

3rd Cycle Draft Blacksod-Broadhaven Catchment Report (HA 33)



Catchment Science & Management Unit

Environmental Protection Agency

August 2021

Version no. 1

Preface

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

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

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

Table of Contents

1	Introduction.....	6
2	Waterbody Overview.....	7
2.1	Waterbody Status	7
2.2	Protected Areas	9
2.3	Heavily Modified Waterbodies.....	12
2.4	Artificial Waterbodies	12
3	Waterbody Risk	12
3.1	Overview of Risk	12
3.2	Surface Waters.....	13
3.3	Groundwater.....	15
3.4	Heavily Modified Waterbodies.....	15
3.5	Artificial Waterbodies	15
4	Significant Issues in <i>At Risk</i> Waterbodies	16
4.1	All Waterbodies	16
4.2	High Status Objective Waterbodies	16
5	Significant pressures in <i>At Risk</i> Waterbodies.....	17
5.1	All Waterbodies	17
5.2	High Status Objective Waterbodies	21
6	Source Load Apportionment Modelling (SLAM)	21
7	Load Reduction Assessment	22
7.1	Nitrogen Load Reduction	22
7.2	Phosphorous / Sediment Load Reduction	22
8	2 nd Cycle Areas for Action	23
8.1	Area for Action Overview	23
8.2	Status Change in 2 nd Cycle Areas for Action	25
8.3	Waterbody Risk in 2 nd Cycle Areas for Action	25
8.4	Significant Issues in 2 nd Cycle Areas for Action.....	26
8.5	Significant Pressure in 2 nd Cycle Areas for Action	27
9	3 rd Cycle Recommended Areas for Action	27
9.1	Recommended Areas for Action Overview	27
10	Catchment Summary	29

List of Figures

Figure 1: Overview of subcatchments in the Blacksod-Broadhaven catchment	6
Figure 2: Waterbody types and numbers in the Blacksod-Broadhaven Catchment.....	7
Figure 3: Waterbody Status Breakdown (All waterbodies).....	8
Figure 4: Status Class Changes between Cycle 2 and Cycle 3	9
Figure 5: Protected Areas – Public Health.....	10
Figure 6: Water Dependent SPAs / SACs and Salmonid Waters	12
Figure 7: Number of waterbodies in each risk category	14
Figure 8: Surface Water Risk Cycle 3	14
Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3	15
Figure 10: Significant Issues across all <i>At Risk</i> WBs between Cycle 2 and Cycle 3.....	16
Figure 11: Significant Issues in <i>At Risk</i> High Status Objective Waterbodies	17
Figure 12: Significant Pressure (All <i>At Risk</i> Waterbodies)	18
Figure 13: Locations of Waterbodies where Agriculture is a Significant Pressure.....	20
Figure 14: Locations of Waterbodies where Hydromorphology is a Significant Pressure	20
Figure 15: Locations of Waterbodies where Forestry is a Significant Pressure	20
Figure 16: Locations of Waterbodies where Peat is a Significant Pressure	20
Figure 17: Significant Pressure in <i>At Risk</i> High Status Objective Waterbodies	21
Figure 18: Estimated Proportions of N & P from Each Sector in the Blacksod-Broadhaven Catchment	22
Figure 19: Waterbodies where Agricultural Measures should be Targeted	23
Figure 20: 2 nd Cycle Areas for Action Locations	24
Figure 21: 2 nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3	25
Figure 22: Number of waterbodies in each risk category in 2 nd Cycle Areas for Action	26
Figure 23: Significant Issues across all 2 nd Cycle Areas for Action Waterbodies.....	26
Figure 24: Significant Pressures in 2 nd Cycle Area for Action Waterbodies	27
Figure 25: 3 rd Cycle Recommended Areas for Action Locations	28

List of Tables

Table 1: Waterbody Status Breakdown Table (All Waterbodies).....	8
Table 2: Designated shellfish areas in the catchment.....	10
Table 3: Natura 2000 Network Assessment Summary.....	11
Table 4: 2 nd Cycle Areas for Action	24
Table 5: 3 rd Cycle Recommended Areas for Action Breakdown.....	28

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 Blacksod-Broadhaven 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 Blacksod-Broadhaven catchment includes the area drained by all streams entering tidal water in Blacksod and Broadhaven Bays and between Corraun Point and Benwee Head, Co. Mayo, draining a total area of 1,302km² (Figure 1). The largest urban centre in the catchment is Belmullet. The other main urban centres in this catchment are Bangor and Keel. The total population of the catchment is approximately 12,549 with a population density of 10 people per km².

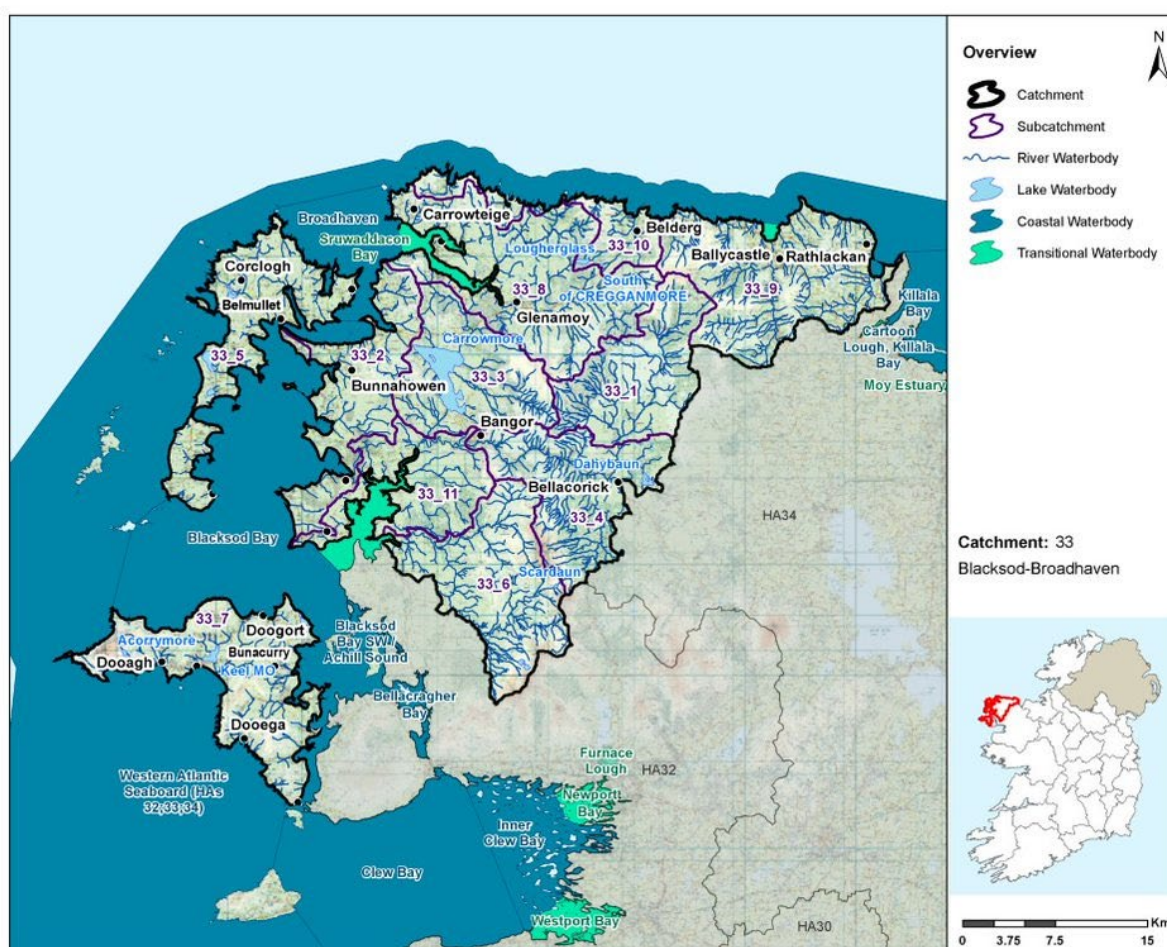


Figure 1: Overview of subcatchments in the Blacksod-Broadhaven catchment

The Blacksod-Broadhaven catchment is divided into 11 subcatchments (Figure 1) with 58 river waterbodies, 13 lake waterbodies, four transitional waterbodies, six coastal waterbodies and 10 groundwater bodies (Figure 2).

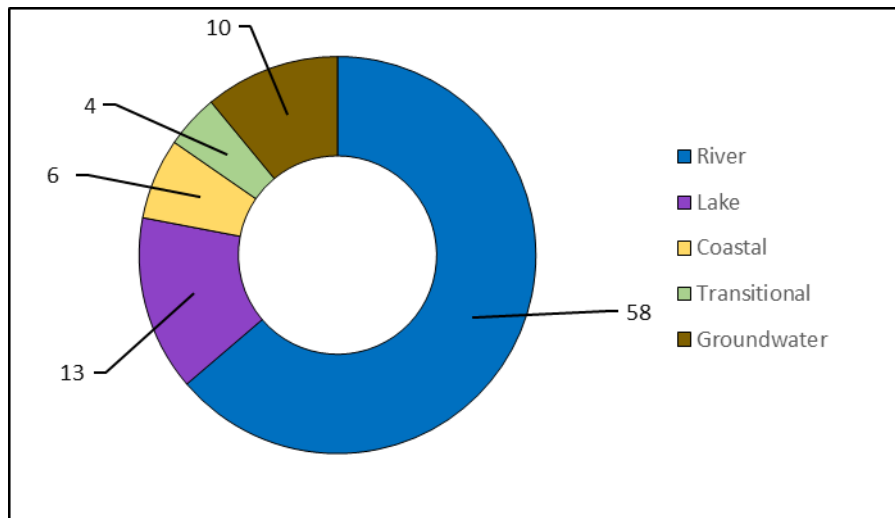


Figure 2: Waterbody types and numbers in the Blacksod-Broadhaven Catchment.

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 eight waterbodies achieving High Status, 37 achieving Good Status, seven achieving Moderate Status and one achieving Poor Status. There are 38 waterbodies that do not have status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.
- ◆ There are eight river waterbodies, two transitional waterbodies and one coastal waterbody that must achieve High Ecological Status (HES) in this catchment. These waterbodies are listed in Appendix 1. Of the 11 HES Environmental Objective waterbodies, six are achieving High Status (five river waterbodies and one transitional waterbody) while four are at Good Status and one is at Poor Status.
- ◆ There has been a reduction of two waterbodies (one river waterbody and one transitional waterbody) achieving High Status between Cycle 2 and Cycle 3, reflected by an increase in one waterbody achieving Good Status and one waterbody achieving Moderate (Figure 3 & Table 1).

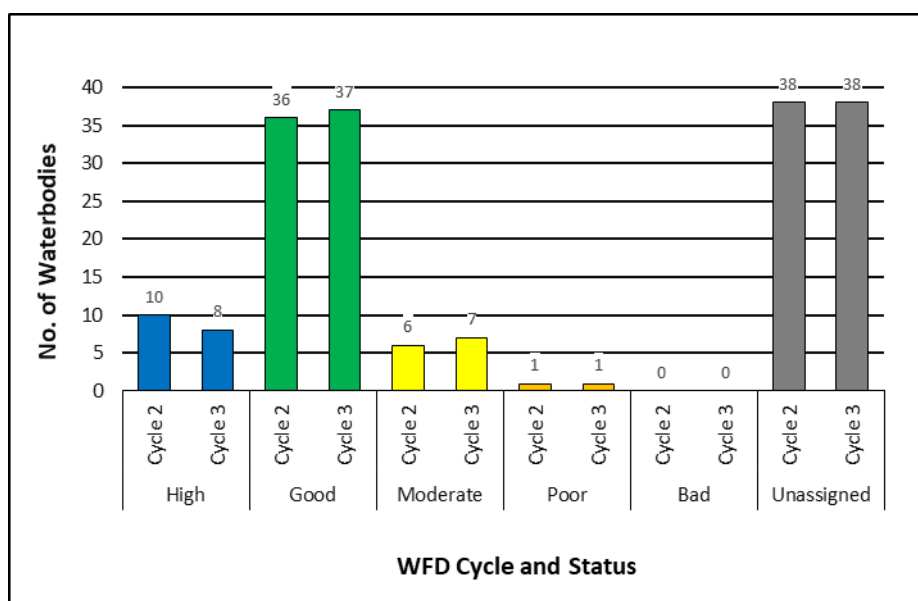


Figure 3: Waterbody Status Breakdown (All waterbodies)

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	8	7	0	0	2	1	0	0	0	0	10	8
Good	22	23	2	1	0	1	2	2	10	10	36	37
Moderate	4	4	2	3	0	0	0	0	0	0	6	7
Poor	1	1	0	0	0	0	0	0	0	0	1	1
Bad	0	0	0	0	0	0	0	0	0	0	0	0
Un-assigned	23	23	9	9	2	2	4	4	0	0	38	38
Total	58	58	13	13	4	4	6	6	10	10	91	91

- ◆ 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 five (9%) waterbodies have improved in status, 42 (79%) waterbodies have remained unchanged and six (11%) waterbodies have declined in status.¹
- ◆ There is an overall decline in the status of one waterbody 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.

