3rd Cycle Draft
Lough Swilly Catchment Report
(HA 39)

Catchment Science & Management Unit

Environmental Protection Agency

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Preface

This document provides a summary of the water quality assessment outcomes for the Lough Swilly 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 Lough Swilly 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 Lough Swilly catchment includes the area drained by all streams entering tidal water in Lough Swilly between Fanad Head and Dunaff Head, Co. Donegal, draining a total area of 965km² (Figure 1). The largest urban centre in the catchment is Letterkenny. The other main urban centre in this catchment is Buncrana. The total population of the catchment is approximately 55,455 with a population density of 57 people per km². The catchment is largely mountainous and is underlain by metamorphic rocks with the exception of the Glendowan Mountains in the west which are composed of granite. These rocks generally provide relatively poor groundwater resources. This catchment comprises the catchments of the Leanna and Swilly Rivers as well as the south western part of the Malin Peninsula and the eastern side of the Fanad Peninsula.

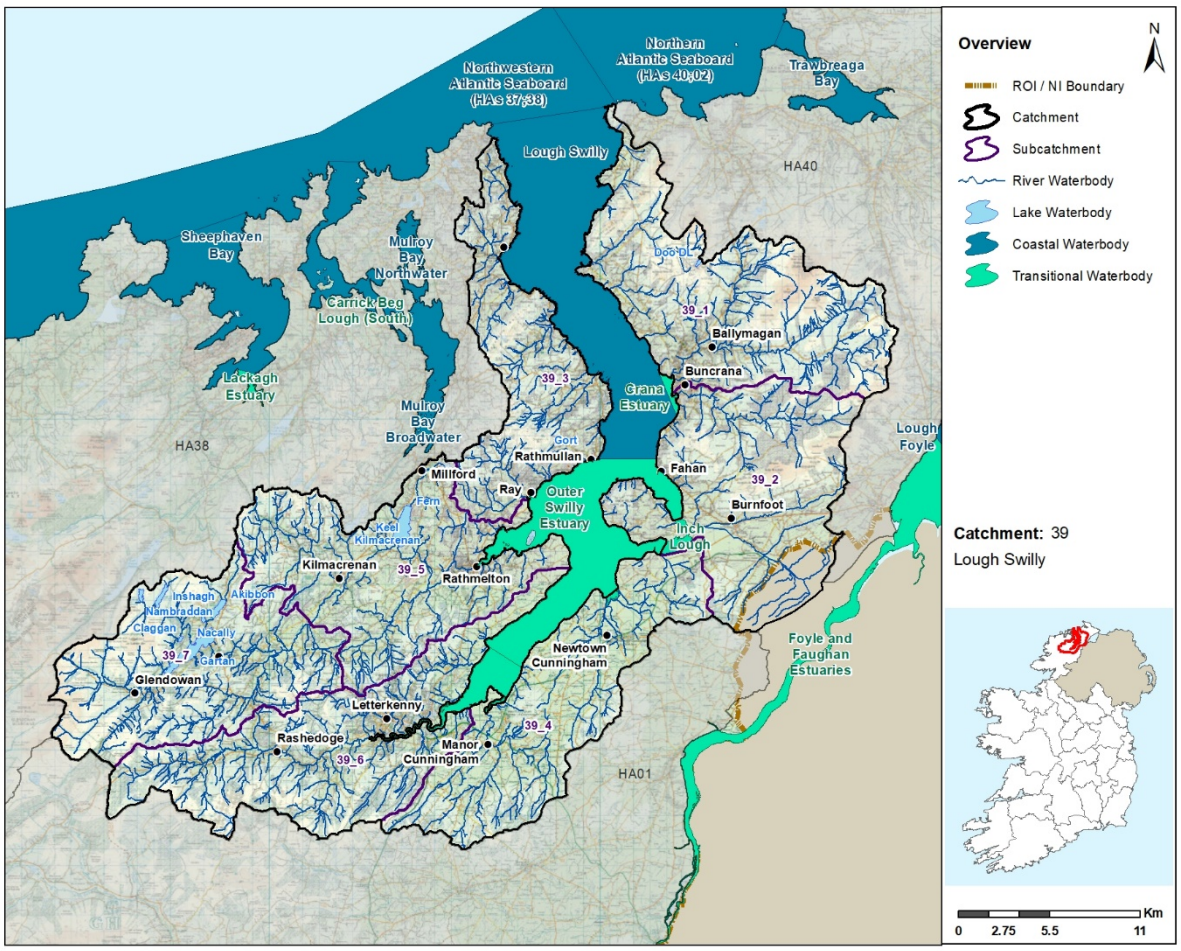


Figure 1: Overview of subcatchments in the Lough Swilly catchment

The Lough Swilly catchment is divided into seven subcatchments (Figure 1) with 51 river waterbodies, nine lake waterbodies, five transitional waterbodies, three coastal waterbodies and eight groundwater bodies (Figure 2).

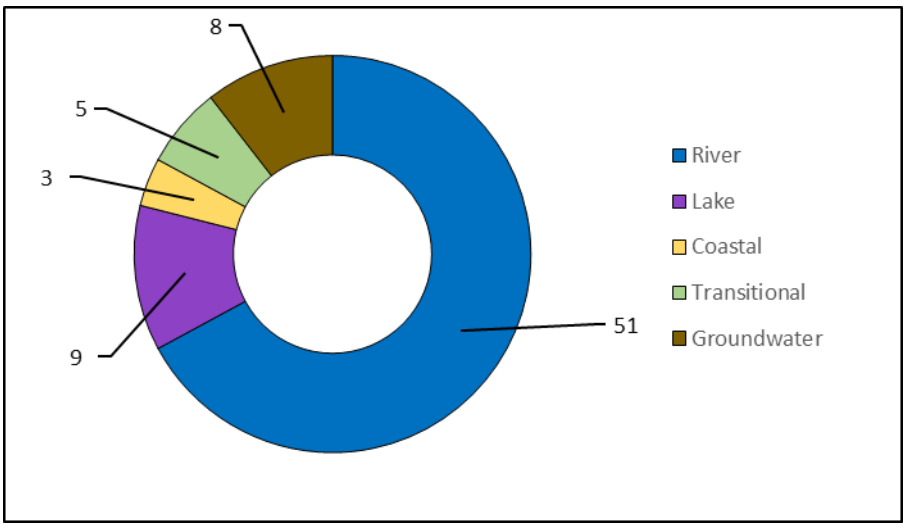


Figure 2: Waterbody types and numbers in the Lough Swilly Catchment.

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 five waterbodies achieving High Status, 26 achieving Good Status, four achieving Moderate Status and 19 achieving Poor Status. There are 22 waterbodies that do not have status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.

