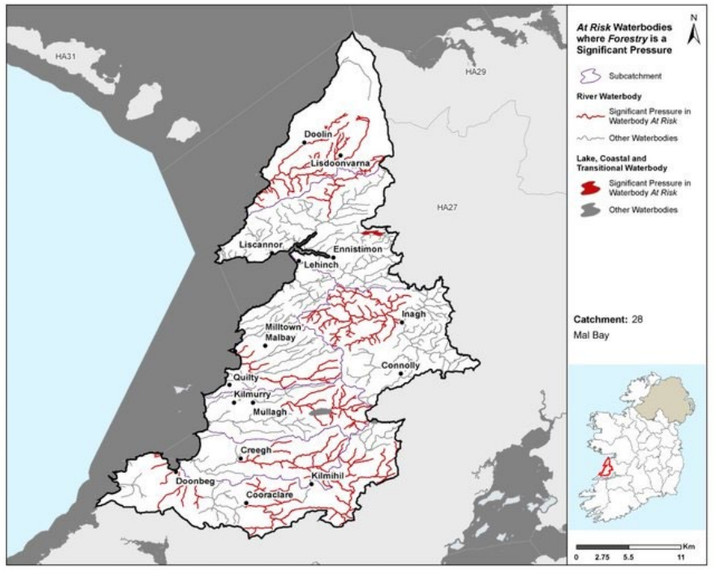


Figure 12: Locations of Waterbodies where Forestry is a Significant Pressure

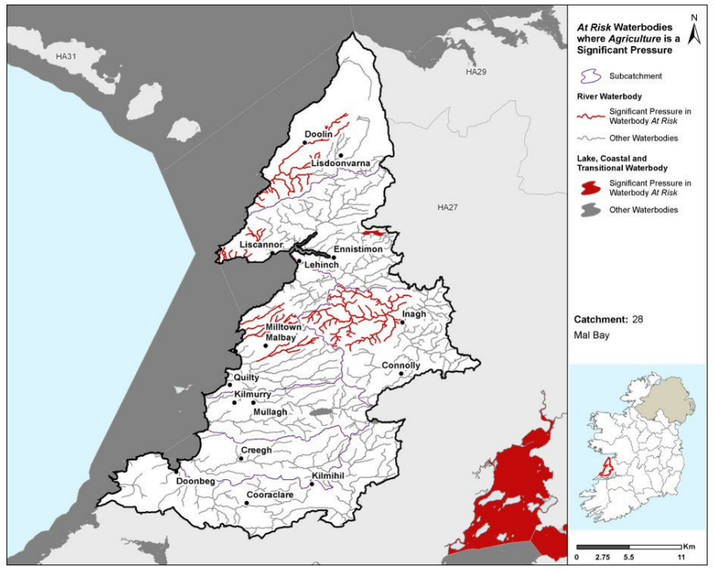


Figure 13: Locations of Waterbodies where Agriculture is a Significant Pressure

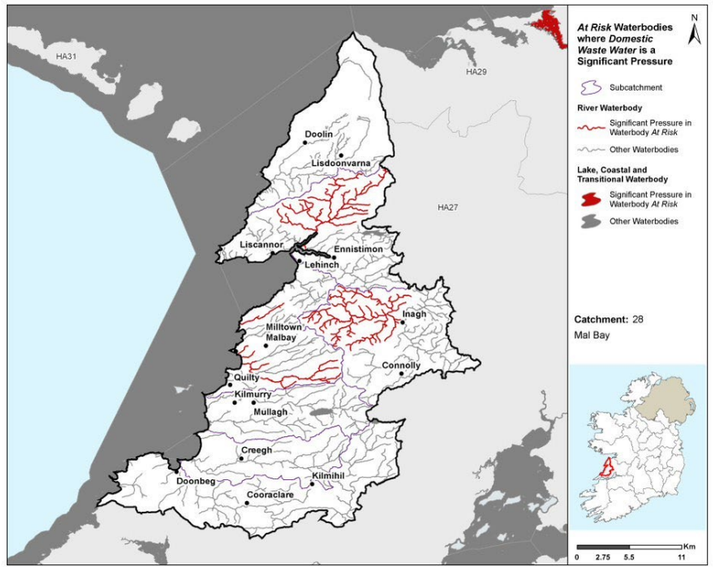


Figure 14: Locations of Waterbodies where Domestic Waste Water is a Significant Pressure

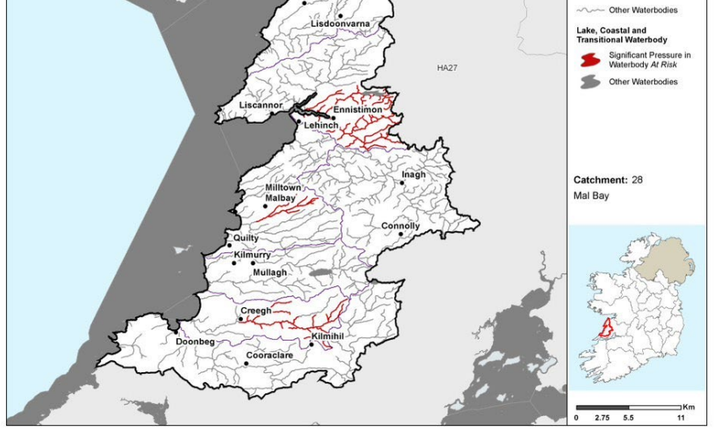


Figure 15: Locations of Waterbodies where Hydromorphology is a Significant Pressure

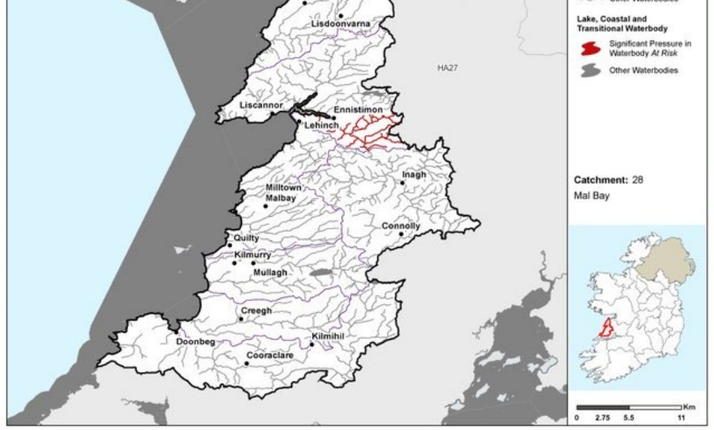


Figure 16: Locations of Waterbodies where Urban Run-off is a Significant Pressure

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 forestry is responsible for 81% and 9% of the nitrogen load respectively while land in pasture, forestry and discharges from urban waste water contribute 42%, 24% and 18% of the phosphorus loadings for the catchment respectively (Figure 17).