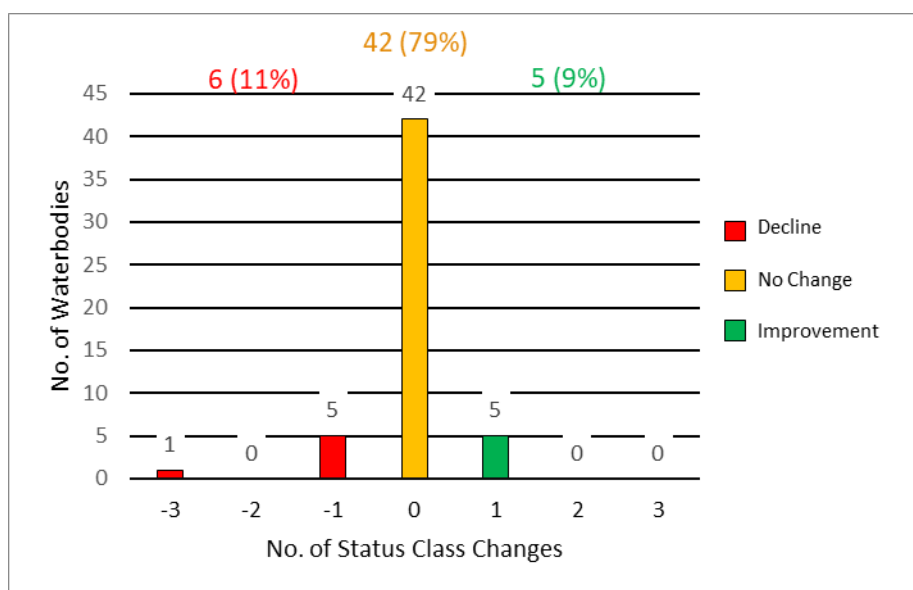


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- ◆ There are two 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 eight marine bathing waters in or directly adjacent to the catchment identified under the Bathing Water Regulations 2008.
- ◆ All eight bathing waters had an Excellent 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 three 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 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
Blacksod Bay	IEPA2_0031	Blacksod Bay	IE_WE_360_0000	✓	
Achill Sound North	IEPA2_0030	Blacksod Bay SW/ Achill Sound	IE_WE_370_0000	✓	
		Blacksod Bay	IE_WE_360_0000		
Achill Sound South	IEPA2_0029	Blacksod Bay SW/ Achill Sound	IE_WE_370_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.

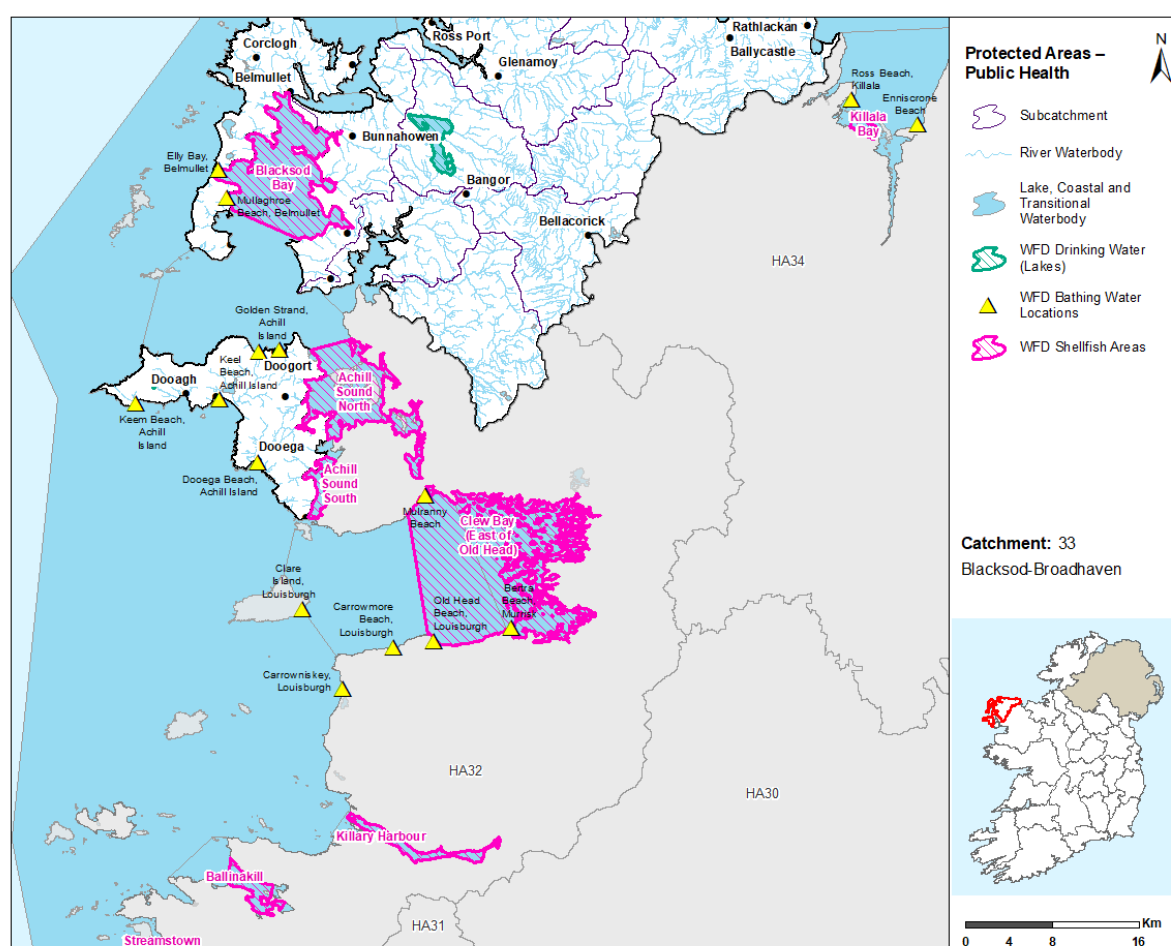


Figure 5: Protected Areas – Public Health

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 16 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](https://www.catchments.ie).⁵

Table 3: Natura 2000 Network Assessment Summary

Water Body Type	Total No.	Meeting the Requirements	Did not meet the Requirements	Unknown*
Rivers	35	21	2	12
Lake	8	5	1	2
Transitional & Coastal	3	3	0	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/>

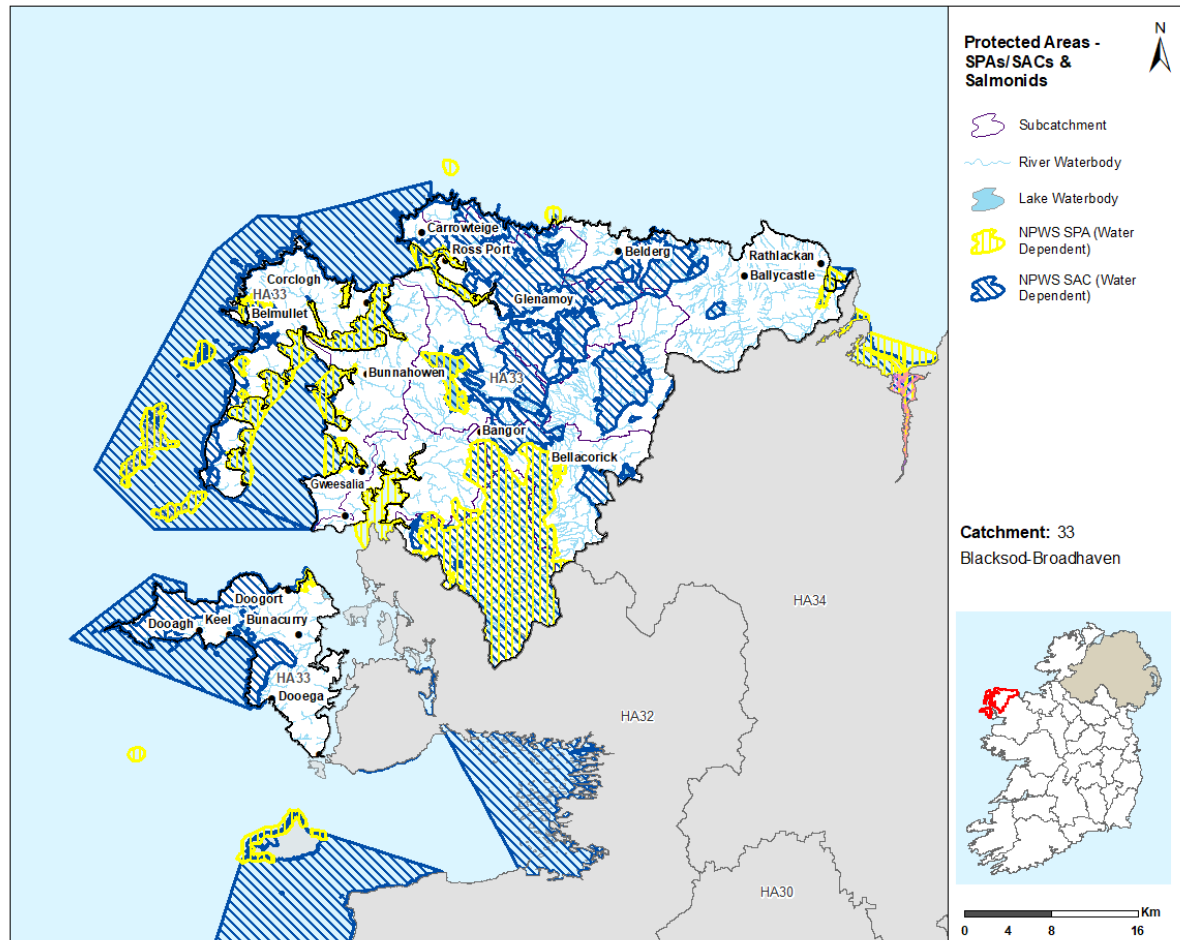


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

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 are currently no heavily modified water bodies (HMWBs) in the catchment. 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 Blacksod – Broadhaven 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 91 waterbodies in the Blacksod-Broadhaven Catchment and 10 (11%) are currently *At Risk*, 32 (35%) in *Review* and 49 (54%) are *Not At Risk*.

3.2 Surface Waters

- ◆ For the 58 river waterbodies, seven (12%) are *At Risk*, 26 (45%) are in *Review* and 25 (43%) are *Not At Risk*.
- ◆ For the 13 lake waterbodies, three (23%) are *At Risk*, four (31%) are in *Review* and six (46%) are *Not At Risk*. Cross, Keel MO and Carrowmore are the lake waterbodies *At Risk*.
- ◆ For the four transitional waterbodies, three (75%) are *Not At Risk* and one (25%) is in *Review* (Dooniver Loughs).
- ◆ For the six coastal waterbodies, one (17%) is in *Review* and five (83%) are *Not At Risk*. The coastal waterbody in *Review* is Belmullet Bay.
- ◆ The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for seven (70%) of 10 *At Risk* waterbodies. Figure 7 gives an overview of the breakdown of risk across waterbody types for both Cycle 2 and Cycle 3.
- ◆ Overall, there is an increase in *three At Risk* waterbodies and one *Review* waterbody, and a reduction of four *Not At Risk* waterbodies between Cycle 2 and Cycle 3.

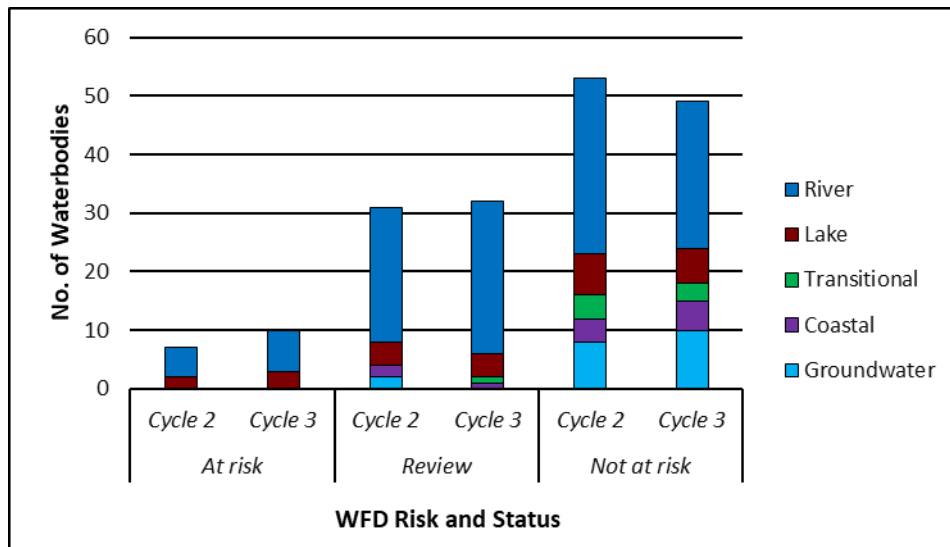


Figure 7: Number of waterbodies in each risk category

- ◆ 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.