- There is one lake waterbody (Gartan), 16 river waterbodies and two coastal waterbodies (Northwestern Atlantic Seaboard (HAs 37;38) and Lough Swilly) that must achieve High Ecological Status (HES) in this catchment. These waterbodies are listed in Appendix 1. Of the 19 HES Environmental Objective waterbodies, four are achieving High Status (three river waterbodies and Northwestern Atlantic Seaboard (HAs 37;38) coastal waterbody), 12are at Good Status and three are at (Glashagh (Lower)_010, Lurgy_010 and Maggy's Burn_010) at Poor Status.

- There have reductions of one waterbody achieving High Status, two waterbodies achieving Good Status and three waterbodies achieving Moderate Status between Cycle 2 and Cycle 3. There has been an increase in six waterbodies achieving Poor Status and one additional waterbody unassigned (Figure 3 & Table 1).

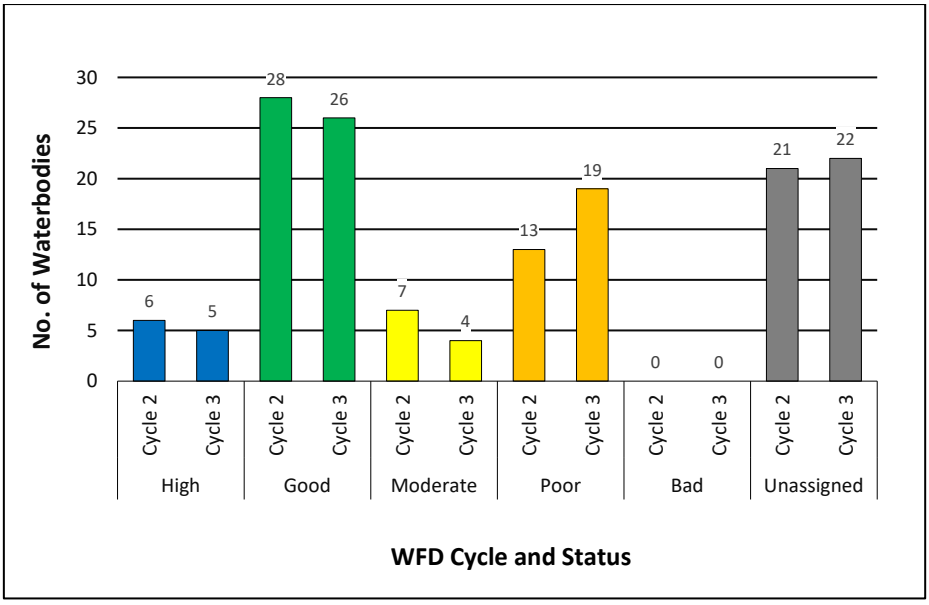


Figure 3: Waterbody Status Breakdown (All waterbodies)

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	3	4	1	0	0	0	2	1	0	0	**6**	**5**
Good	19	15	1	2	0	0	0	1	8	8	**28**	**26**
Moderate	6	2	0	0	1	2	0	0	0	0	**7**	**4**
Poor	11	18	1	1	1	0	0	0	0	0	**13**	**19**
Bad	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Un-assigned	12	12	6	6	2	3	1	1	0	0	**21**	**22**
Total	51	51	9	9	4	5	3	3	8	8	**75**	**76**

- 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, six (11%) waterbodies have improved in status, 36 (67%) waterbodies have remained unchanged and 12 (22%) waterbodies have declined in status.[1]
- There is an overall decline in the status of six waterbodies across the catchment since the Cycle 2 assessment.

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

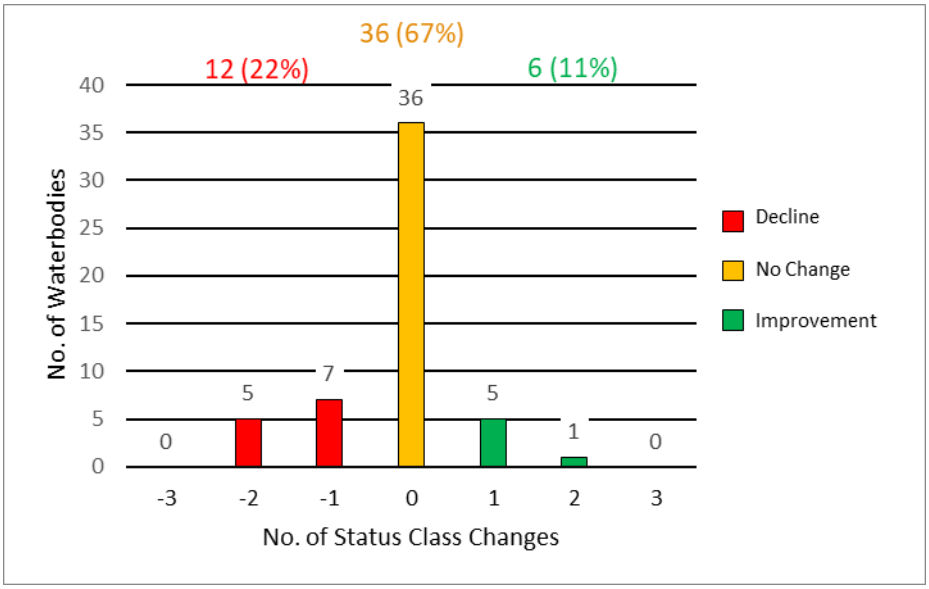


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

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

- Portsalon bathing water had an Excellent classification in 2020, Lisfannon and Rathmullen had a Good classification and Lady's Bay (Buncrana) was classified as Sufficient.

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

2.2.3 Shellfish Areas

- There is one designated shellfish area in the catchment.

[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
Lough Swilly	IEPA2_0042	Swilly Estuary	IE_NW_220_0100		✓
		Lough Swilly	IE_NW_220_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.