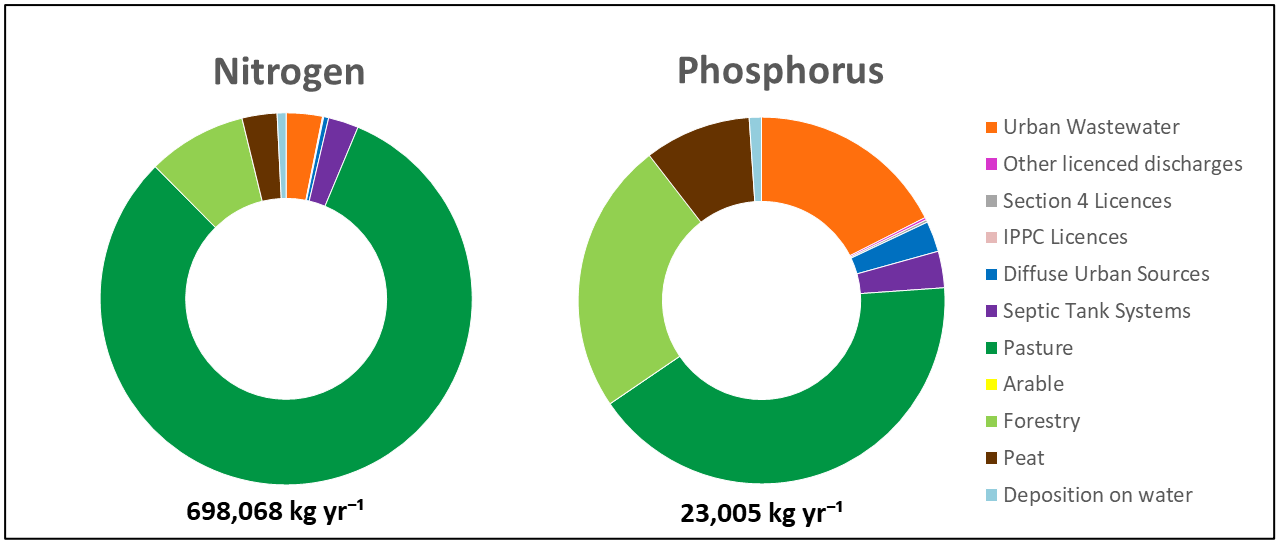


Figure 17: Estimated Proportions of N & P from Each Sector in the Mal Bay Catchment

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 Mal Bay Catchment.

7.2 Phosphorous / Sediment Load Reduction

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

Figure 18 highlights areas where agricultural measures sediment and phosphorus should be targeted. Waterbodies with blue fill are areas where sediment or phosphorus should be targeted. Pollution

Impact Potential mapping for both phosphorus and nitrogen in the catchment are provided in Appendix 2.

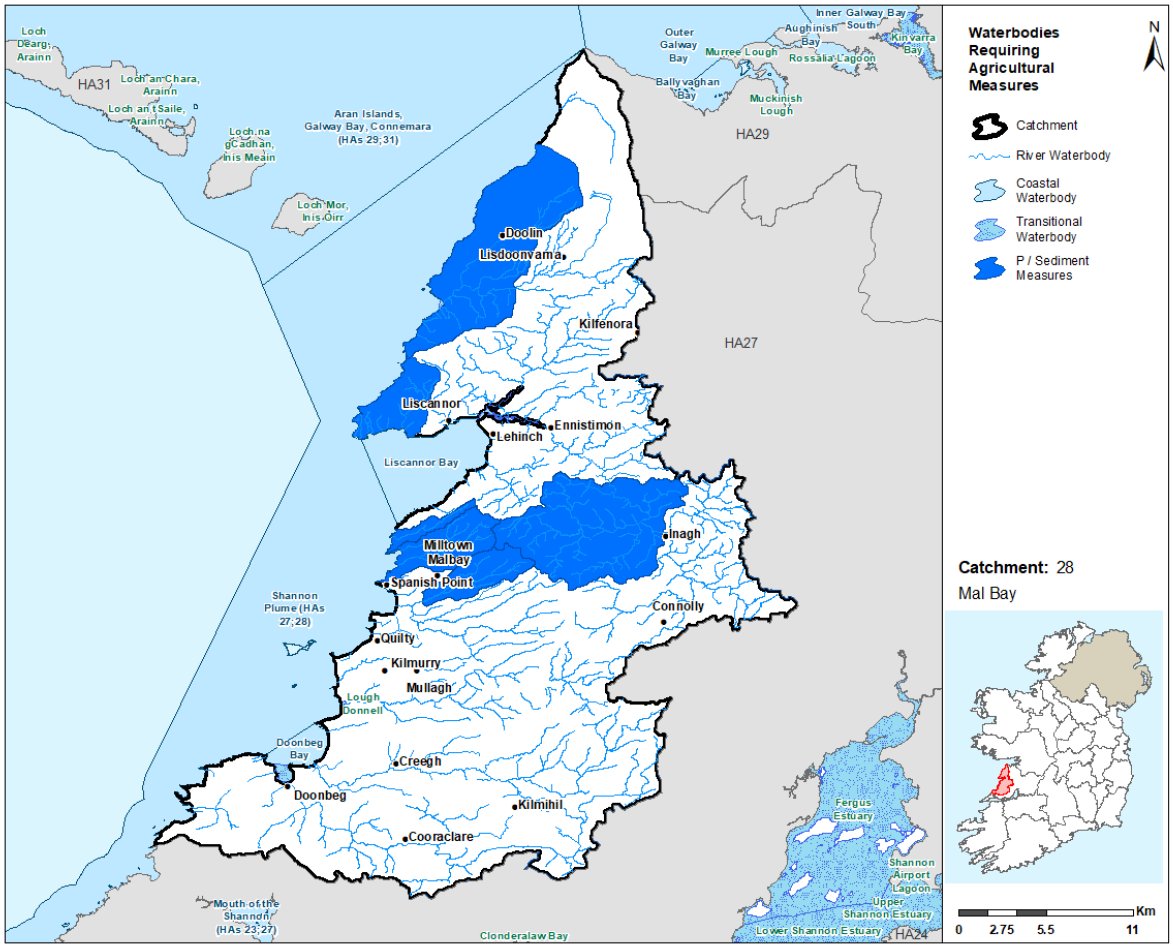


Figure 18: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- There were four Areas for Action, comprising of nine 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 5 and shown in Figure 19. LAWPRO, in conjunction with local authorities and stakeholders from the South-western Regional Operational Committee, have been working in these areas since 2018.