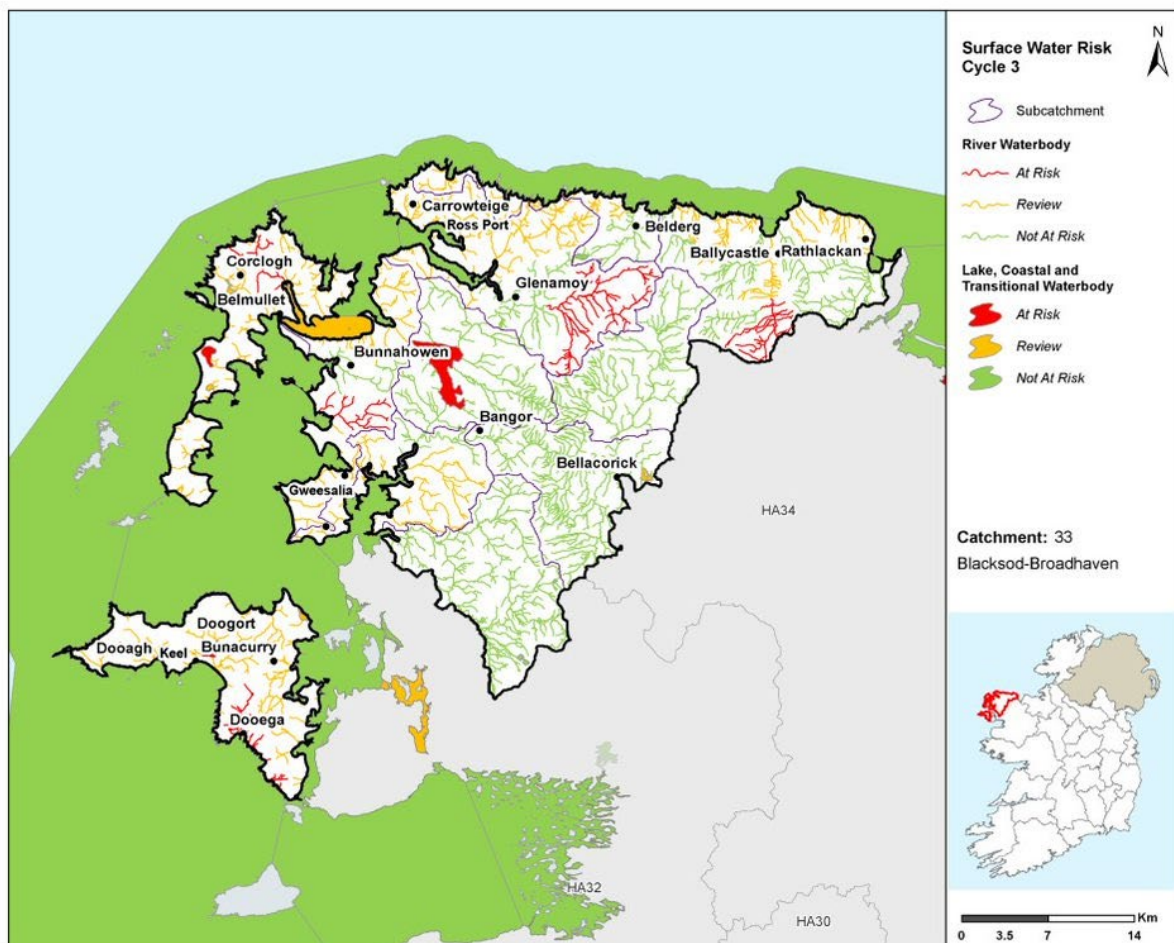


Figure 8: Surface Water Risk Cycle 3

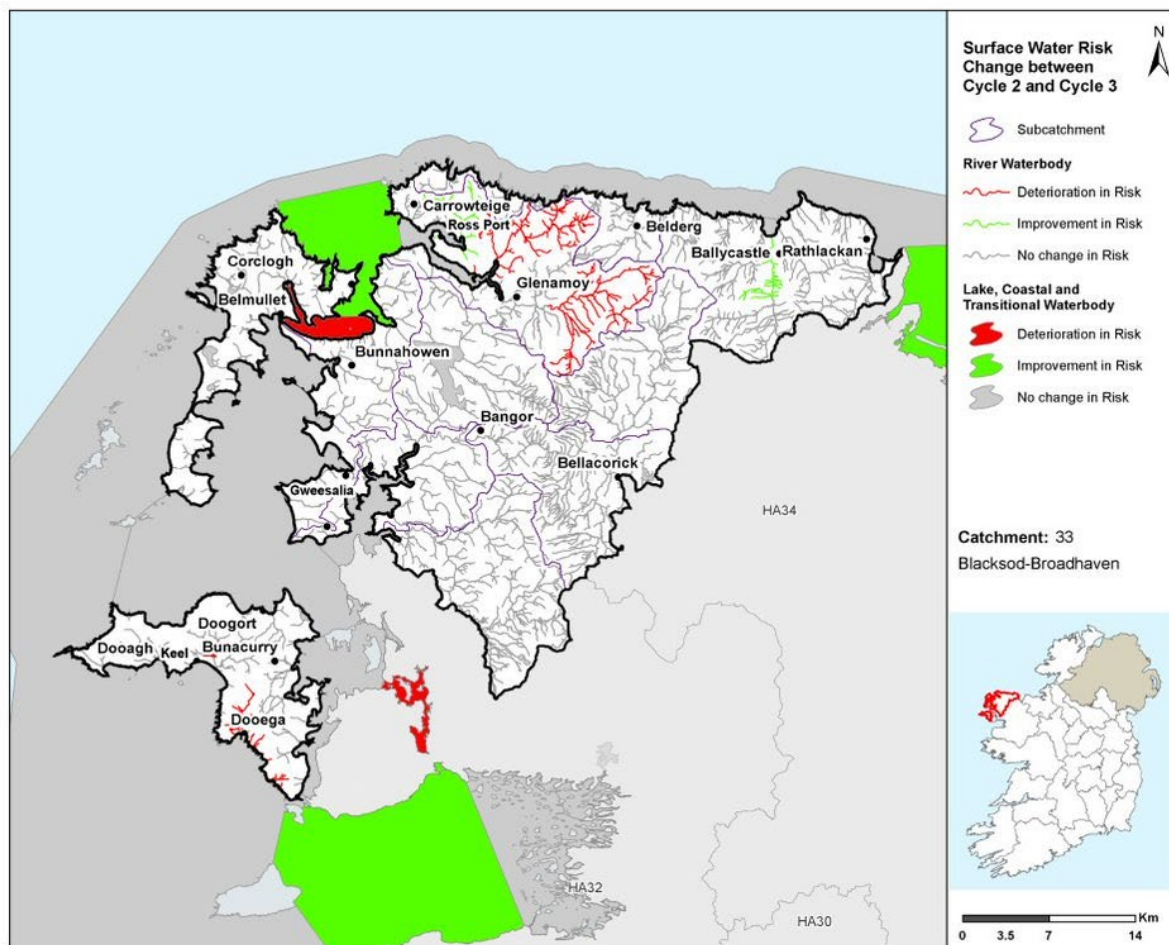


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- ◆ All 10 groundwater bodies are *Not At Risk*.
- ◆ In Cycle 2, there were two groundwater bodies in *Review* in this catchment and eight *Not At Risk*.

3.4 Heavily Modified Waterbodies

- ◆ There are no heavily modified water bodies (HMWBs) 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.

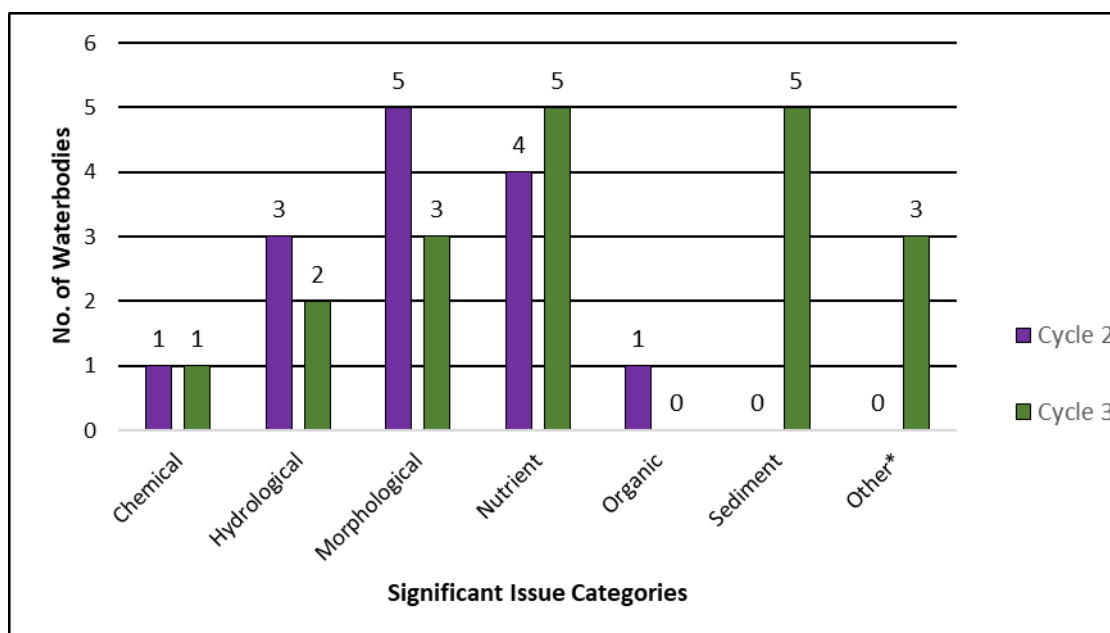
3.5 Artificial Waterbodies

- ◆ There are no Artificial Waterbodies (AWBs) present in the Blacksod – Broadhaven Catchment.

4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

- ◆ Excess nutrients and sediment impacts are the most prevalent issues in the Blacksod-Broadhaven catchment (Figure 10) with each impacting five waterbodies in Cycle 3. Morphological and other issues are impacting three waterbodies, and hydrological and chemical issues are impacting two and one waterbodies, respectively.
 - For river waterbodies, the main significant issues are sediment impacts (5), nutrient pollution (3), morphological (2), other issues (2) and hydrological impacts (1).
 - For lake waterbodies, the main significant issues are nutrient pollution (2), chemical (1), morphological impacts (1), hydrological impacts (1) and other impacts (1).
- ◆ Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues have increased by one from four to five and the number of waterbodies impacted by sediment issues has increased by five from zero to five.
- ◆ The numbers of waterbodies with morphological and hydrological issues have reduced from five and three respectively in Cycle 2 to three and two in Cycle 3.
- ◆ The number of waterbodies impacted by other issues has increased from no waterbodies in Cycle 2 to three in Cycle 3, while the number of waterbodies impacted by chemical issues has remained the same.



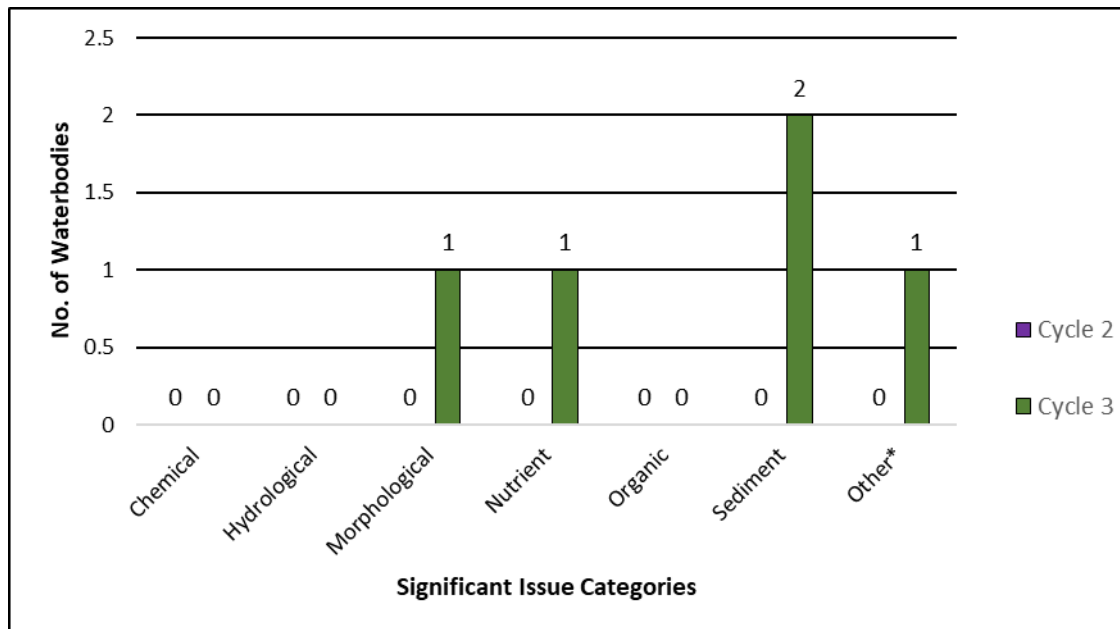
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 10: Significant Issues across all *At Risk* WBs between Cycle 2 and Cycle 3

4.2 High Status Objective Waterbodies

- ◆ In Cycle 3 for High Status Objective waterbodies sediment issues are impacting two of the three High Status Objective waterbodies currently *At Risk* (Figure 11). Nutrients, morphological and other issues are impacting one waterbody each.
 - All of the High Status Objective waterbodies currently *At Risk* are river waterbodies.