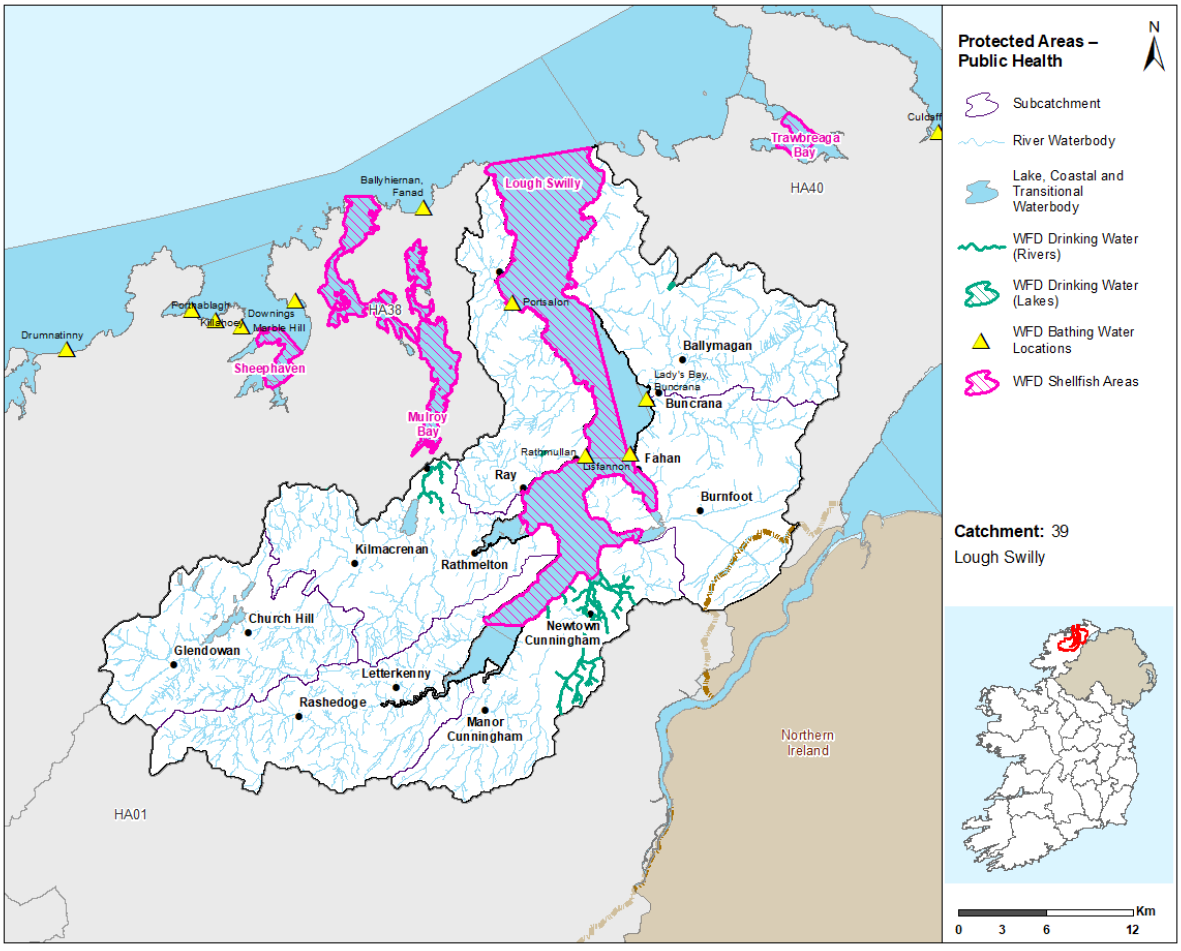


Figure 5: Protected Areas – Public Health

2.2.4 Natura 2000 Sites and Salmonid Waters

- Many of the habitats and species listed for protection in the Birds and Habitats Directives are water dependent. The Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) with

water dependent habitats or species in this catchment are presented in Figure 6, along with waterbodies designated as salmonid waters (S.I. No. 293 of 1988) and waterbodies with Fresh Water Pearl Mussel habitat, where identified.

- There are seven SACs in this catchment, six of which have water dependent habitats or species. The waterbodies within these SACs were assessed for associated water dependent habitats and species and if they met the supporting requirements for habitats and species using their 2013-2018 WFD status. For the purposes of the assessment, it was assumed that Good ecological status is adequate to meet the supporting conditions of all habitats and species with the exception of the Freshwater Pearl Mussel, which has additional requirements for supporting conditions set out in the Freshwater Pearl Mussel Regulations (S.I. No 296 of 2009) for macroinvertebrates, filamentous algae, phytobenthos, macrophytes and siltation.

- Specific water supporting conditions have not been identified for the dependent bird species in the SPAs and so waterbodies associated with SPAs are not included in this assessment.

Results of the overall assessment for this catchment are outlined in

Table 3 below, information at a waterbody level can be viewed at Catchments.ie.[5]

Table 3: Natura 2000 Network Assessment Summary

Water Body Type	Total No.	Meeting the Requirements	Did not meet the Requirements	Unknown*
Rivers	30	9	10	11
Lakes	3	3	0	0
Transitional & Coastal	3	1	2	0

**As the waterbody status was unassigned.*

- There are six river waterbodies with FWPM habitats, one of which had achieved the required macroinvertebrate standard as set out in the FWPM Regulations.

- There are no groundwater bodies delineated and assessed as Groundwater Dependent Terrestrial Ecosystems for this catchment.

- Water dependent SACs/ SPAs (including FWPM SAC sub-catchments) and salmonid waters in the catchment are illustrated in Figure 6.