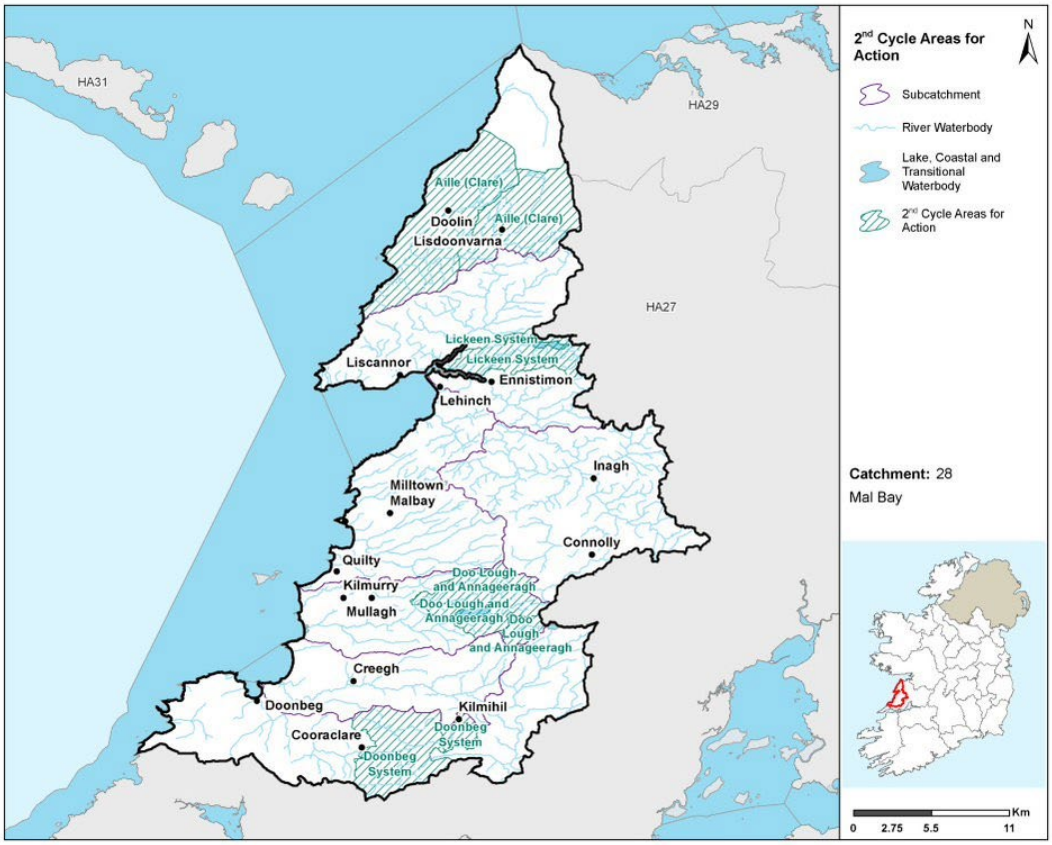


Figure 19: 2nd Cycle Areas for Action Locations

Table 5: 2nd Cycle Areas for Action

2nd Cycle Area for Action	Number of Waterbodies	Sub-catchment	Local Authority	Reason for Selection
Doonbeg System	2	28_3	Clare	• Manageable area. • Important for salmon and sea trout. • Active community group in Doonbeg. • One deteriorated waterbody.
Lickeen System	2	28_6	Clare	• Bad status lake • Lickeen lake is an important trout fishery and former char lake. • Active community group. • Manageable area - small number of land owners. • Two deteriorated water bodies. • One waterbody (Lickeen lake) is failing to meet its protected area objectives for drinking water.
Doo Lough and Annageeragh	3	28_7	Clare	• Potential pilot project to examine impact from forestry. • Freshwater Pearl Mussels were recently found here. • Important salmon and sea trout fishery. • Headwaters to Doo Lough. • One deteriorated waterbody.

2nd Cycle Area for Action	Number of Waterbodies	Sub-catchment	Local Authority	Reason for Selection
				• One waterbody (Doo Lough) is failing to meet its protected area objective for MCPA.
Aille (Clare)	2	28_2	Clare	• Opportunity to work with Integrated catchment management project (Grainne - Uisce Aille) • Community interest due to the amenity value of the river. • Unique habitat for fish surviving in the karst conduits. • Important for tourism. • Historic heritage value. • Headwaters of the river Aille. • One deteriorated waterbody.

8.2 Status Change in 2nd Cycle Areas for Action

- For Cycle 3, of the nine waterbodies in the 2nd Cycle Areas for Action, there is one lake waterbody (Doo CE), one river waterbody (Annageeragh_010) at Moderate Status, five river waterbodies (Aille (Clare)_010, Aille (Clare)_020, Annageeragh_020, Ballymacravan_010 & Doonbeg_030) at Poor Status, and two waterbodies (Kilmihil Stream_010 & Lickeen) are at Bad Status.

- There is an overall deterioration in the status of two of the 2nd cycle Areas for Action waterbodies across the catchment.

- Of the nine waterbodies within the 2nd Cycle Areas for Action, seven experienced no change in status between Cycle 2 and Cycle 3, no waterbodies experienced an improvement and two river waterbodies (Kilmihil Stream_010 & Aille (Clare)_020) were subject to deterioration in status (Figure 20). The waterbodies which experienced decline were in Aille (Clare) Area for Action and Doonbeg System Area for Action.