- Between Cycle 2 and Cycle 3, the number of *At Risk* High Status Objective waterbodies has increased from no waterbodies to three waterbodies. Therefore, all significant impacts on waterbodies recorded in Cycle 3 have increased from no waterbodies in the previous cycle. Sediment has increased from impacting no waterbodies to impacting two waterbodies, while morphological, nutrient and other impacts have all increased from no waterbodies to one waterbody each 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

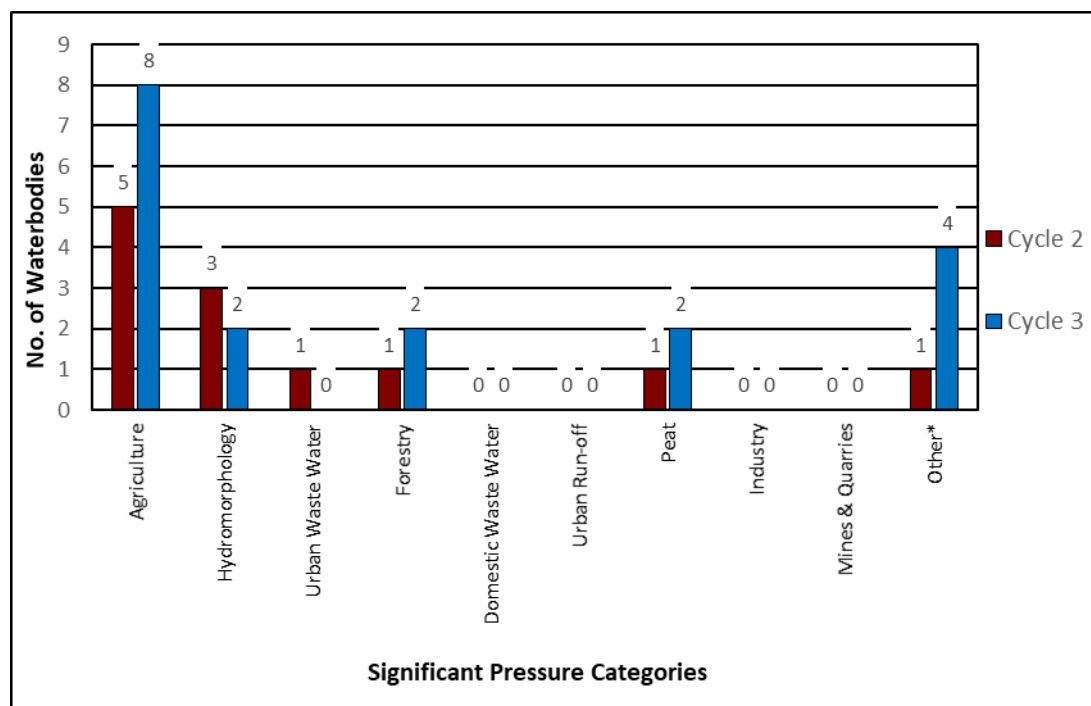
Figure 11: Significant Issues in *At Risk* High Status Objective Waterbodies

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 12 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 other⁶, hydromorphology, forestry, peat and urban waste water.
- When comparing Cycle 2 and Cycle 3 the biggest change is an increase of three waterbodies where agriculture and other pressures are a significant pressure which both increase by three waterbodies in Cycle 2 to Cycle 3.

⁶ Abstractions, aquaculture, atmospheric, anthropogenic pressures, historically polluted sites, waste, water treatment and invasive species have all been grouped into the "Other" pressure category for the purpose of this report



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

Figure 12: Significant Pressure (All At Risk Waterbodies)

5.1.1 Pressure Type

5.1.1.1 Agriculture

- ◆ Agriculture is a significant pressure in six river waterbodies and two lake waterbodies. The issues related to farming in this catchment are 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. Sediment can also be a problem from land drainage works, bank erosion from animal access or stream crossings. In particular, agriculture drainage works on one waterbody (Clooneen(Mayo)_010) is discharging excess sediment to the waterbody. Chemical issues (Cypermethrin) were also noted to be related with sheep dipping.

5.1.1.2 Other

- ◆ *Invasive species*
Invasive species (Gunnera) has been identified as a significant pressure in one river waterbody (Dooega_010).
- ◆ *Unknown anthropogenic*
Fish status is driving the Moderate Status in Ballinglen_010, with a decline in both salmon and trout number. The pressure is unknown, but siltation is expected to be an issue. Furthermore, Glenamoy_020 is at Poor Status as a result of a decline in trout and salmon populations but the cause for this is also unknown. One lake waterbody, Keel MO, has deteriorated from Good Status to Moderate Status during the two cycles.

5.1.1.3 Hydromorphology

- ◆ Hydromorphology is a significant pressure in two river waterbodies. One river waterbody within the Tóin an Mhása (33_5) subcatchment is subject to extensive modification. Drainage schemes exist which has led to high levels of siltation, the waterbody has been re-sectioned, over-deepened

and historically dredged. The other waterbody, within the Glenamoy (33_8) subcatchment is *At Risk* due to land drainage pressure which have altered the morphology.

5.1.1.4 Forestry

- ◆ Forestry has been identified as a significant pressure in one lake waterbody (Carrowmore) and one river waterbody (Glenamoy_010). The pressures within the lake waterbody relate to impacts from landslides because of ground instability and nutrient inputs from aerial fertilising. However, the river waterbody is being impacted by clearfelling, thinning and replanting pressures.

5.1.1.5 Peat

- ◆ Peat drainage and extraction has been identified as a significant pressure in two river waterbodies (Dooega_010 and Doolough Stream_010). Elevated nutrient concentrations and sediment are the significant issues, with land drainage for peat harvesting causing sediment influx. A huge portion of the Glencastle (33_2) subcatchment, where the Doolough Stream_010 is located was used for extensive commercial peat harvesting. Commercial peat extraction has ceased since 2003 and restoration works have begun, however, the impacts are still present. Local peat extraction may be impacting the waterbody, as well as, the unresolved consequences from the commercial harvesting.

Figure 13 – Figure 16 illustrates the locations of waterbodies for the four most common pressures in order of prevalence (agriculture, hydromorphology, forestry and peat) within the catchment in Cycle 3.

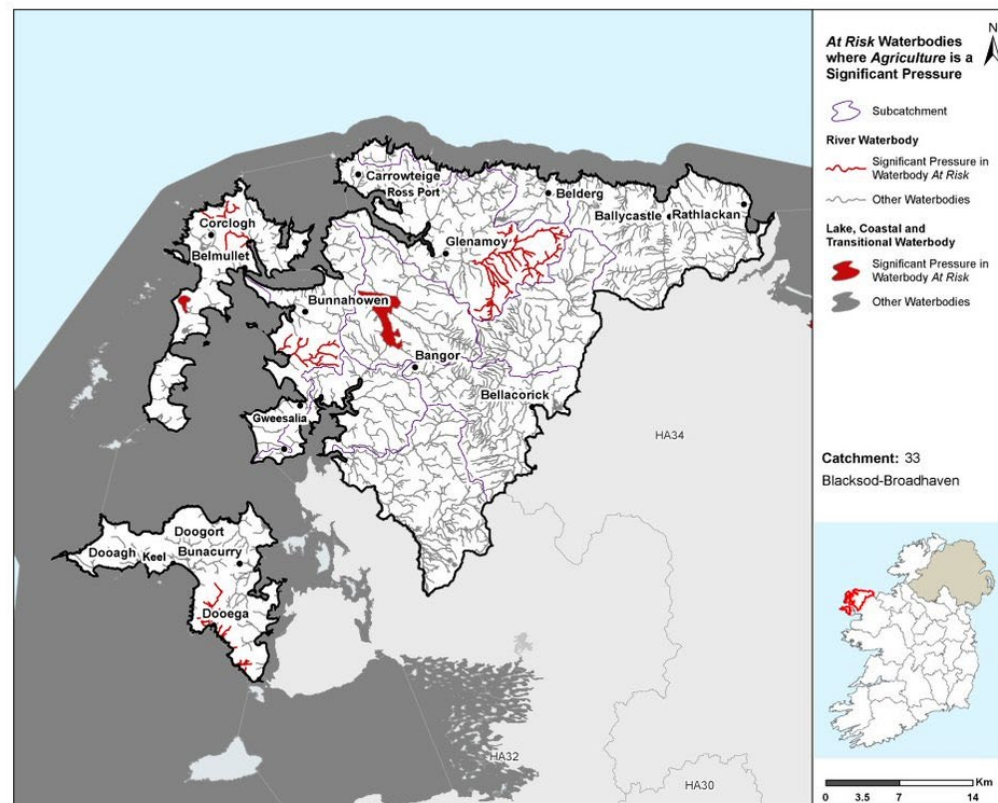


Figure 13: Locations of Waterbodies where Agriculture is a Significant Pressure

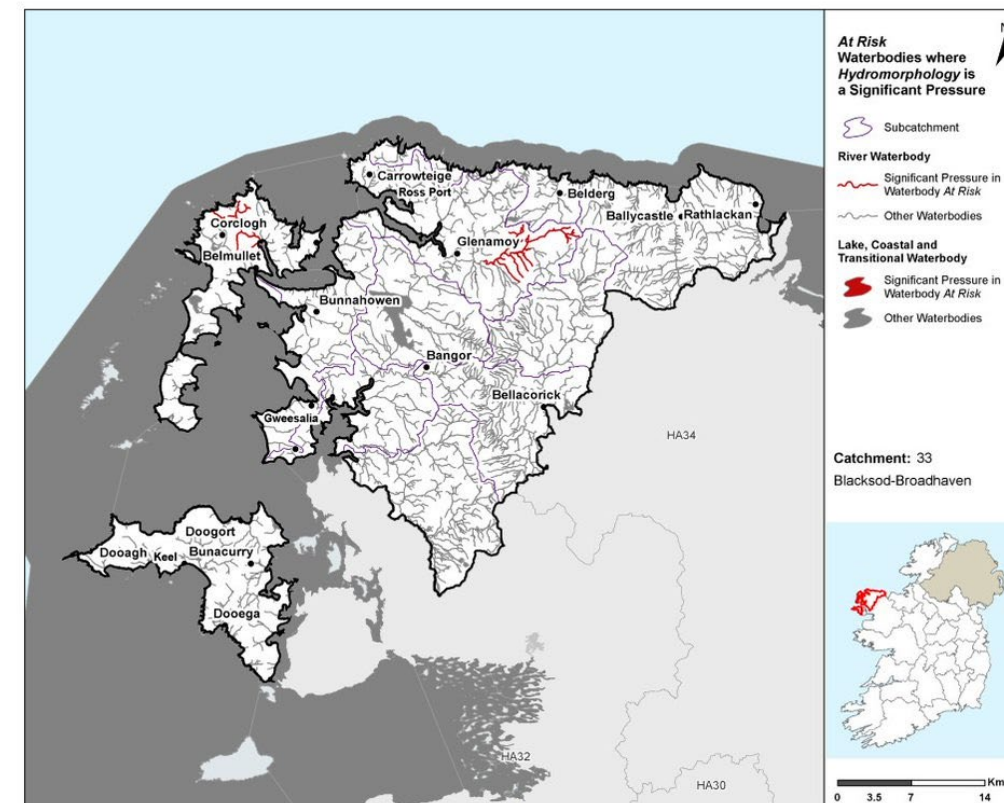


Figure 14Figure 13: Locations of Waterbodies where Hydromorphology is a Significant Pressure