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

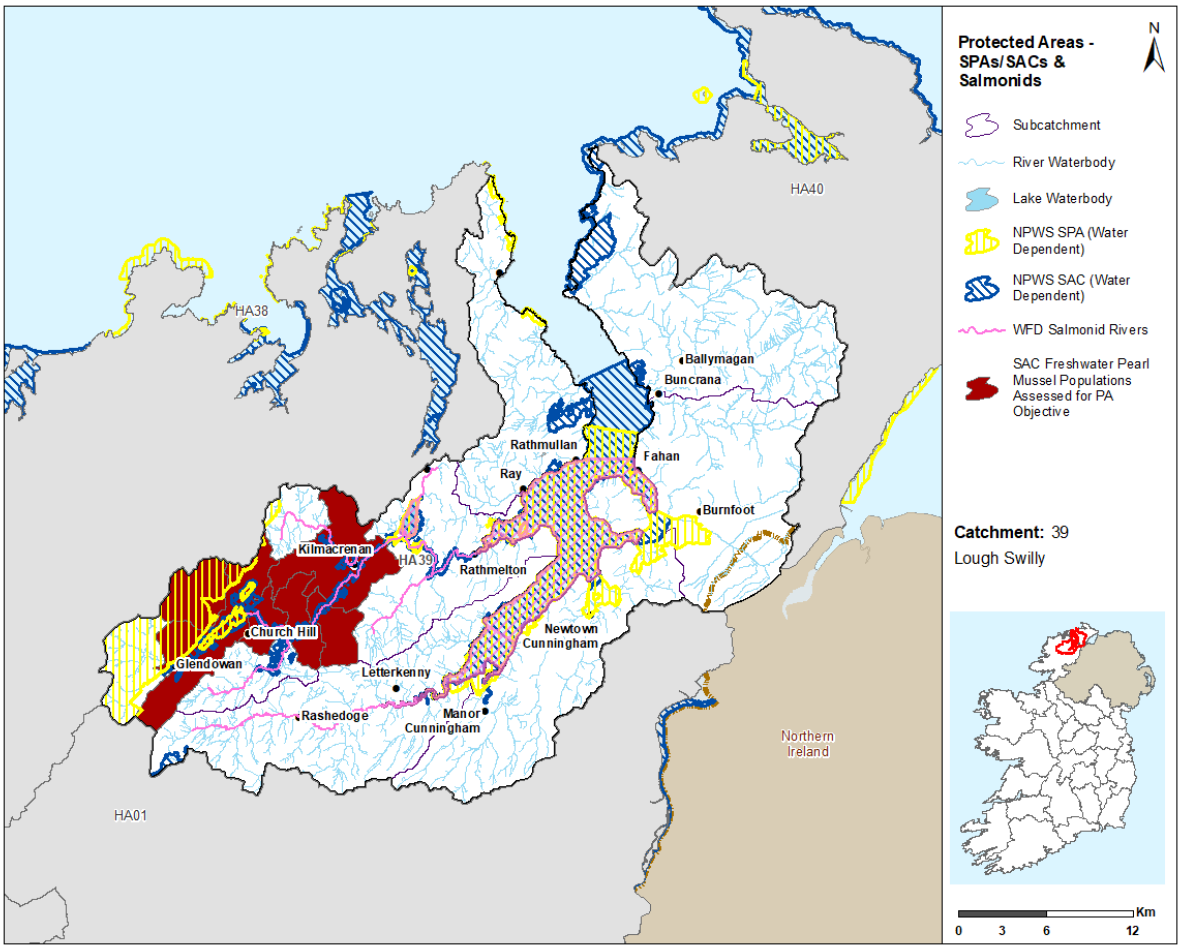


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

2.2.5 Nutrient Sensitive Areas

- 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 designated 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

- The Lough Swilly Catchment has no artificial waterbodies (AWBs).

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 76 waterbodies in the Lough Swilly Catchment and 29 (38%) are currently *At Risk*, 18 (24%) in *Review* and 29 (38%) are *Not At Risk*.

3.2 Surface Waters

- For the 51 rivers waterbodies, 24 (47%) are *At Risk*, 13 (25%) are in *Review* and 14 (27%) are *Not At Risk*.

- For the nine lake waterbodies, two (22%) are *At Risk*, three (33%) are in *Review* and four (44%) are *Not At Risk.* Gartan and Fern are the lake waterbodies *At Risk.*

- For the five transitional waterbodies, three (60%) are *At Risk* and two (40%) are in *Review*. The transitional waterbodies *At Risk* are the Swilly Estuary, Inch Lough and Outer Swilly Estuary.

- All three coastal waterbodies (Northwestern Atlantic Seaboard (HAs 37;38), Northern Atlantic Seaboard (HAs 40;02) and Lough Swilly) are *Not At Risk*.

- The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for 24 (83%) of 29 *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 *seven At Risk* waterbodies and two *Review* waterbodies, and a decline of eight *Not At Risk* waterbodies between Cycle 2 and Cycle 3.

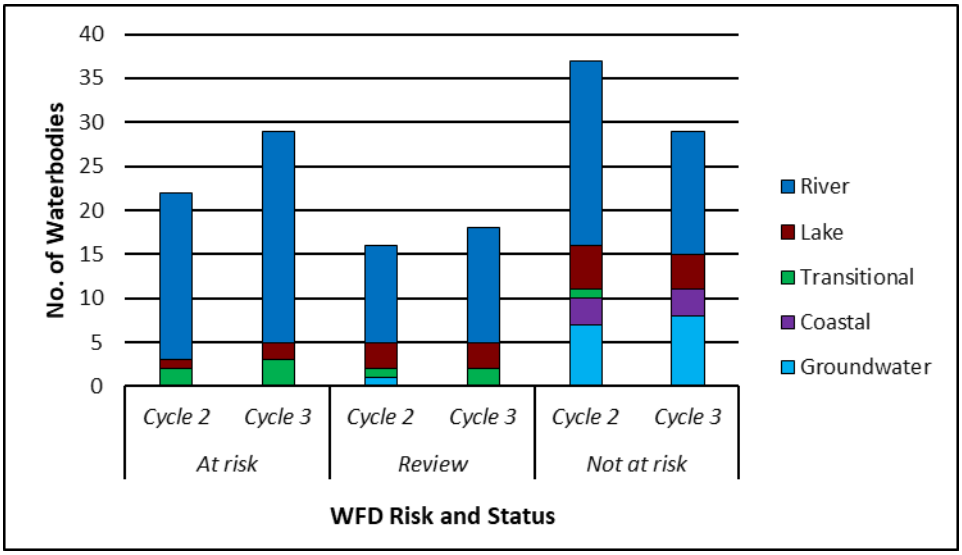


Figure 7: Number of waterbodies in each risk category

- 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.