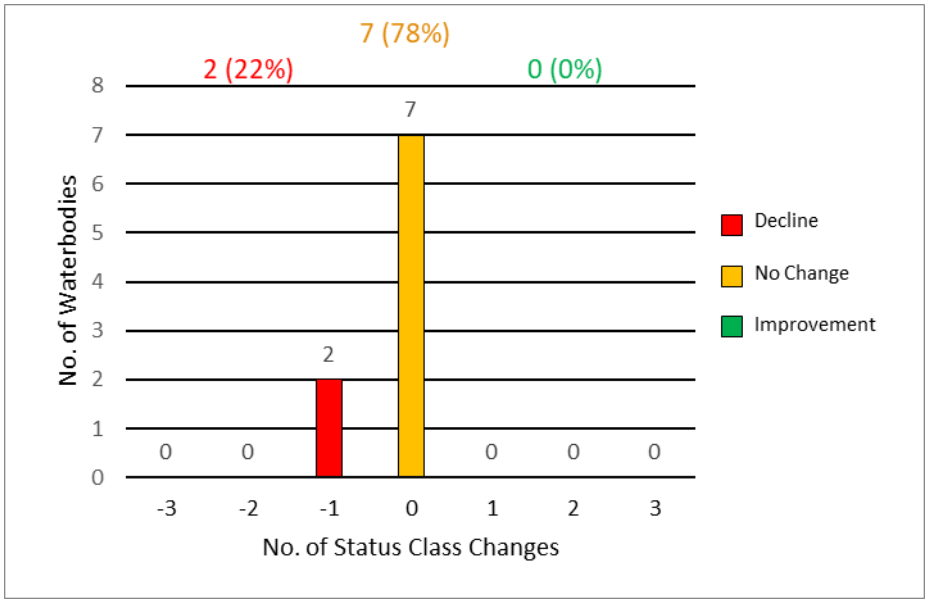


Figure 20: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- For the nine waterbodies in the 2nd Cycle Areas for Action, eight (89%) of these are currently *At Risk* and one (11%) is in *Review*.
- All seven (100%) river waterbodies are *At Risk*, four (21%) are in *Review* and 15 (79%) are *At Risk*.
- Of the two lake waterbodies, one (50%) is in *Review* and one (50%) is *At Risk*. Lickeen is the lake water *At Risk*.
- Figure 21 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 no change in the number of *At Risk* waterbodies in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3. There are eight *At Risk* waterbodies in both Cycle 2 and Cycle 3.

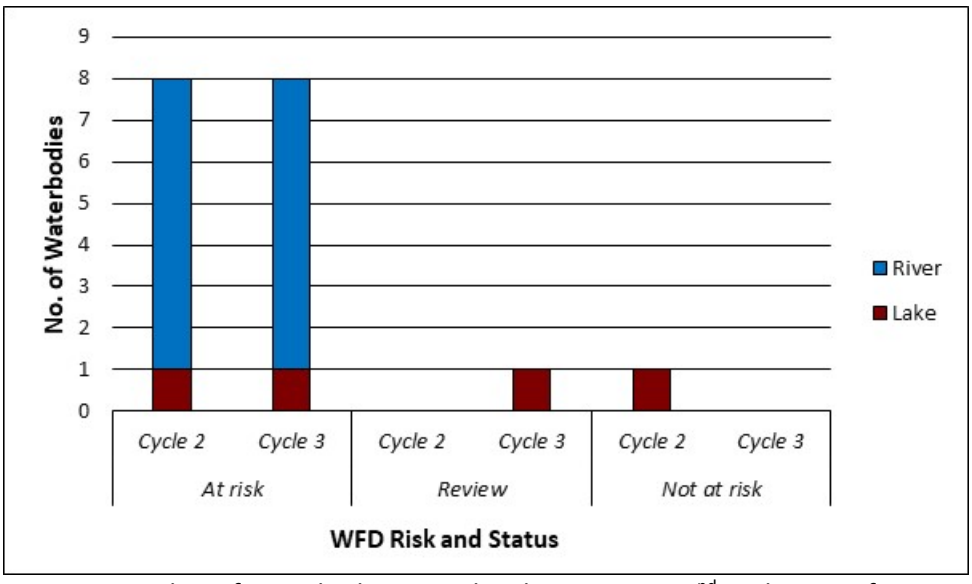
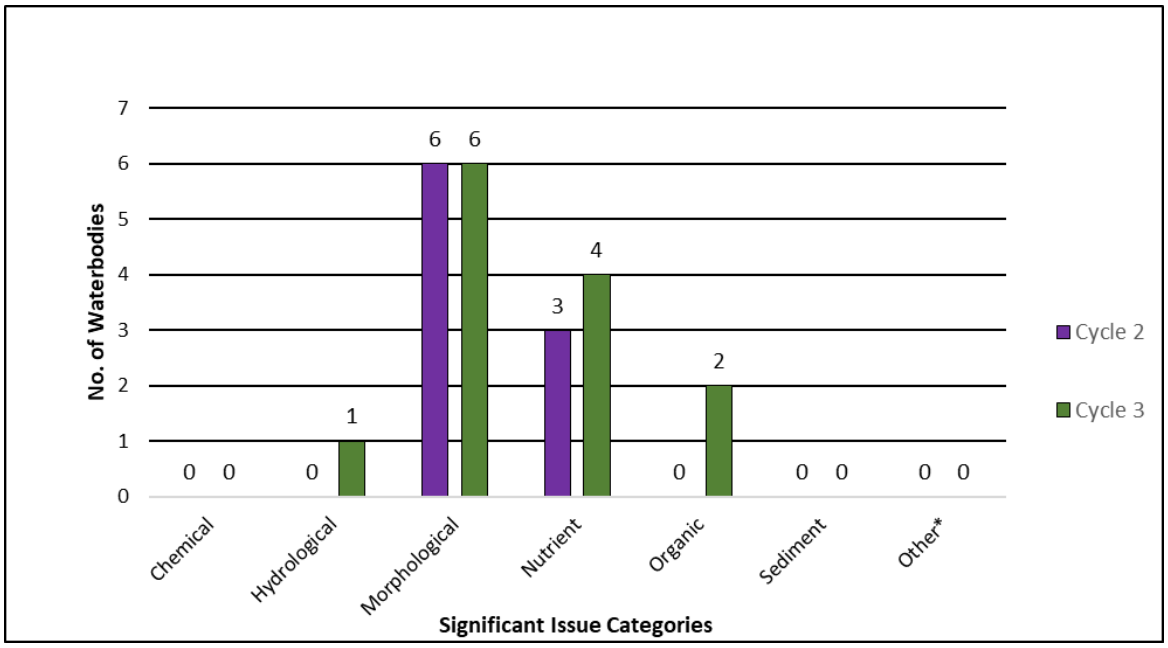


Figure 21: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

8.4 Significant Issues in 2nd Cycle Areas for Action

- Based on the EPA assessment for Cycle 3, the significant issues in the 2nd Cycle Areas for Action are morphological issues impacting six waterbodies (Figure 22). This is followed by nutrient pollution which is impacting four waterbodies, organic pollution impacting two waterbodies and hydrological issues are impacting one waterbody.

- The number of 2nd Cycle Areas for Action waterbodies impacted by hydrological and nutrient impacts have both increased by one. Kilmihil Stream_010 is impacted by hydrological impacts and AILLE (CLARE)_010 is now impacted by nutrient pollution in Cycle 3. The number of waterbodies impacted by morphological impacts remain at six between Cycle 2 and Cycle 3.