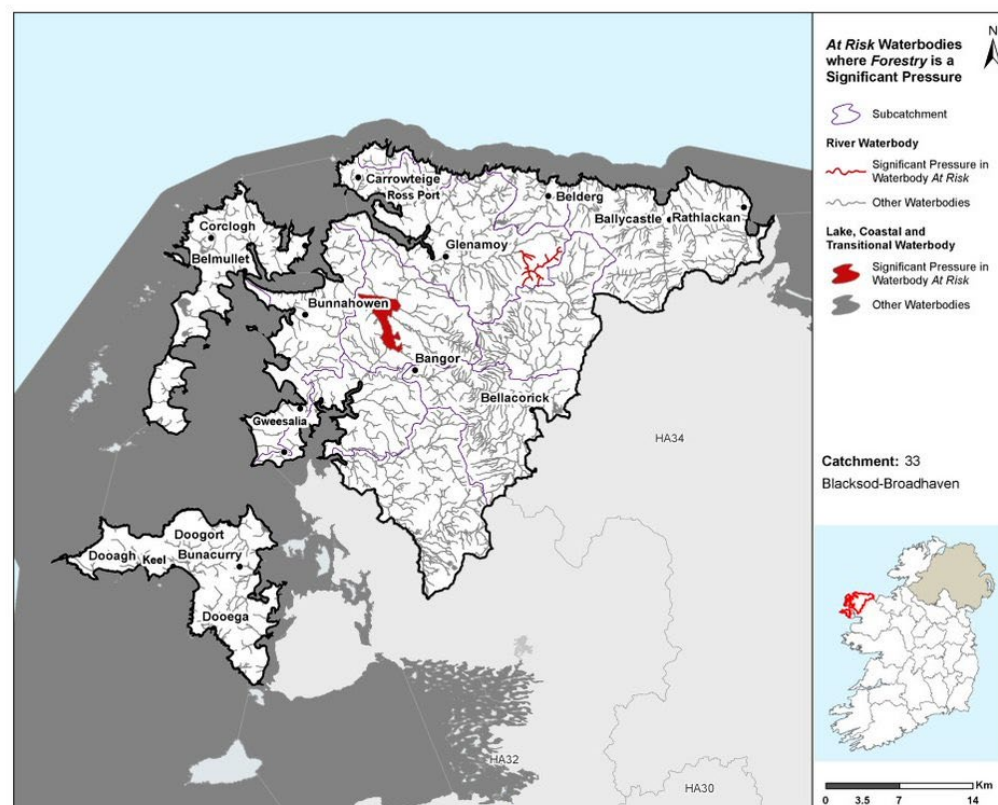


Figure 15: Locations of Waterbodies where Forestry is a Significant Pressure

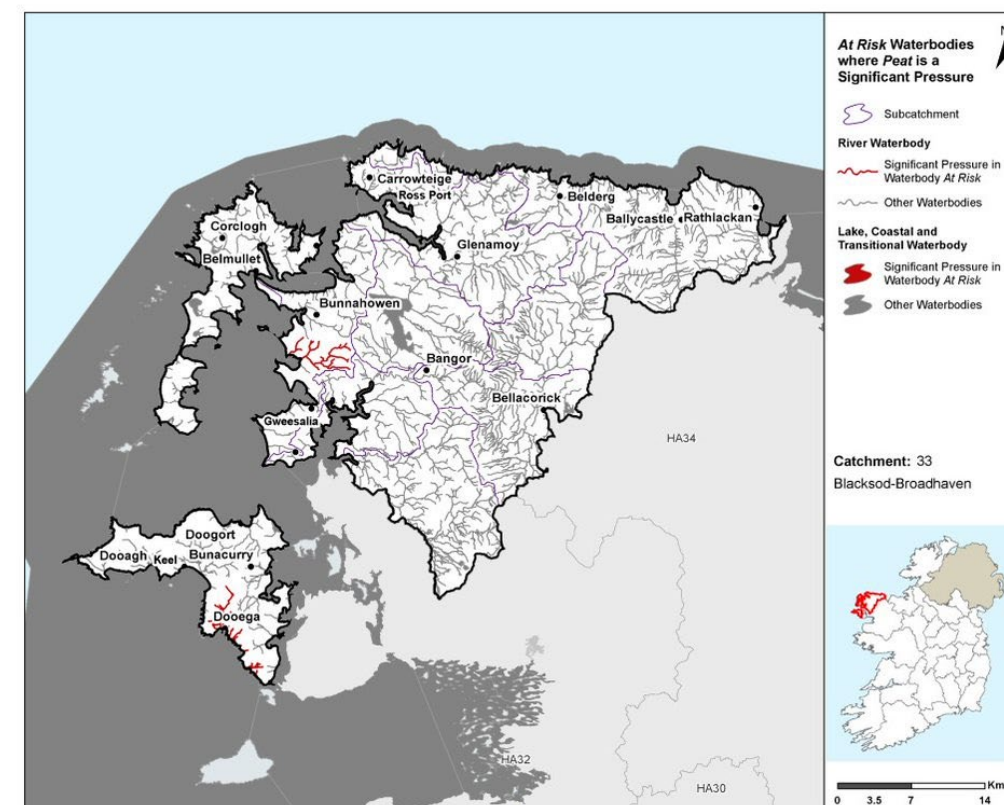
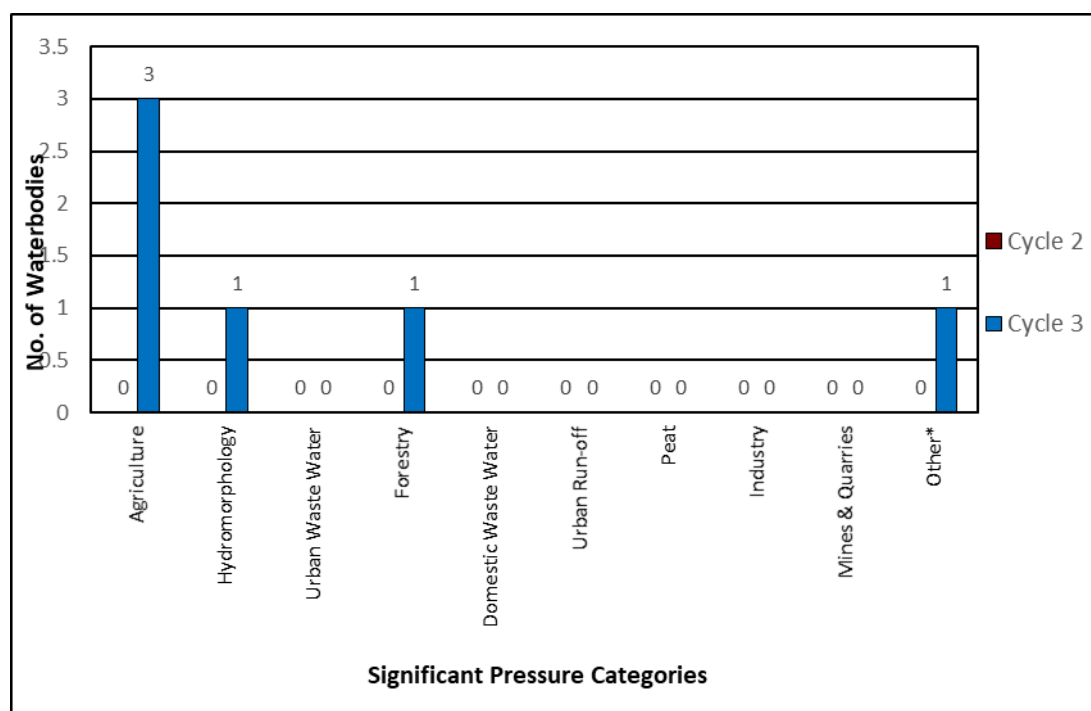


Figure 16: Locations of Waterbodies where Peat is a Significant Pressure

5.2 High Status Objective Waterbodies

- ◆ Agriculture is also the dominant significant pressure in High Status Objective waterbodies, with agricultural pressures identified in all three *At Risk* High Status Objective waterbodies.



*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 17: 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 land in peat, pasture and forestry is responsible for 37%, 34% and 20% of the nitrogen load respectively while land in peat, pasture and forestry also contribute 42%, 30% and 20% of the phosphorus loadings for the catchment respectively (Figure 17).

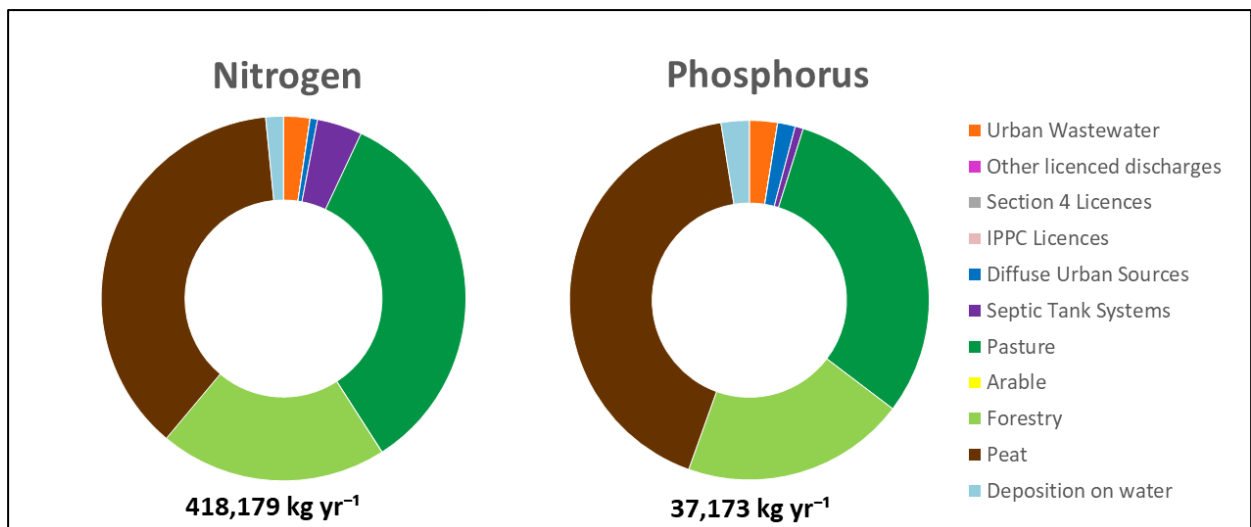


Figure 18: Estimated Proportions of N & P from Each Sector in the Blacksod-Broadhaven Catchment

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 Blacksod - Broadhaven Catchment.

7.2 Phosphorous / Sediment Load Reduction

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

Figure 19 highlights areas where agricultural measures for 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.

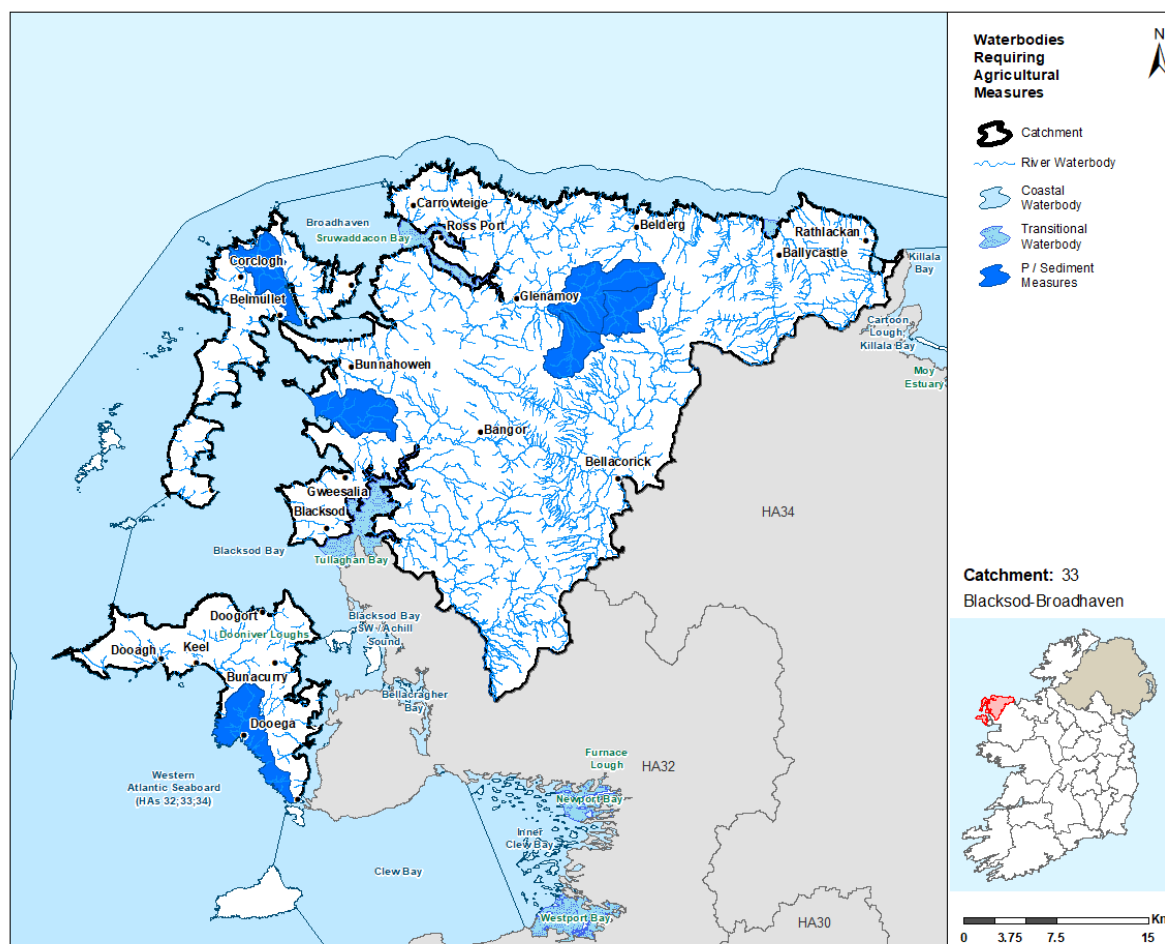


Figure 19: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- ◆ There were two Areas for Action, comprising of six 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 4 and shown in Figure 20. LAWPRO, in conjunction with local authorities and stakeholders from the Western Regional Operational Committee, have been working in these areas since 2018.