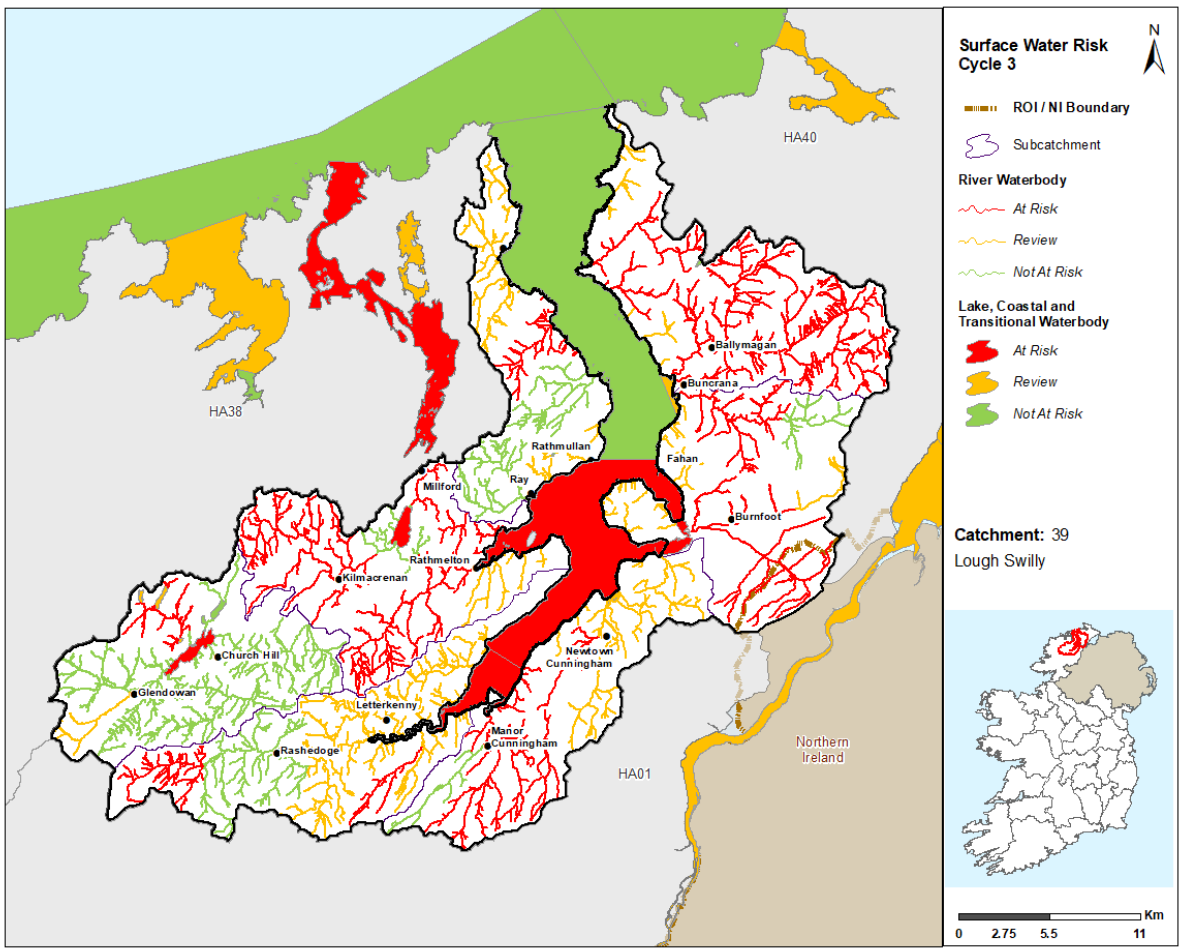


Figure 8: Surface Water Risk Cycle 3

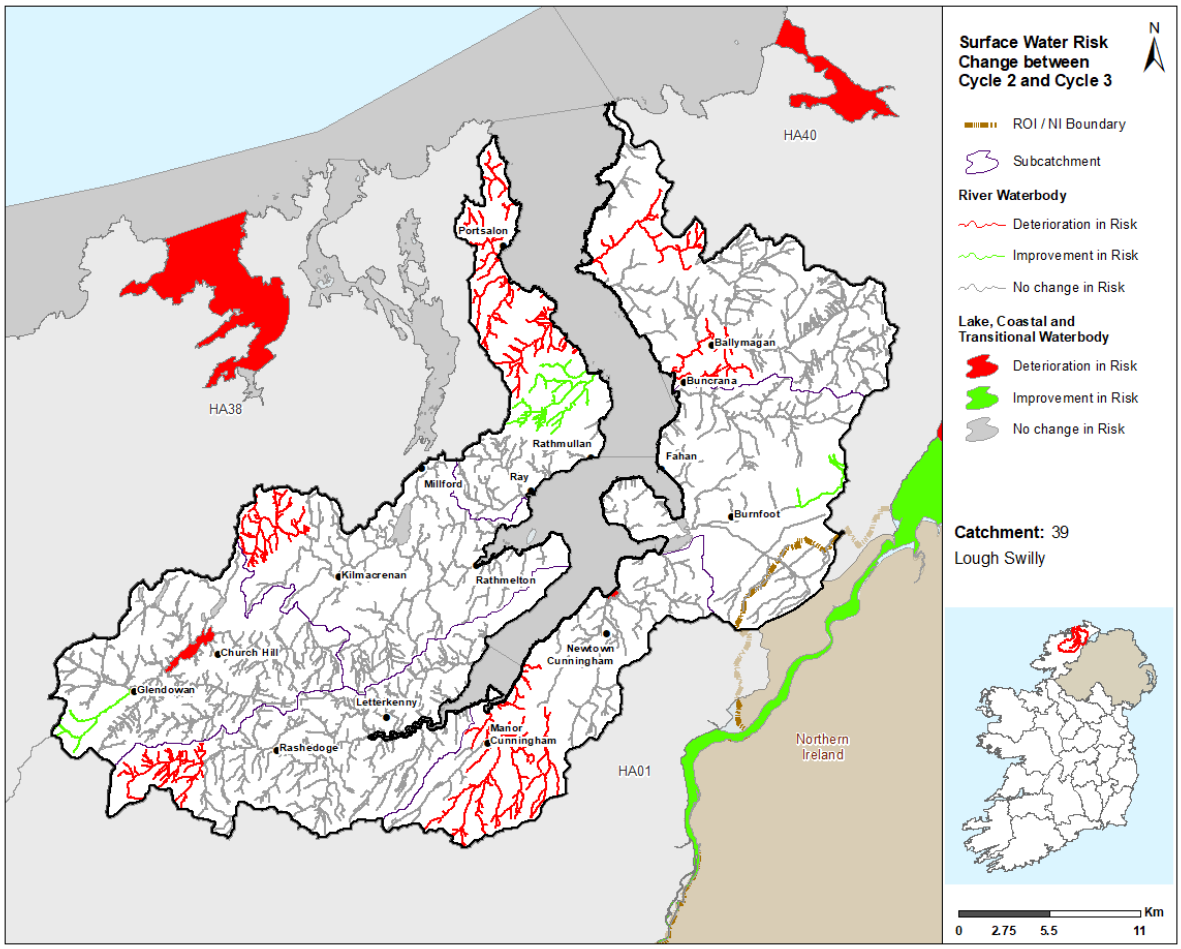


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- All the eight groundwater bodies are *Not At Risk*.
- In Cycle 2, there was one groundwater body in *Review* in this catchment and seven *Not At Risk*.

3.4 Heavily Modified Waterbodies

- As stated in Section 2.3, there are no designated 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

- As stated in Section 2.4, there are no artificial waterbodies in the Lough Swilly Catchment.

4 Significant Issues in *At Risk* Waterbodies

4.1 All Waterbodies

- Excess nutrients remain the most prevalent issues in the Lough Swilly catchment (Figure 10) impacting 20 waterbodies in Cycle 3. Chemical issues are impacting 13 waterbodies, while organic

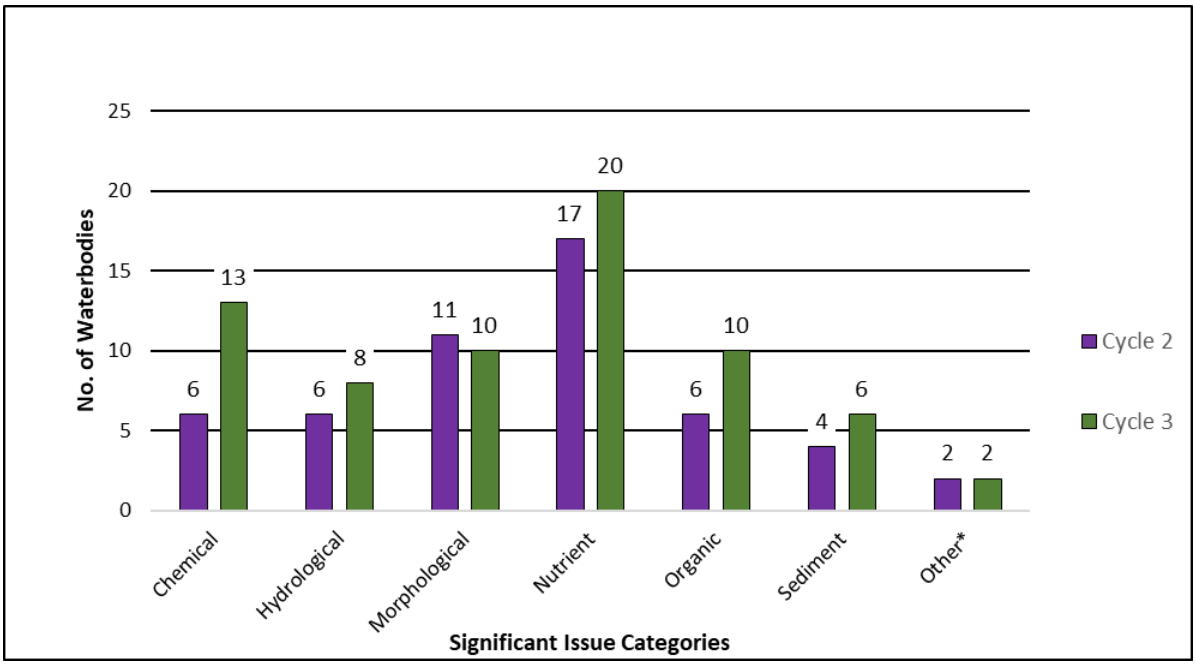
pollution and morphological issues are each impacting 10 waterbodies. Hydrological issues are impacting eight waterbodies and Sediment is impacting six waterbodies.