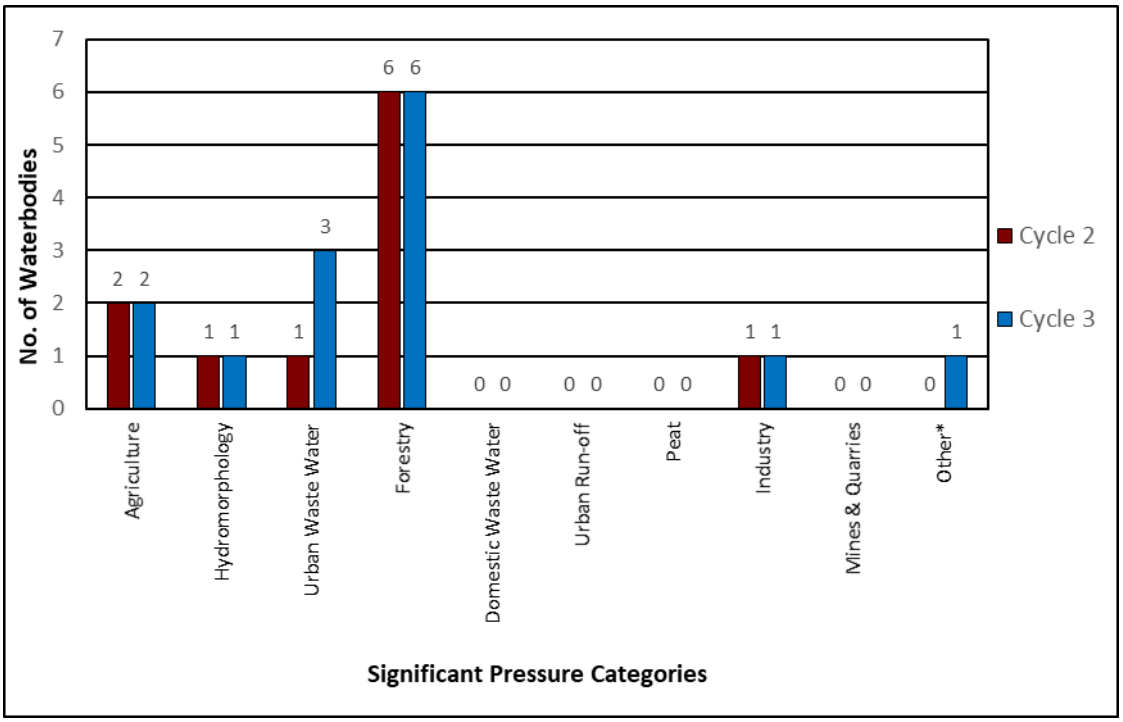
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 22: 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:
  - Forestry – six waterbodies remain impacted since Cycle 2.
  - Urban Waste Water – three waterbodies (Aille (Clare)_010, Aille (Clare)_020 & Kilmihil Stream_010) are impacted in Cycle 3 compared to one waterbody (Kilmihil Stream_010) in Cycle 2.
  - Agriculture – two waterbodies (Aille (Clare)_020 & Lickeen) remain impacted in Cycle 3.
  - Industry – one waterbody (Aille (Clare)_020) remains impacted in Cycle 3.
  - Hydromorphology – one waterbody (Ballymacravan_010) now deemed to be impacted in cycle 3.
  - Other – In one waterbody (Aille (Clare)_020) the significant pressure type is related to tourism. In addition.
- When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has been there has been no change in the number of waterbodies affected by each significant pressure category in the catchment with the exception of urban waste water and

pressures (which increased by two waterbodies) and tourism related pressures (in the other pressures category) which decreased by one waterbody.



*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 23: 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 eight Areas for Action, comprising of 37 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 23 of the 37 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, seven are in *Review* and five are *Not At Risk.* The eight Recommended Areas for Action are all Areas for Restoration. LAWPRO are the proposed lead organisation in all eight Recommended Areas for Action. The Recommended Areas for Action in the catchment are listed in Table 6 and shown in Figure 24. The reason for selecting each waterbody in a Recommended Area for Action is provided in Appendix 3.

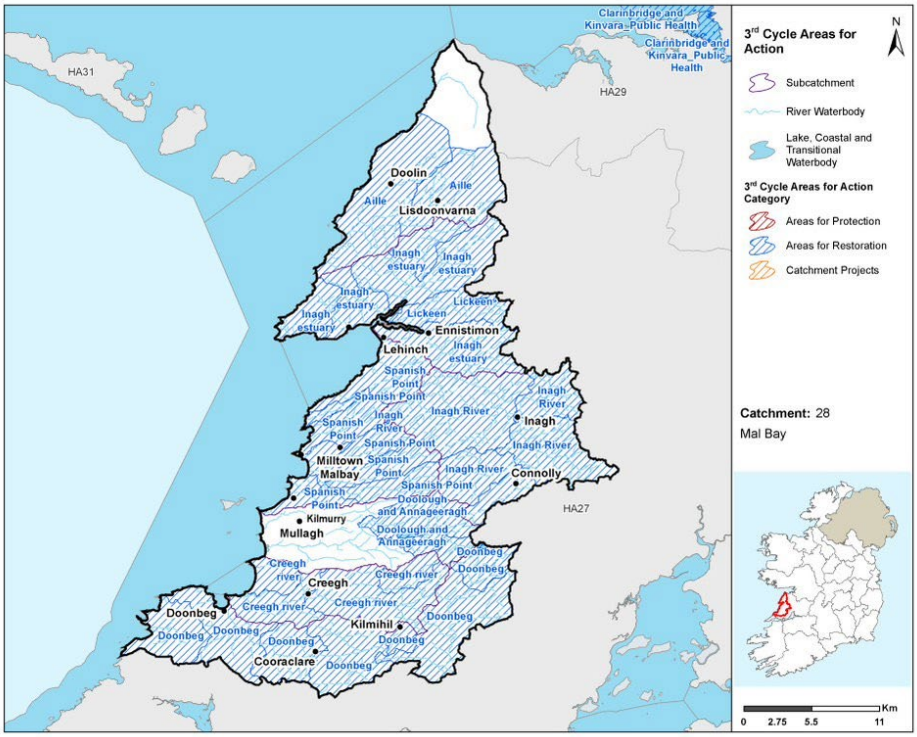


Figure 24: 3rd Cycle Recommended Areas for Action Locations

Table 6: 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
Aille	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Doolough and Annageeragh	3	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Spanish Point	7	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Inagh River	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Lickeen	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Inagh estuary	5	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Doonbeg	8	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Creegh river	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