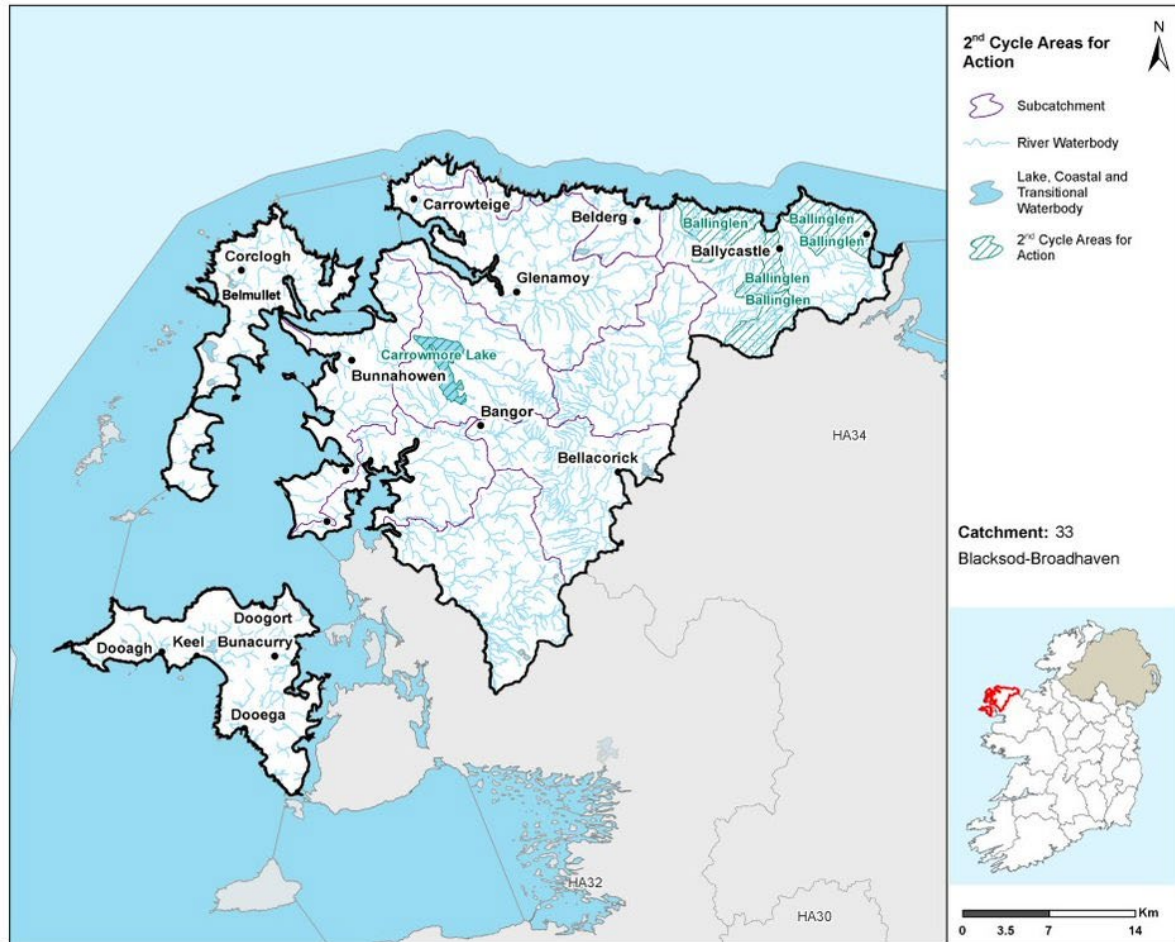


Figure 20: 2nd Cycle Areas for Action Locations

Table 4: 2nd Cycle Areas for Action

2 nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Carrowmore	1	33_3	Mayo	<ul style="list-style-type: none"> • Important for Inland Fisheries Ireland. • Important for Mayo CoCo: fishery, tourism amenity, drinking water abstraction. • Building upon previous work: farm inspections and improving forestry practices. • One water is failing to meet its protected area objective for drinking water.
Ballinglen	5	33_9	Mayo	<ul style="list-style-type: none"> • Important non-designated bathing water area. • Important non-designated salmonid area. • Two deteriorated waterbodies. • Headwaters.

8.2 Status Change in 2nd Cycle Areas for Action

- ◆ For Cycle 3, of the six waterbodies in the 2nd Cycle Areas for Action, there is one waterbody at Good Status, two waterbodies at Moderate Status and three waterbodies where status has not been assigned.
- ◆ There is an overall improvement in the status of one of the 2nd cycle Areas for Action waterbodies across the catchment.⁷
- ◆ Of the three waterbodies within the 2nd Cycle Areas for Action which had status assigned, two experienced no change in status between Cycle 2 and Cycle 3 and one waterbody experienced an improvement in status (Figure 21). The waterbody improvement is within the Ballinglen Area for Action.

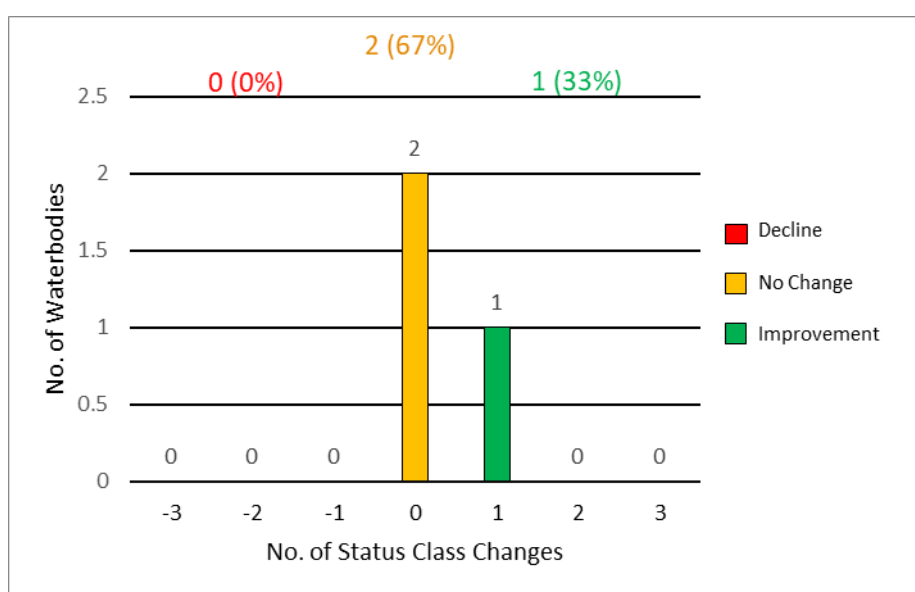


Figure 21: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- ◆ For the six waterbodies in the 2nd Cycle Areas for Action, two (33%) of these are currently *At Risk* and four (67%) in *Review*.
- ◆ For the five river waterbodies, one (20%) is *At Risk* and four (80%) are in *Review*.
- ◆ The one lake waterbody (Carrowmore) is *At Risk*.

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.

- ◆ The *At Risk* waterbodies are equally distributed between lake waterbodies and river waterbodies, with one *At Risk* waterbody in each category. Figure 22 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 three to two *At Risk* waterbodies in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3.

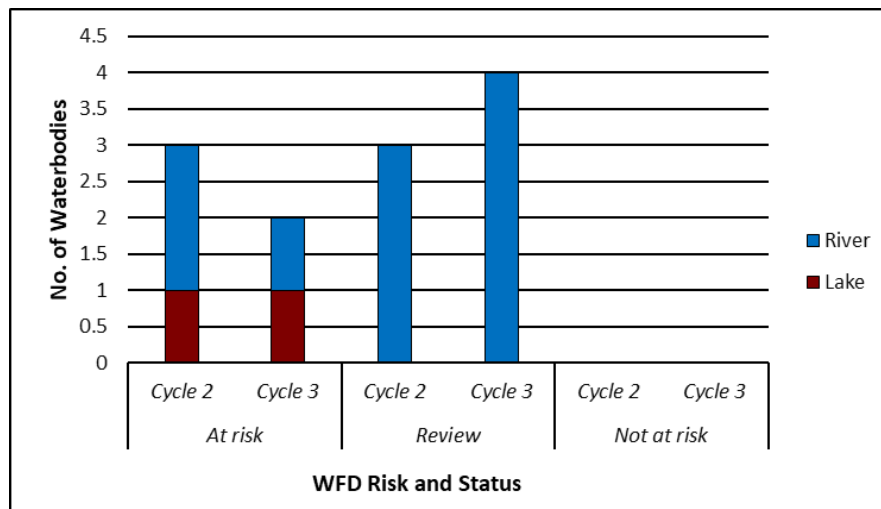
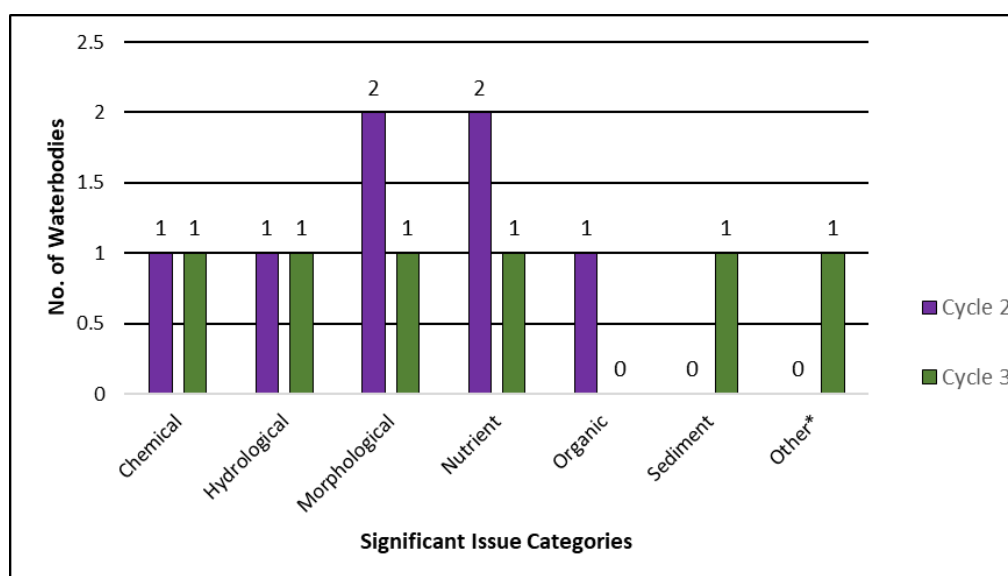


Figure 22: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

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 impacts, nutrient pollution, chemical, hydrological, sediment and other issues each impacting one waterbody (Figure 23).
- ◆ The number of 2nd Cycle Areas for Action waterbodies associated with each of the significant issues categories has either reduced or remained unchanged between Cycle 2 and Cycle 3.

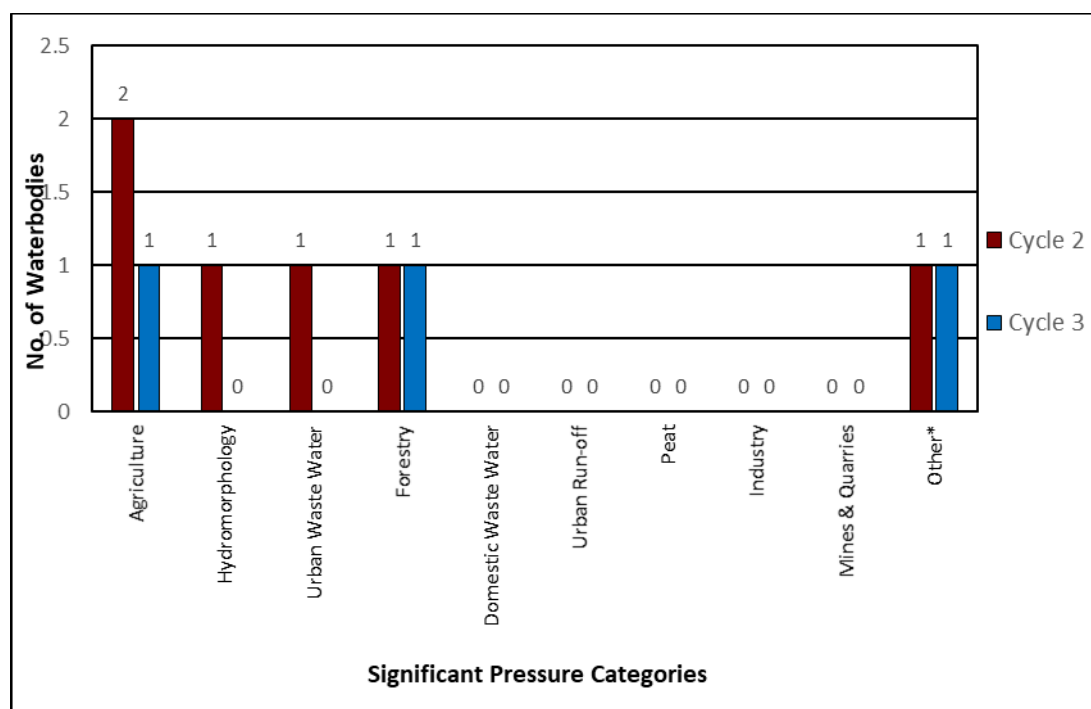


*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 23: 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 - one waterbody remains impacted since Cycle 2.
 - Agriculture – one waterbody is impacted compared to two impacted in Cycle 2.
 - Other (Anthropogenic) - one waterbody remains impacted since 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 24: 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 nine Areas for Action, comprising of 22 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. Seven of the 22 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, seven are in *Review* and eight 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, Mayo County Council are the proposed lead on one Recommended Area for Action and NFGWS are the proposed lead on the remaining two Recommended Areas for Action. The Recommended Areas for Action in the catchment are listed in Table 5 and shown in Figure 25. The reason for selecting for each waterbody in a Recommended Area for Action is provided in Appendix 3.