- For river waterbodies, the main significant issues are nutrient impacts (16), chemical pollution (13), morphological impacts (8), hydrological issues (8), sediment (6), organic pollution (6) and other impacts (2).
- For lake waterbodies, the main significant issues are nutrient pollution (1), organic (1) and morphological impacts (1).
- For the *At Risk* transitional waterbodies, the significant issues are nutrient pollution (3), organic (3) and morphological (1).

- Between Cycle 2 and Cycle 3, the number of waterbodies with chemical issues has increased by seven (from six to 13) nutrient pollution has increased by three from 17 to 20 waterbodies and the number of waterbodies impacted by organic pollution issues has increased by four from six to 10.

- The number of waterbodies impacted by hydrological issues and sediment issues have each increased by two (from six to eight and from four to six respectively) between Cycle 2 and Cycle 3, while the number of waterbodies impacted by other issues has remained unchanged.

- Morphological issues are the only issue type which experienced a decrease since Cycle 2, with 10 waterbodies impacted in Cycle 3, compared to 11 impacted in Cycle 2.

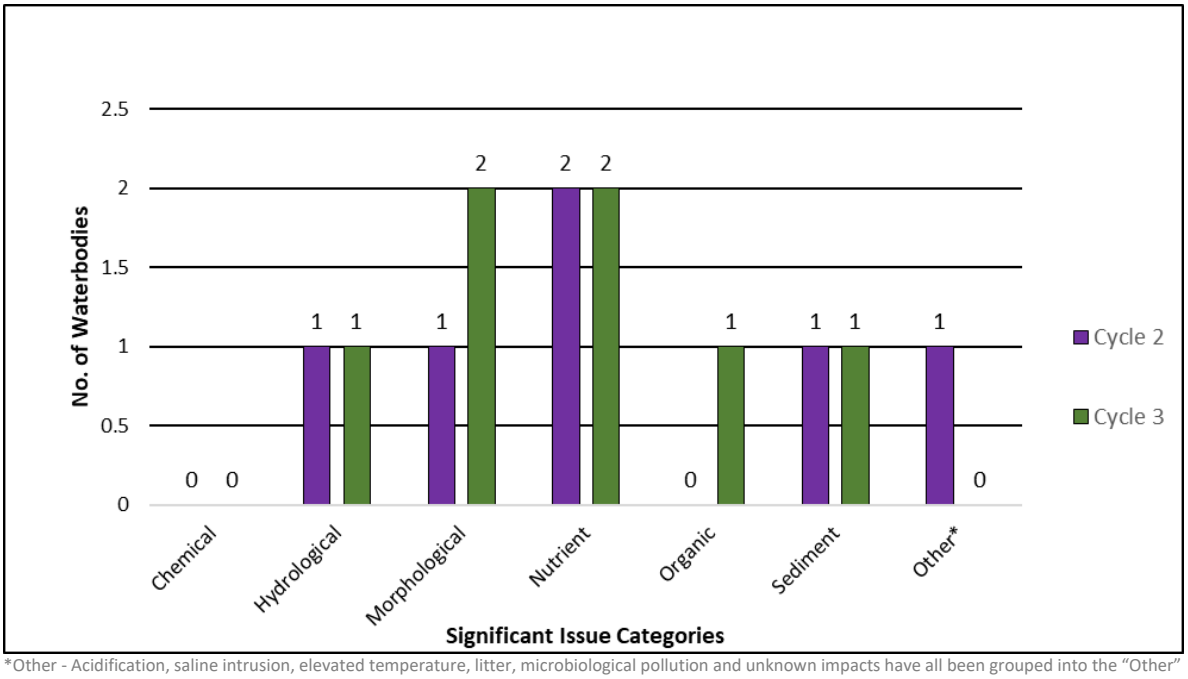


*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

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

4.2 High Status Objective Waterbodies

- For Cycle 3 there are three High Status Objective waterbodies currently *At Risk* (Figure 11). Gartan Lake is impacted by morphological issues, Carn Low_010 river waterbody is impacted by nutrient and organic pollution and Glaskeelan_010 river waterbody is impacted by hydrological and morphological issues as well as nutrient pollution.



*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

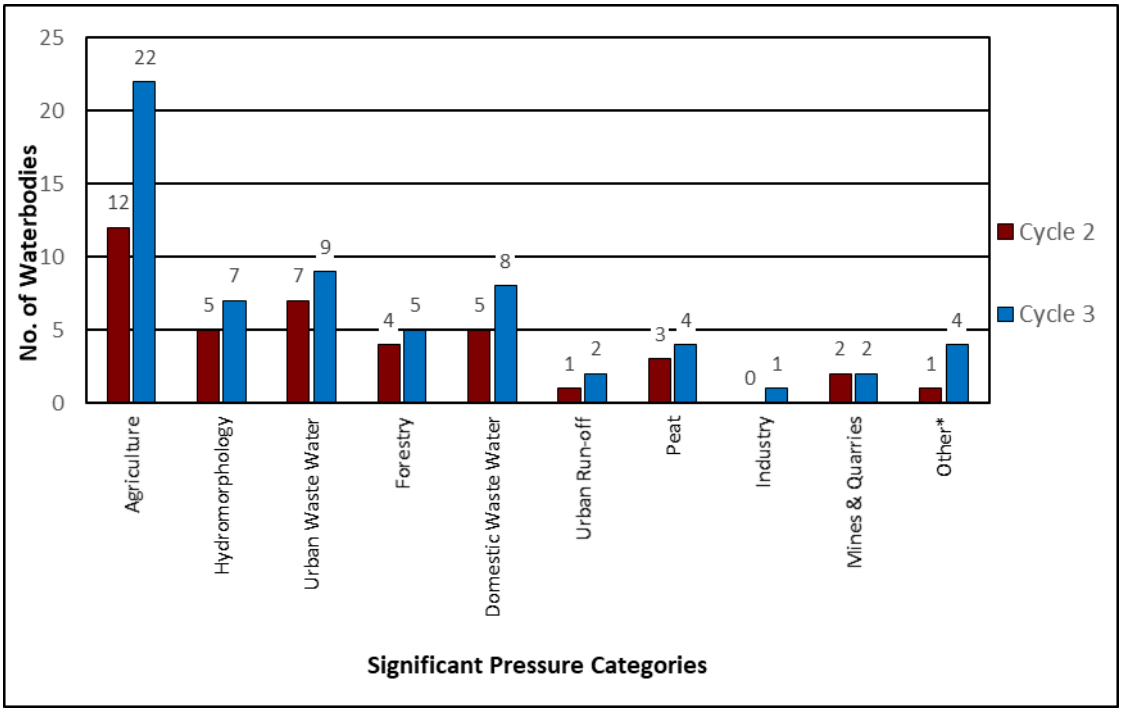
Figure 11: Significant Issues in *At Risk* High Status Objective Waterbodies