10 Catchment Summary

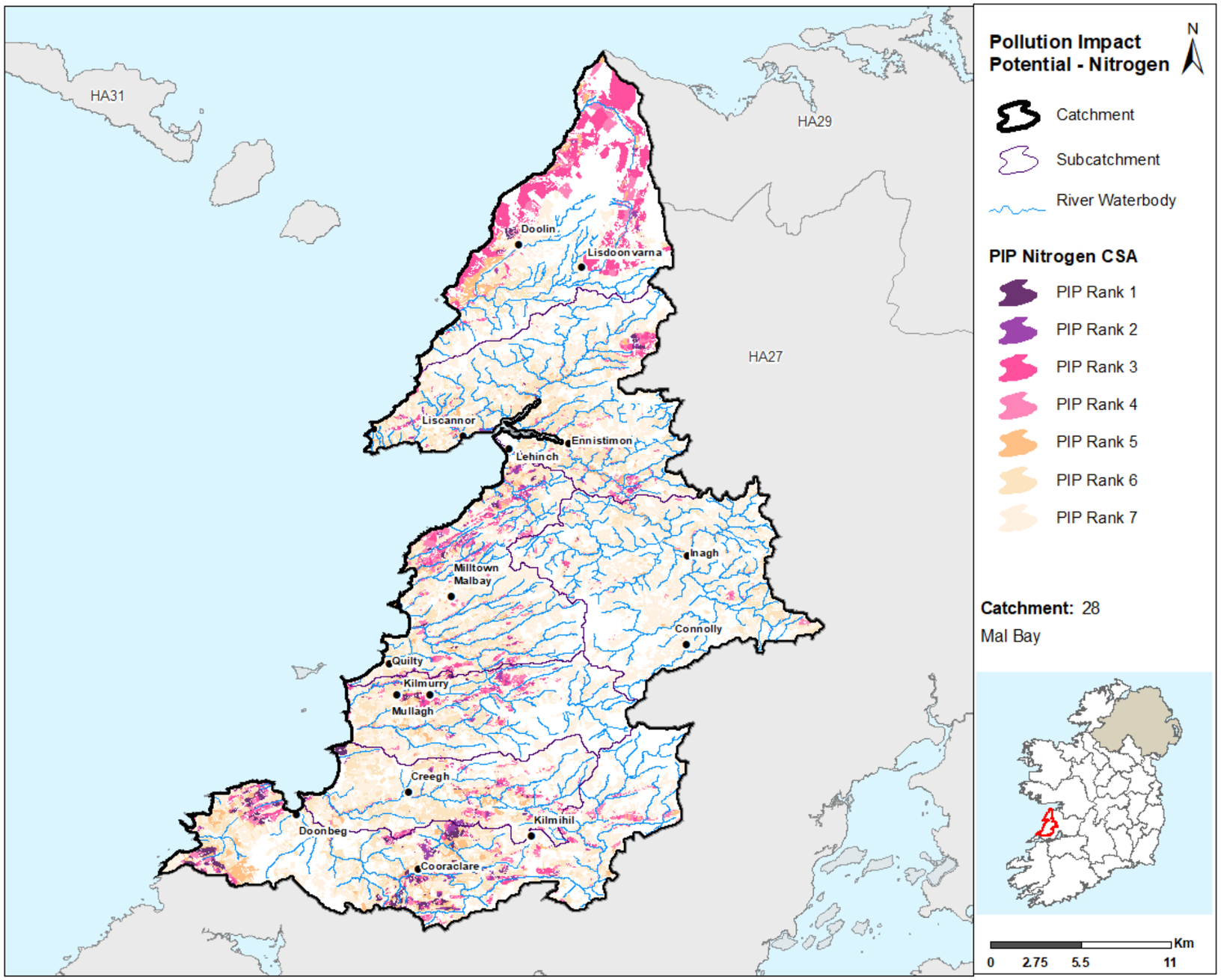
- Of the 37 river waterbodies, 23 are *At Risk* of not meeting their WFD objectives.
- Two out of four lake waterbodies are *At Risk* of not meeting their WFD objectives.
- There are no transitional or coastal waterbodies *At Risk*.
- There are no groundwater bodies *At Risk*.
- There are 25 waterbodies *At Risk* in Cycle 3 compared to 13 waterbodies *At Risk* in Cycle 2.

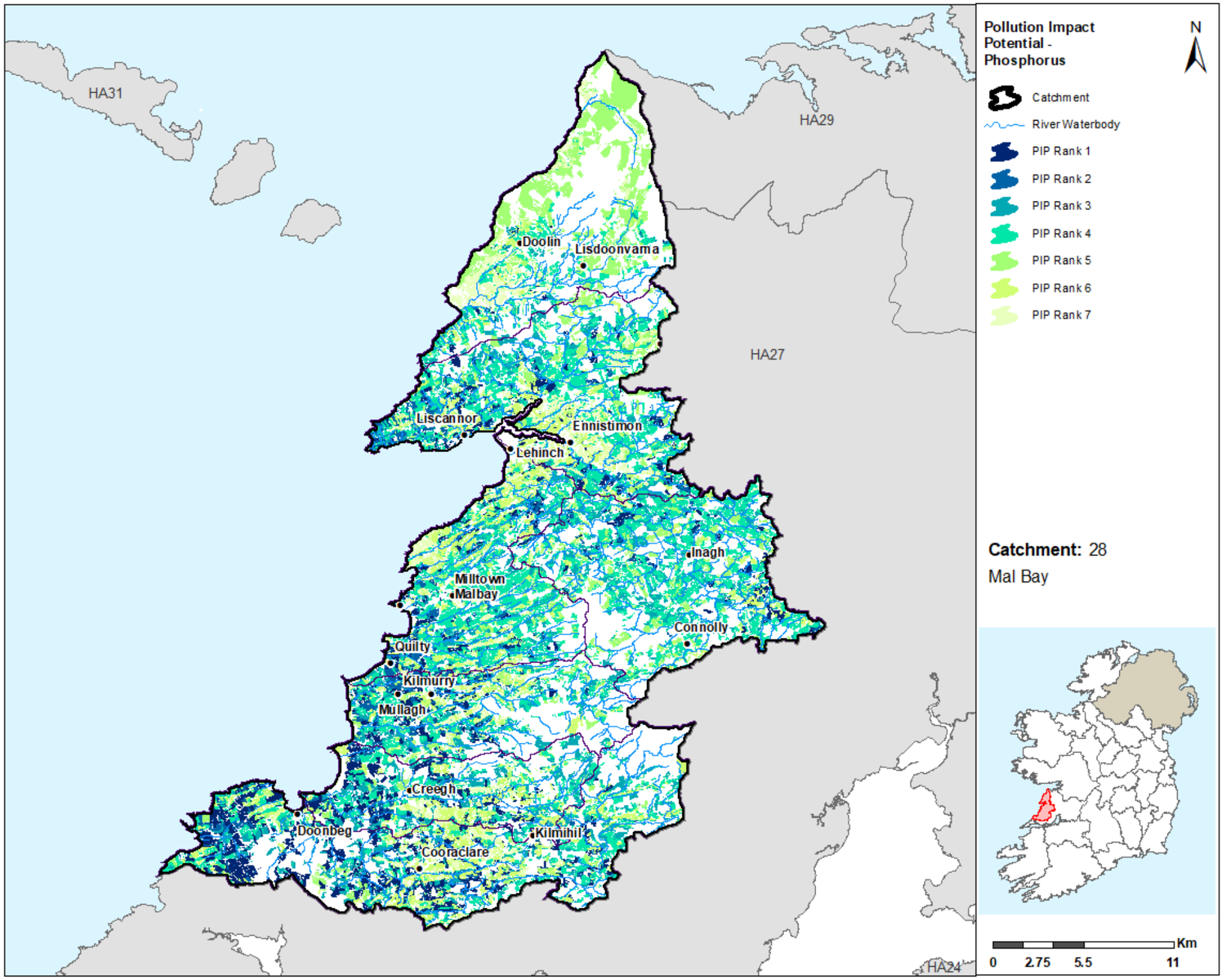
- The main significant issues arise are from nutrient pollution, followed by hydrological impacts, morphological impacts, sediment and organic pollution.
- The main significant pressures are forestry followed by agriculture, domestic waste water, hydromorphology and urban run-off.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by nutrient pollution, hydrological impacts and sediment particularly from forestry and agricultural sources. Between Cycle2 and Cycle 3 there has been an increase in the number of waterbodies impacted by all significant issues and significant pressure categories with the exception of hydrological issues and industry pressures which remain the same.
- In the 2nd Cycle Areas for Action, there were eight waterbodies *At Risk* in Cycle 2 and eight remain *At Risk* in Cycle 3.
- There are eight 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 37 waterbodies with 25 waterbodies *At Risk*, seven in *Review* and five *Not At Risk*.