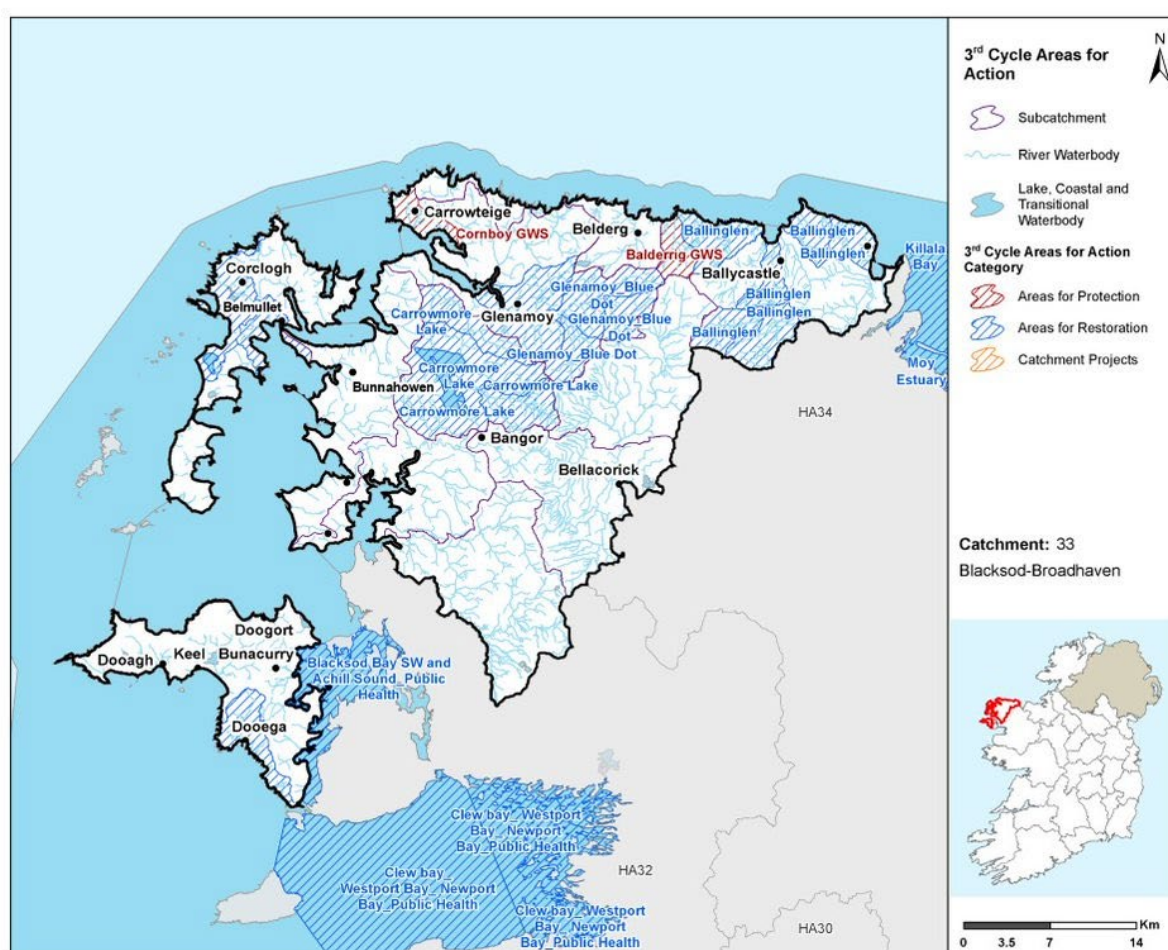


Figure 25: 3rd Cycle Recommended Areas for Action Locations

Table 5: 3rd Cycle Recommended Areas for Action Breakdown

3 rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Ballinglen	6	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Carrowmore Lake	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

3rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Glenamoy_Blue Dot	4	Restoration	Blue Dot Areas for Action LAWPRO and Others	LAWPRO
Cross Lake Imleach Beag Thuaigh	3	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Dooega_Public Health	1	Restoration	Public Health Areas for Restoration NFGWS, IW, HSE, LAs, SFPA	Mayo County Council
Balderrig GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Cornboy GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Blacksod Bay SW and Achill Sound_Public Health	1	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Killala Bay	1	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

10 Catchment Summary

- Of the 58 river waterbodies, seven are *At Risk* of not meeting their WFD objectives.
- Three out of 13 lake waterbodies are *At Risk* of not meeting their WFD objectives.
- There has been an overall deterioration across the catchment with 10 waterbodies *At Risk* in Cycle 3 compared to seven waterbodies *At Risk* in Cycle 2.
- The main significant issues are from nutrients pollution and sediment impacts, followed by morphological, other impacts, hydrological and chemical pollution.
- The main significant pressures are agricultural pressures followed by other (anthropogenic and invasive species), forestry and peat.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by nutrient and sediment.
- In the 2nd Cycle Areas for Action three waterbodies were *At Risk* in Cycle 2 and two waterbodies are *At Risk* in Cycle 3.
- There are nine 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 22 waterbodies with seven waterbodies *At Risk*, seven in *Review* and eight *Not At Risk*.

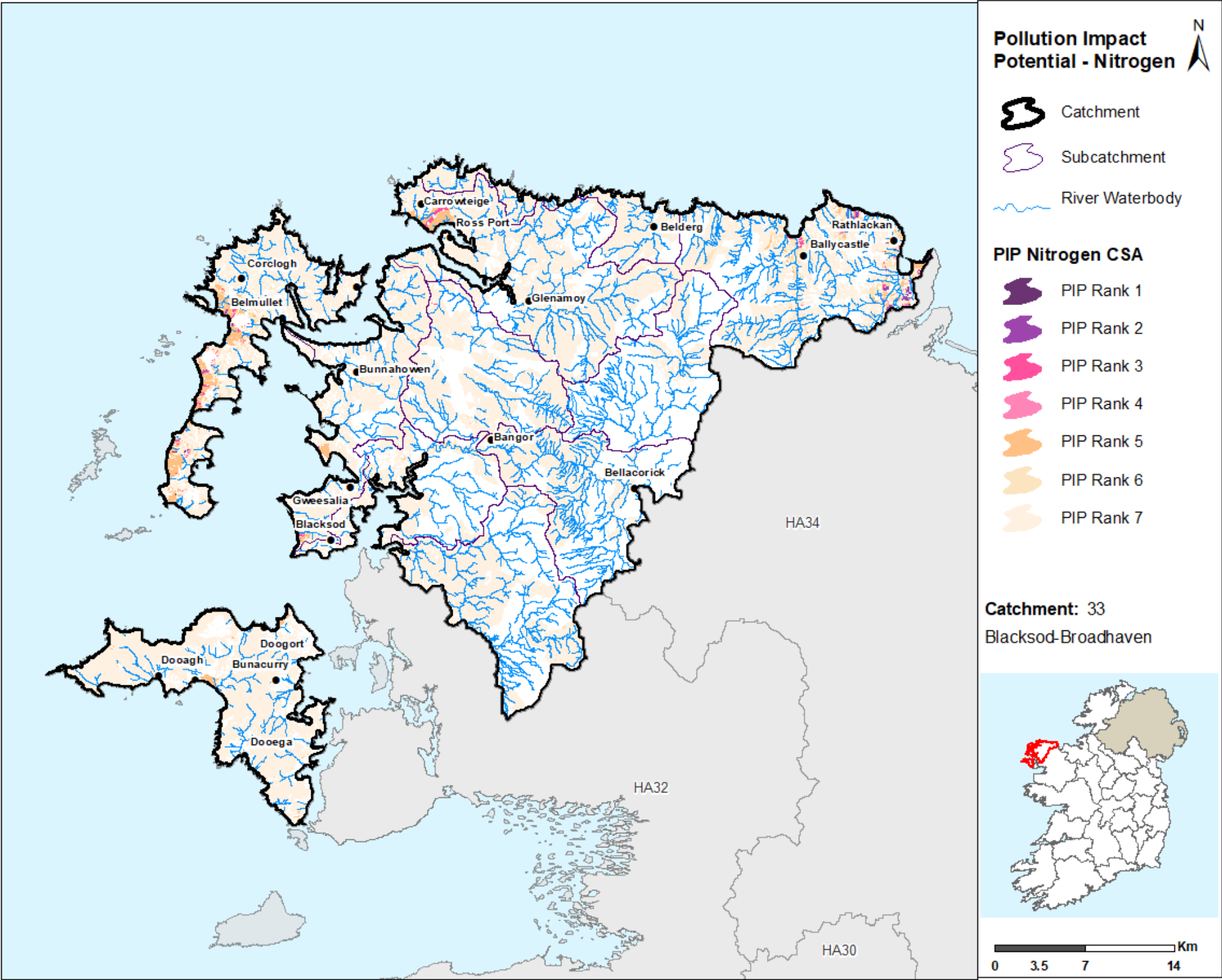
Appendix 1

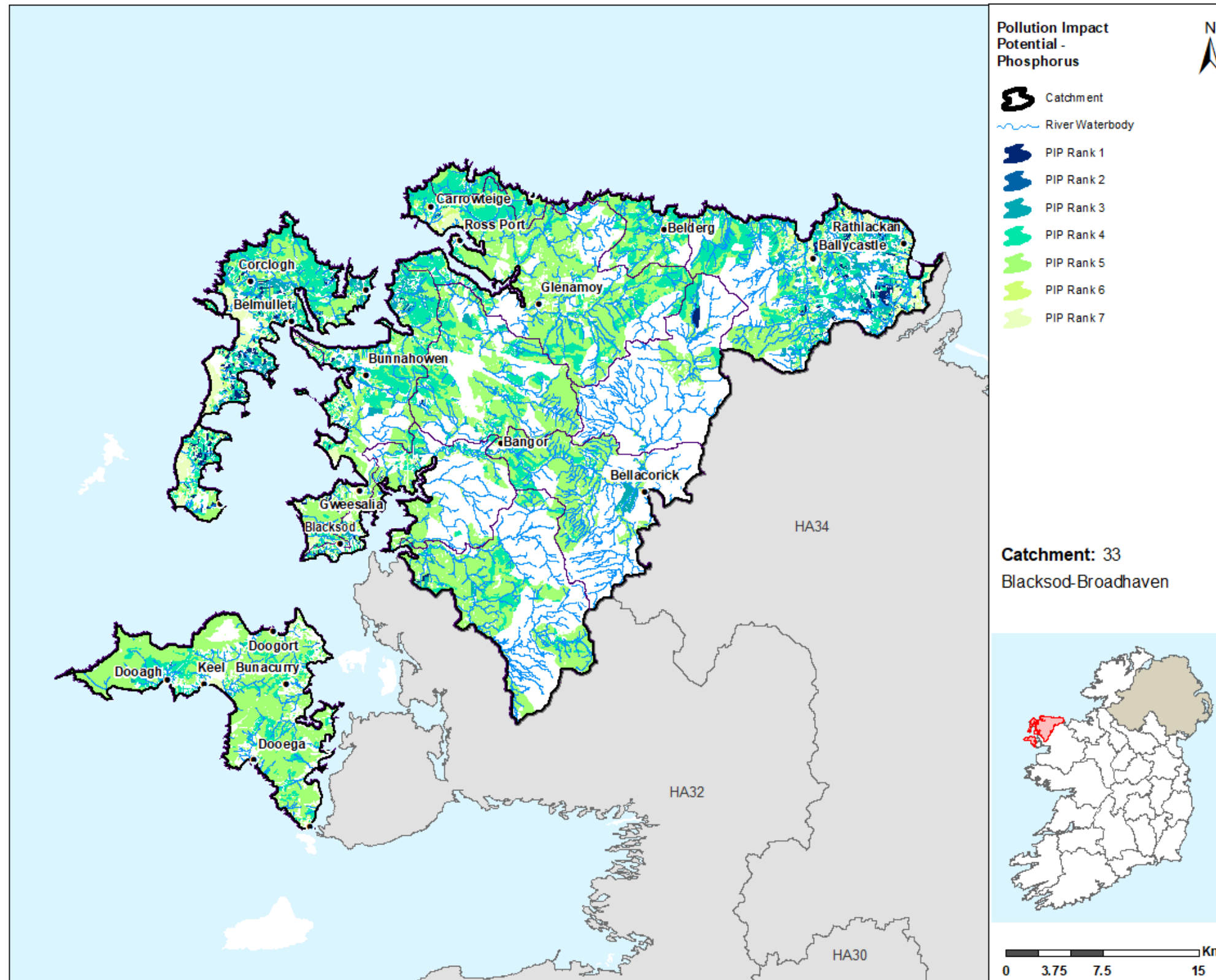
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
BARROOSKY_010	River	IE_WE_33B080400	Good
Broadhaven	Coastal	IE_WE_400_0000	Good
GLENAMOY_010	River	IE_WE_33G010020	Good
GLENAMOY_020	River	IE_WE_33G010050	Poor
GLENGLASSERA_010	River	IE_WE_33G050100	High
KEERGLEN_010	River	IE_WE_33K010200	High
OWENMORE (MAYO)_030	River	IE_WE_33O040250	High
OWENMORE (MAYO)_040	River	IE_WE_33O040270	High
SHESKIN STREAM_010	River	IE_WE_33S030150	High
Sruwaddacon Bay	Transitional	IE_WE_400_0200	Good
Tullaghan Bay	Transitional	IE_WE_390_0100	High

Appendix 2

Pollution Impact Potential Mapping





Appendix 3

Summary information on all waterbodies in the Blacksod-Broadhaven 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)
33_4	IE_WE_33A020100	ALTNABROCKY_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_5	IE_WE_33A040520	ACHADH_GHLAISĀN_010	River	Review	Review	Unassigned	Unassigned	No			
33_9	IE_WE_33B010100	BALLINGLEN_010	River	At Risk	At Risk	Moderate	Moderate	No	Other	Ballinglen	Existing PAA. Characteriation ongoing. Include for 3rd cycle.
33_9	IE_WE_33B010200	BALLINGLEN_020	River	At Risk	Review	Moderate	Good	No		Ballinglen	Existing PAA. Characteriation ongoing. Include for 3rd cycle. Possible WWTP pressures, but needs to be confirmed.
33_10	IE_WE_33B020200	BELDERG_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_7	IE_WE_33B030960	BARNYNAGAPPUL STREAM_010	River	Review	Review	Unassigned	Unassigned	No			
33_10	IE_WE_33B050810	BALLINAPARK_010	River	Review	Review	Unassigned	Unassigned	No			
33_3	IE_WE_33B070200	BELLANABOY_010	River	Not At Risk	Not At Risk	Good	Good	No		Carrowmore Lake	Subcatchment of Carrowmore lake. Important to story & protection of the lake.
33_8	IE_WE_33B080400	BARROOSKY_010	River	Not At Risk	At Risk	High	Good	Yes	Ag	Glenamoy_Blue Dot	At Risk HSO WB. Proposed by MCC for LAWPRO.
33_8	IE_WE_33B140620	BARR_NA_COILLEADH_010	River	Review	Review	Unassigned	Unassigned	No			
33_9	IE_WE_33C010700	CLOONALAGHAN_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_5	IE_WE_33C030050	CLOONEEN (MAYO)_010	River	At Risk	At Risk	Moderate	Moderate	No	Ag, Hymo		
33_5	IE_WE_33C040710	CoimĀn an mhĀjsa_010	River	Review	Review	Unassigned	Unassigned	No		Cross Lake Imleach Beag Thuaigh	
33_9	IE_WE_33C520880	CABINTOWN_010	River	Review	Review	Unassigned	Unassigned	No		Ballinglen	Existing PAA. Characteriation ongoing. Include for 3rd cycle. Unassigned waterbodies plan required.
33_7	IE_WE_33D010200	DOOEGA_010	River	Not At Risk	At Risk	Good	Moderate	No	Ag, Other, Peat	Dooega_Public Health	Declined to moderate and Bathing Water inflow
33_2	IE_WE_33D020100	DOOLOUGH STREAM_010	River	At Risk	At Risk	Poor	Moderate	No	Ag, Peat		
33_5	IE_WE_33F010370	AN_FĀĀL_MĀĀR_010	River	Review	Review	Unassigned	Unassigned	No			
33_8	IE_WE_33G010020	GLENAMOY_010	River	Not At Risk	At Risk	High	Good	Yes	Ag, For	Glenamoy_Blue Dot	At Risk HSO WB. Proposed by MCC for LAWPRO.
33_8	IE_WE_33G010050	GLENAMOY_020	River	Not At Risk	At Risk	High	Poor	Yes	Ag, Hymo, Other	Glenamoy_Blue Dot	At Risk HSO WB. Proposed by MCC for LAWPRO.