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, urban waste water, domestic waste water, hydromorphological pressures, forestry, other[6], peat, mines and quarries, urban run-off and industry.
- When comparing Cycle 2 and Cycle 3, the biggest change is an increase of 10 waterbodies where agriculture is a significant pressure from 12 waterbodies in Cycle 2 to 22 waterbodies in 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 21 river waterbodies and one transitional waterbody (Inch Lough IE_NW_220_0300) (Figure 11). The impacts related to farming in this catchment are overland 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. There may also be issues with agricultural pesticides such as sheep dip entering water bodies.

5.1.1.2 Urban Waste Water

- Urban Waste Water Agglomerations have been identified as a significant pressure in six *At Risk* river waterbodies, two transitional waterbodies (Swilly Estuary & Outer Swilly Estuary) and one lake waterbody (Fern). None of the seven agglomerations identified as significant pressures are scheduled for upgrades under Irish Water's Capital Investment Programme (2020-2024).

Table 4: Urban Waste Water Treatment Agglomerations identified as significant pressures in *At Risk* waterbodies in Cycle 3

Facility name	Facility Type	Waterbody	2013-18 Ecological Status	Irish Water's Expected CIP Completion Date[7]
Letterkenny D0009	Combined Sewer Overflows	Swilly Estuary	Moderate	N/A

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

Letterkenny D0009	Combined Sewer Overflows	Outer Swilly Estuary	Unassigned	N/A
Milford D0342	Agglomeration PE of 1,001 to 2,000	Fern	Poor	N/A
Milford D0342	Agglomeration PE of 1,001 to 2,000	MAGGY'S BURN_010	Poor	N/A
Burnfoot D0531	Agglomeration PE of 500 to 1,000	BURNFOOT_020	Poor	N/A
Kilmacrennan D0513	Agglomeration PE of 500 to 1,000	LEANNAN_050	Good	N/A
Ramelton D0341	Agglomeration PE of 1,001 to 2,000	CARN LOW_010	Good	N/A
Manorcunningham D0519	Agglomeration PE of 500 to 1,000	LESLIE HILL STREAM_020	Unassigned	N/A
Bridgend D0532	Agglomeration PE of 500 to 1,000	SKEOGE_010	Poor	N/A

- Urban waste water significant pressures impacted two additional waterbodies in comparison to Cycle 2 (an increase from seven to nine). Manorcunningham agglomeration is now impacting Leslie Hill Stream_020 and Letterkenny agglomeration is also impacting Outer Swilly Estuary.

5.1.1.3 Domestic waste water

- Domestic waste water has been identified as a significant pressure in six river waterbodies and two transitional waterbodies (Swilly Estuary & Outer Swilly Estuary). The impacts relate to inadequate and poorly sited domestic waste water treatment systems This situation arises typically in areas with poorly draining soils and subsoils, and shallow bedrock areas, and results in elevated nutrient concentrations in nearby streams.

5.1.1.4 Hydromorphological Pressures

- There are five river waterbodies, one lake and one transitional waterbody where hydromorphological pressures have been identified through characterisation. Barrier are the dominant hydromorphological sub-pressure category in the catchment with Mill (Donegal)_020.

5.1.1.5 Forestry

- Forestry has been identified as a significant pressure in five river waterbodies, an increase from four waterbodies impacted in Cycle 2. The types of problems encountered include for example: losses of sediment and/or nutrients during afforestation, tree felling and abstraction; losses of sediment from access roads and during road construction; losses of nutrients during aerial fertilisation and impacts from public access.

5.1.1.6 Other significant pressures

- *Abstraction*

  An abstraction associated with the Mill Brook Salmon Hatchery, has been identified as a pressure impacting the hydrological regime in the Leannan_020 river waterbody. The hydrological regimes of Crana_020, Maggy's Burn_010 and Owennasop_010 river water bodies are affected by abstraction for public water supply. Maggy's Burn_010 is the source for Milford PWS and Crana_020 and Owennasop_010 both supply Fullerton Pollan Dam PWS.

- *Waste*

  One *At Risk* river water body, Owenboy (Crana)_010 is impacted by illegal waste dumping.

5.1.1.7 Peat

- There are extensive areas of bogland in this catchment. Peat drainage and extraction has been identified as a significant pressure in five river waterbodies (Crana_010, Crana_020, Glashagh (Upper)_010, Glaskeelan_010 & Mill (Donegal)_020).

5.1.1.8 Mines & Quarries

- Mines and Quarries, with sediment impacts have been identified in two river waterbodies (Corravaddy Burn_010 and Mill (Donegal)_020).

5.1.1.9 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 the Swilly Estuary and Outer Swilly Estuary.

5.1.1.10 Industry

- Industry has been identified as a significant pressure in one river waterbody (Glashagh (Lower)_010 with an industrial point source discharges, causing nutrient issues.