Appendix 1
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
AUGHAGLANNA_010	River	IE_SH_28A060700	Good

Appendix 2
Pollution Impact Potential Mapping




HA31
HA29
HA27
HA24
Doolin
Lisdoonvarna
Liscannor
Ennistimon
Lehinch
Inagh
Milltown
Malbay
Connolly
Quilty
Kilmurry
Mullagh
Creegh
Doonbeg
Kilmihil
Cooraclare
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: 28
Mal Bay
Km
0
2.75
5.5
11

Appendix 3
Summary information on all waterbodies in the Mal Bay 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)
28_2	IE_SH_28A010300	AILLE (CLARE)_010	River	*At Risk*	*At Risk*	Poor	Poor	No	For, UWW	Aille	Existing PAA waterbody. Further characterisation won't be complete.
28_2	IE_SH_28A010400	AILLE (CLARE)_020	River	*At Risk*	*At Risk*	Moderate	Poor	No	Ag, For, Ind, Other, UWW	Aille	Existing PAA waterbody. Further characterisation won't be complete.
28_7	IE_SH_28A020010	ANNAGEERAGH_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	For	Doolough and Annageeragh	Existing PAA waterbody. FC not yet commenced so ASSAP work unlikely to be complete
28_7	IE_SH_28A020100	ANNAGEERAGH_020	River	*At Risk*	*At Risk*	Poor	Poor	No	For	Doolough and Annageeragh	Existing PAA waterbody. FC not yet commenced so ASSAP work unlikely to be complete
28_7	IE_SH_28A020300	ANNAGEERAGH_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
28_5	IE_SH_28A030900	ANNAGH (CLARE)_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	DWW, For	Spanish Point	Includes Spanish Point stream and Leagard Stream: sig presures from DWWTS on poorly draining soils at Spanish Point and discharge from UWWTP Miltown Malbay to Leagard Stream, Designated Bathing Water/Blug Flag Spanish Point Beach, Forestry Pressures in headwaters
28_7	IE_SH_28A040600	AUGHAVEEMA_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
28_1	IE_SH_28A060700	AUGHAGLANNA_010	River	*Not At Risk*	*Review*	High	Good	Yes		Inagh River	Deteriorated HES objective waterbody Include under SC approach for 28_1 Community project
28_6	IE_SH_28B020400	BALLYMACRAVAN_010	River	*At Risk*	*At Risk*	Poor	Poor	No	Hymo	Lickeen	Existing PAA. ASSAP work programme may not be complete
28_5	IE_SH_28B030500	BALLINPHONTA_010	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Ag, Other	Spanish Point	Include under SC approach for 28_5.
28_6	IE_SH_28B320970	BALLYEA_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Inagh estuary	Include under SC approach for 28_6
28_6	IE_SH_28B400850	BEAGHY_010	River	*At Risk*	*At Risk*	Unassigned	Unassigned	No	Ag	Inagh estuary	Include under SC approach for 28_6
28_3	IE_SH_28B420460	BALLARD_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Doonbeg	Include under SC approach 28_3
28_2	IE_SH_28C010100	CAHER (CLARE)_010	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)
28_2	IE_SH_28C010200	CAHER (CLARE)_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
28_4	IE_SH_28C020400	CREEGH_010	River	*Not At Risk*	*At Risk*	Good	Moderate	No	For	Creegh river	Declined in 2018, headwaters to Creagh_020 improvements here would have positive effect for Creegh_020
28_4	IE_SH_28C021400	CREEGH_020	River	*Not At Risk*	*At Risk*	Good	Poor	No	For, Hymo	Creegh river	Big drop Good to Poor status between last two monitoring periods - due to Fish status but inverts dropped Good to moderate, Creegh_010 possibly contributing.
28_4	IE_SH_28C021700	CREEGH_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Creegh river	Include under SC approach 28_4
28_6	IE_SH_28C050500	COOLEEN_010	River	*At Risk*	*At Risk*	Moderate	Poor	No	DWW, For	Inagh estuary	Continuing to decline, now poor status, supports obj of Dealagh_010 to Improve to Good Include under SC approach for 28_6
28_5	IE_SH_28C670910	CLOONEYOGAN_NORTH_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Spanish Point	Include under SC approach for 28_5. Discharges south of the Inagh Estuary
28_4	IE_SH_28C800530	CARROWMORE_NORTH_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Creegh river	Include under SC approach 28_4
28_6	IE_SH_28D010350	DEALAGH_010	River	*Not At Risk*	*At Risk*	Good	Moderate	No	DWW, Other	Inagh estuary	Storyboard says possibly Cooleen_010 impacting Dealagh_010 but may be also issues between the two monitoring points within this WB Include under SC approach for 28_6
28_3	IE_SH_28D020100	DOONBEG_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Doonbeg	Includes Lough Acrow, water supply lake for Lisseycasey GWS. Headwaters to AR downstream waterbodies. Proposed to expand the Doonbeg PAA. Include headwaters under SC approach for 28_3.
28_3	IE_SH_28D020500	DOONBEG_020	River	*Not At Risk*	*At Risk*	Good	Moderate	No	For, Other	Doonbeg	Inputting waterbody to Doonbeg 30. Expand PAA.
28_3	IE_SH_28D020650	DOONBEG_030	River	*At Risk*	*At Risk*	Poor	Poor	No	For	Doonbeg	Existing PAA waterbody. Status was driven by results for Tullagower Stream, up to 2018 assessment. But downstream mon pt deteriorated in 2018 assessment (Cooraclare Bridge).