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Areas for Action Name	Recommended Areas for Action (reasons for selection)
33_8	IE_WE_33G010100	GLENAMOY_030	River	Not At Risk	Not At Risk	Good	Good	No		Glenamoy_Blue Dot	Include for completeness.
33_9	IE_WE_33G020200	GLENCULLIN (NORTH MAYO)_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_3	IE_WE_33G030100	GLENCULLIN (WEST MAYO)_010	River	Not At Risk	Not At Risk	Good	Good	No		Carrowmore Lake	Subcatchment of Carrowmore lake. Important to story & protection of the lake.
33_9	IE_WE_33G040800	GORTMORE STREAM (MAYO)_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_9	IE_WE_33G050100	GLENGLASSERA_010	River	Not At Risk	Not At Risk	High	High	Yes		Balderrig GWS	Proposed by NFGWS. The NFGWS would like to propose that the Glenglassera Stream catchment is included within a PAA on the basis of Public Health. The stream is used for water abstraction by Balderrig GWS. The stream is currently classified as being of 'High' status and worthy of protection. In addition, the waterbody is located in the Glenamoy Bog Complex SAC. Balderrig GWS
33_8	IE_WE_33G060100	GWEEDANEY_010	River	At Risk	Review	Moderate	Good	No			
33_2	IE_WE_33G080500	GLENCastle_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_7	IE_WE_33G400250	GLENDARARY_010	River	Review	Review	Unassigned	Unassigned	No			
33_5	IE_WE_33I010620	IMLEACH BEAG THUAIDH_010	River	Review	Review	Unassigned	Unassigned	No		Cross Lake Imleach Beag Thuaigh	Drum/Binghamstown GWS
33_9	IE_WE_33K010200	KEERGLEN_010	River	Not At Risk	Not At Risk	High	High	Yes		Ballinglen	Expand PAA. Tributary of Ballinglen_010. Achieving HES so for protection.
33_7	IE_WE_33K020760	KEEL_EAST_010	River	Review	Review	Unassigned	Unassigned	No			
33_9	IE_WE_33K030830	KNOCKBOHA_010	River	Review	Review	Unassigned	Unassigned	No		Ballinglen	Existing PAA. Characteriation ongoing. Include for 3rd cycle. Unassigned waterbodies plan required.
33_9	IE_WE_33K100650	KILLERDUFF_010	River	Review	Review	Unassigned	Unassigned	No		Ballinglen	Existing PAA. Characteriation ongoing. Include for 3rd cycle. Unassigned waterbodies plan required.

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)
33_8	IE_WE_33K180130	KILGALLIGAN_010	River	Review	Review	Unassigned	Unassigned	No		Cornboy GWS	Proposed by GWS. Cornboy GWS
33_4	IE_WE_33M010100	MUING_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_8	IE_WE_33M020150	MUINGNABO_010	River	Not At Risk	Review	Good	Good	No			
33_3	IE_WE_33M030200	MUNHIN_010	River	Not At Risk	Not At Risk	Good	Good	No		Carrowmore Lake	Subcatchment of Carrowmore lake. Important to story & protection of the lake.
33_5	IE_WE_33M080640	AN_MULLACH_RUA_010	River	Review	Review	Unassigned	Unassigned	No			
33_5	IE_WE_33M090470	MOYRAHAN_010	River	Review	Review	Unassigned	Unassigned	No			
33_11	IE_WE_33M190620	MUINGNAHALLOONA_010	River	Review	Review	Unassigned	Unassigned	No			
33_6	IE_WE_33O010010	OWENDUFF (BLACKSOD)_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_6	IE_WE_33O010030	OWENDUFF (BLACKSOD)_020	River	Not At Risk	Not At Risk	Good	Good	No			
33_6	IE_WE_33O010100	OWENDUFF (BLACKSOD)_030	River	Not At Risk	Not At Risk	Good	Good	No			
33_1	IE_WE_33O040050	OWENMORE (MAYO)_010	River	Not At Risk	Not At Risk	Good	High	No			
33_4	IE_WE_33O040200	OWENMORE (MAYO)_020	River	Not At Risk	Not At Risk	Good	High	No			
33_4	IE_WE_33O040250	OWENMORE (MAYO)_030	River	Not At Risk	Not At Risk	High	High	Yes			
33_4	IE_WE_33O040270	OWENMORE (MAYO)_040	River	Not At Risk	Not At Risk	High	High	Yes			
33_4	IE_WE_33O040325	OWENMORE (MAYO)_050	River	Not At Risk	Not At Risk	Good	Good	No			
33_11	IE_WE_33O040500	OWENMORE (MAYO)_060	River	Not At Risk	Not At Risk	Good	Good	No			
33_10	IE_WE_33P020900	PORT_DURLAINNE_010	River	Review	Review	Unassigned	Unassigned	No			
33_2	IE_WE_33R010800	AN_RÁTH_010	River	Review	Review	Unassigned	Unassigned	No			
33_2	IE_WE_33R020920	RINN NA SIONNACH_010	River	Review	Review	Unassigned	Unassigned	No			
33_1	IE_WE_33S030150	SHESKIN STREAM_010	River	Not At Risk	Not At Risk	High	High	Yes			
33_6	IE_WE_33S050005	SRAHDUGGAN STREAM_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_6	IE_WE_33T010100	TARSAGHAUNMORE_010	River	Not At Risk	Not At Risk	Good	Good	No			
33_11	IE_WE_33T070130	TRISTIA_010	River	Review	Review	Unassigned	Unassigned	No			
33_11	IE_WE_33T130850	TULACHÁN DUBH_010	River	Review	Review	Unassigned	Unassigned	No			
33_11	IE_WE_33T210290	TULLAGHAUNNASHAMMER_010	River	Review	Review	Unassigned	Unassigned	No			
33_11	IE_WE_33T280770	TULLAGHAN_010	River	Review	Review	Unassigned	Unassigned	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Areas for Action Name	Recommended Areas for Action (reasons for selection)
33_6	IE_WE_33_1803	Corryaphuil North	Lake	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_10	IE_WE_33_1804	South of CREGGANMORE	Lake	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_6	IE_WE_33_1872	Scardaun	Lake	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_6	IE_WE_33_1876	Corryaphuil South	Lake	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_5	IE_WE_33_1889	Cross	Lake	At Risk	At Risk	Moderate	Moderate	No	Ag	Cross Lake Imleach Beag Thuaigh	
33_7	IE_WE_33_1892	Acorrymore	Lake	Not At Risk	Not At Risk	Good	Good	No			
33_5	IE_WE_33_1893	Leam	Lake	Review	Review	Unassigned	Unassigned	No			
33_7	IE_WE_33_1895	Keel MO	Lake	Not At Risk	At Risk	Good	Moderate	No	Other		
33_5	IE_WE_33_1903	Termoncarragh	Lake	Review	Review	Unassigned	Unassigned	No			
33_10	IE_WE_33_1906	Lougherglass	Lake	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_4	IE_WE_33_1912	Dahybaun	Lake	Review	Review	Unassigned	Unassigned	No			
33_3	IE_WE_33_1914	Carrowmore	Lake	At Risk	At Risk	Moderate	Moderate	No	Ag, For	Carrowmore Lake	Existing <i>At Risk</i> water body. lag time here for lake sediment recovery. Needs to be quantified.
33_7	IE_WE_33_1919	Dooniver Sruhll	Lake	Review	Review	Unassigned	Unassigned	No			
31_4, 32_11, 32_12, 32_13, 32_4, 32_8, 32_9, 33_10, 33_2, 33_5, 33_7, 33_8, 33_9, 34_11, 34_13, 35_12	IE_WE_250_0000	Western Atlantic Seaboard (HAS 32;33;34)	Coastal	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
32_4, 33_11, 33_2, 33_5, 33_7	IE_WE_360_0000	Blacksod Bay	Coastal	Not At Risk	Not At Risk	Unassigned	Unassigned	No			

Subcatchment Code	Waterbody Code	Waterbody Name	Waterbody Type	Risk 10-15	Risk 13-18	Status 10-15	Status 13-18	High Ecological Status Objective Waterbody	Significant Pressures	Recommended Areas for Action Name	Recommended Areas for Action (reasons for selection)
32_4, 33_7	IE_WE_370_0000	Blacksod Bay SW / Achill Sound	Coastal	Not At Risk	Not At Risk	Unassigned	Unassigned	No		Blacksod Bay SW and Achill Sound_Public Health	Proposed by BIM. Shellfish Protected area IEPA2_0030. Concern over the changes in recent years to Bivalve Classification Production Area for oysters - Production area 'Dorriel Creek' from Classificaiton 'A' to Seasonal 'A' . Protect & restore.Shellfish Protected area IEPA2_0029. Concern over the proposed change 2020-2021 to Bivalve Classification Produciton Area for oysters - Production area ' Corraun' from Classificaton 'A' to Seasonal 'A' . Protect & restore.
33_2, 33_5, 33_8	IE_WE_400_0000	Broadhaven	Coastal	Review	Not At Risk	Good	Good	Yes			
33_2, 33_5	IE_WE_405_0000	Belmullet Bay	Coastal	Not At Risk	Review	Unassigned	Unassigned	No			
33_9, 34_11, 34_13, 34_19	IE_WE_420_0000	Killala Bay	Coastal	Review	Not At Risk	Good	Good	No		Killala Bay	Shellfish Protected Area IEPA2_0060. Concern over recent downgrading of shellfish area - Classified Bivalve Mollusc Production area for oysters , from an 'A' Classification to 'B' Classification . Protect & restore
33_7	IE_WE_370_0100	Dooniver Loughs	Transitional	Not At Risk	Review	Unassigned	Unassigned	No			
32_4, 33_11, 33_6	IE_WE_390_0100	Tullaghan Bay	Transitional	Not At Risk	Not At Risk	High	High	Yes			
33_8	IE_WE_400_0200	Sruwaddacon Bay	Transitional	Not At Risk	Not At Risk	High	Good	Yes			
33_9	IE_WE_410_0100	Bunatrahir Bay	Transitional	Not At Risk	Not At Risk	Unassigned	Unassigned	No			
33_7	IE_WE_G_0026	Achill	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
32_2, 32_3, 32_4, 32_5, 33_4, 33_6, 34_14, 34_5	IE_WE_G_0027	Malranny	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)
32_3, 32_5, 33_4, 34_12, 34_14, 34_5, 34_8	IE_WE_G_0030	Laherdaun	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
33_4, 34_14, 34_8	IE_WE_G_0031	Deel	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
33_1, 33_4, 33_9, 34_13, 34_14, 34_19, 34_8	IE_WE_G_0041	Bellacorick-Killala	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
33_9, 34_13	IE_WE_G_0046	Killala North	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
33_9, 34_13, 34_19	IE_WE_G_0047	Killala South	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
33_1, 33_3, 33_4, 33_8, 33_9	IE_WE_G_0052	Bangor	Groundwater	Not At Risk	Not At Risk	Good	Good	No			
32_2, 32_3, 32_4, 33_1, 33_10, 33_11, 33_2, 33_3, 33_4, 33_5, 33_6, 33_8, 33_9, 34_13, 34_14	IE_WE_G_0057	Belmullet	Groundwater	Review	Not At Risk	Good	Good	No			
33_5	IE_WE_G_0065	Belmullet Gravels	Groundwater	Review	Not At Risk	Good	Good	No			

Ag: Agriculture

M+Q: Mines and Quarries

DWW: Domestic Waste Water

Peat: Peat Drainage and Extraction

For: Forestry

UR: Urban Run-off

Hymo: Hydromorphology

UWW: Urban Waste Water

Ind: Industry

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