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)
28_3	IE_SH_28D020725	DOONBEG_040	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Doonbeg	FPM present downstream of Cooraclare village Include under SC approach 28_3
28_3	IE_SH_28D020770	DOONBEG_050	River	*Not At Risk*	*At Risk*	Good	Moderate	No	For, Other, Peat	Doonbeg	Include under SC approach 28_3
28_5	IE_SH_28F010300	FREAGH_010	River	*At Risk*	*At Risk*	Poor	Poor	No	Ag, DWW	Spanish Point	Decline from Good to Moderate Include under SC approach for 28_5
28_5	IE_SH_28G020200	GLENDINE (CLARE)_010	River	*Not At Risk*	*At Risk*	Good	Poor	No	Ag, Hymo, Other	Spanish Point	Continuously Poor Include under SC approach for 28_5
28_1	IE_SH_28I010100	INAGH (ENNISTYMON)_010	River	*Not At Risk*	*At Risk*	Good	Poor	No	Other	Inagh River	Declined from Good to Poor between the last monitoring period and the current one. Include under SC approach for 28_1 community project
28_1	IE_SH_28I010206	INAGH (ENNISTYMON)_020	River	*Review*	*At Risk*	Good	Moderate	No	Other	Inagh River	Sig deterioration from Good to Poor, headwaters for Inagh River, downstream WB swould benefit measures in this WB Include under SC approach for 28_1 Community project
28_1	IE_SH_28I010210	INAGH (ENNISTYMON)_030	River	*Not At Risk*	*At Risk*	Good	Poor	No	Other, UWW	Inagh River	Status dropped from Good to moderate in 2018, had been consistenly good prior to the most recent monitoring period Community project Include under SC approach for 28_1
28_1	IE_SH_28I010300	INAGH (ENNISTYMON)_040	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Ag, DWW, For, Other	Inagh River	Significant deterioration from Good to Poor status in 2018. Measures here will benefit downstream WBs River restoration project under way here Include under SC approach for 28_1
28_6	IE_SH_28I010450	INAGH (ENNISTYMON)_050	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Hymo, Other, UR	Inagh estuary	Deterioration from Good to moderate Include under SC approach for 28_6
28_5	IE_SH_28K010800	KILDEEMA_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Spanish Point	Include under SC approach for 28_5.

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)
28_3	IE_SH_28K020200	KILMIHIL STREAM_010	River	*At Risk*	*At Risk*	Poor	Bad	No	UWW	Doonbeg	Existing PAA waterbody, transition strategy
28_5	IE_SH_28T110930	TROMRA EAST_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Spanish Point	Include under SC approach for 28_5.
28_1	IE_SH_28_64	Keagh	Lake	*At Risk*	*At Risk*	Moderate	Moderate	No	For	Inagh River	Moderate status, mainly forestry, peat cutting pressures Include under SC approach for 28_1 Community project
28_7	IE_SH_28_82	Doo CE	Lake	*Not At Risk*	*Review*	Good	Good	No		Doolough and Annageeragh	Existing PAA waterbody. FC not yet commenced so ASSAP work unlikely to be complete
28_6	IE_SH_28_85	Lickeen	Lake	*At Risk*	*At Risk*	Bad	Bad	No	Ag, For	Lickeen	Existing PAA. ASSAP work programme may not be complete
28_3	IE_SH_28_87	Naminna	Lake	*Not At Risk*	*Not At Risk*	Good	Good	No		Doonbeg	Water supply for Kilmaley Inagh GWS. Downstream waterbodies proposed under Doonbeg expanded PAA. Include under SC approach 28_3
27_8, 28_2, 28_3, 28_4, 28_5, 28_6, 28_7, 29_3	IE_SH_070_0000	Shannon Plume (HAs 27;28)	Coastal	*Not At Risk*	*Review*	Unassigned	Unassigned	No			
28_3, 28_4	IE_SH_080_0000	Doonbeg Bay	Coastal	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
28_5, 28_6	IE_SH_100_0000	Liscannor Bay	Coastal	*Not At Risk*	*Review*	Unassigned	Unassigned	No			
28_2, 29_3, 31_1, 31_3, 31_4, 31_5, 31_6, 31_8, 31_9, 32_12	IE_WE_010_0000	Aran Islands, Galway Bay, Connemara (HAs 29;31)	Coastal	*Not At Risk*	*Review*	Unassigned	Unassigned	No			
28_3, 28_4	IE_SH_080_0100	Doonbeg Estuary	Transitional	*Review*	*Review*	Unassigned	Unassigned	No			
28_7	IE_SH_090_0100	Lough Donnell	Transitional	*Review*	*Review*	Poor	Bad	No			
28_5, 28_6	IE_SH_100_0100	Inagh Estuary	Transitional	*Review*	*Review*	Unassigned	Unassigned	No			
28_2	IE_SH_110_0100	Aille Clare Estuary	Transitional	*Review*	*Review*	Unassigned	Unassigned	No			
27_7, 28_2, 28_6, 29_3, 29_8	IE_SH_G_047	Burren	Groundwater	*Review*	*Review*	Good	Good	No			
27_10, 27_3, 27_7, 28_1, 28_6	IE_SH_G_069	Craggaunboy	Groundwater	*Review*	*Review*	Good	Good	No			
27_2, 27_4, 27_5, 27_8, 27_9, 28_3	IE_SH_G_123	Kilrush	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)
27_10, 27_2, 27_5, 27_9, 28_1, 28_3, 28_7	IE_SH_G_148	Lissycasey	Groundwater	*Not At Risk*	*Review*	Good	Good	No			
27_10, 27_3, 27_4, 27_5, 27_7, 27_8, 27_9, 28_1, 28_2, 28_3, 28_4, 28_5, 28_6, 28_7	IE_SH_G_167	Milltown Malbay	Groundwater	*Review*	*Review*	Good	Good	No			
28_6	IE_SH_G_169	Wastewater Discharge Facility (A0079-01)	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
27_7, 28_2, 29_3	IE_SH_G_212	Slieve Elva	Groundwater	*Review*	*Review*	Good	Good	No			
27_7, 28_2, 29_3, 29_8	IE_WE_G_0001	Ballyvaughan Uplands	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* water bodies have not been included as they will need to be confirmed as part of an Investigative Assessment.