Table 5: Breakdown of Cycle 3 Industry Significant Pressures in the Lough Swilly Catchment

Waterbody Code	Waterbody Name	Waterbody Type	Emission Type	Name	Impact
IE_NW_39G020200	GLASHAGH (LOWER)_010	River	Section 4	N/A	Nutrient

*Name of facility not provided during characterisation

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

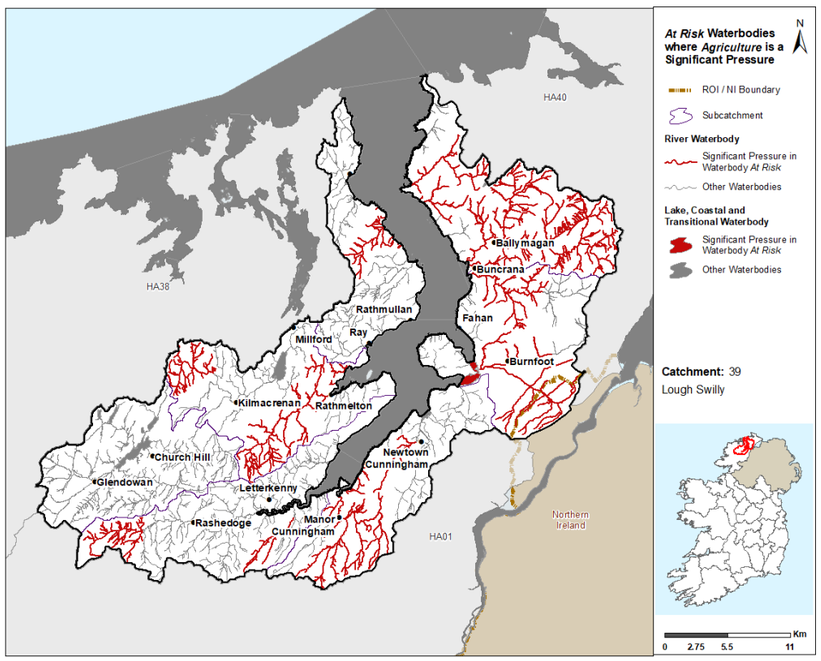


Figure 13: Locations of Waterbodies where Agriculture is a Significant Pressure

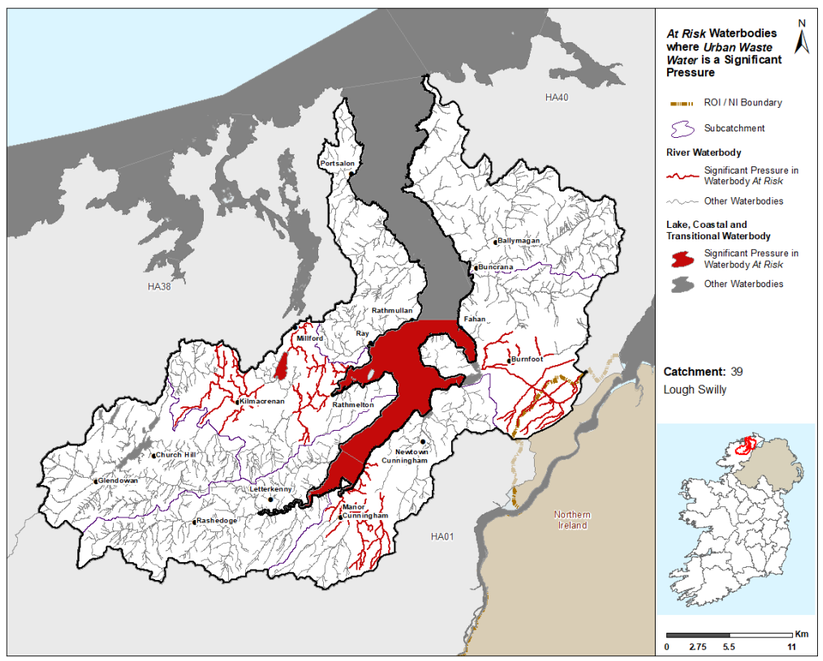


Figure 14: Locations of Waterbodies where Urban Waste Water is a Significant Pressure

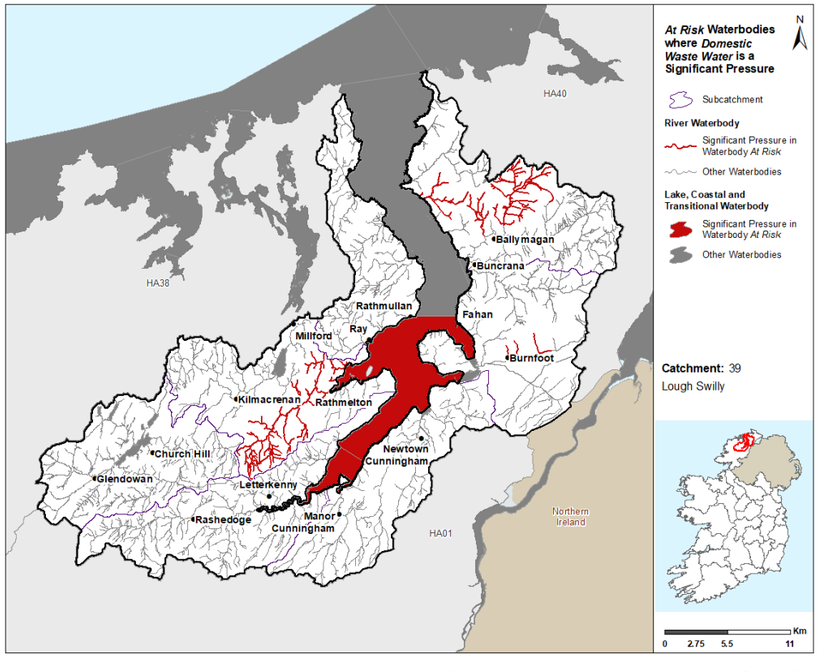


Figure 15: Locations of Waterbodies where Domestic Waste Water is a Significant Pressure

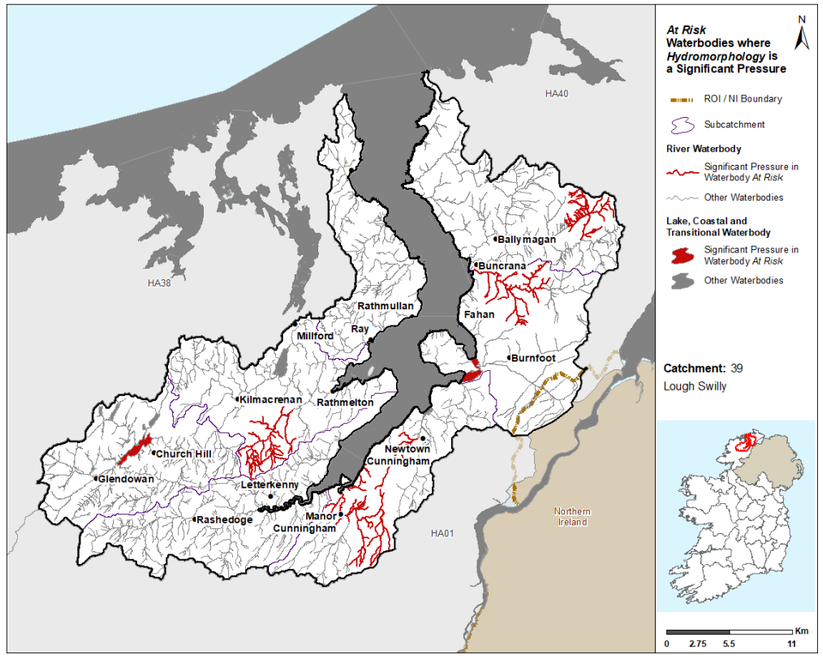
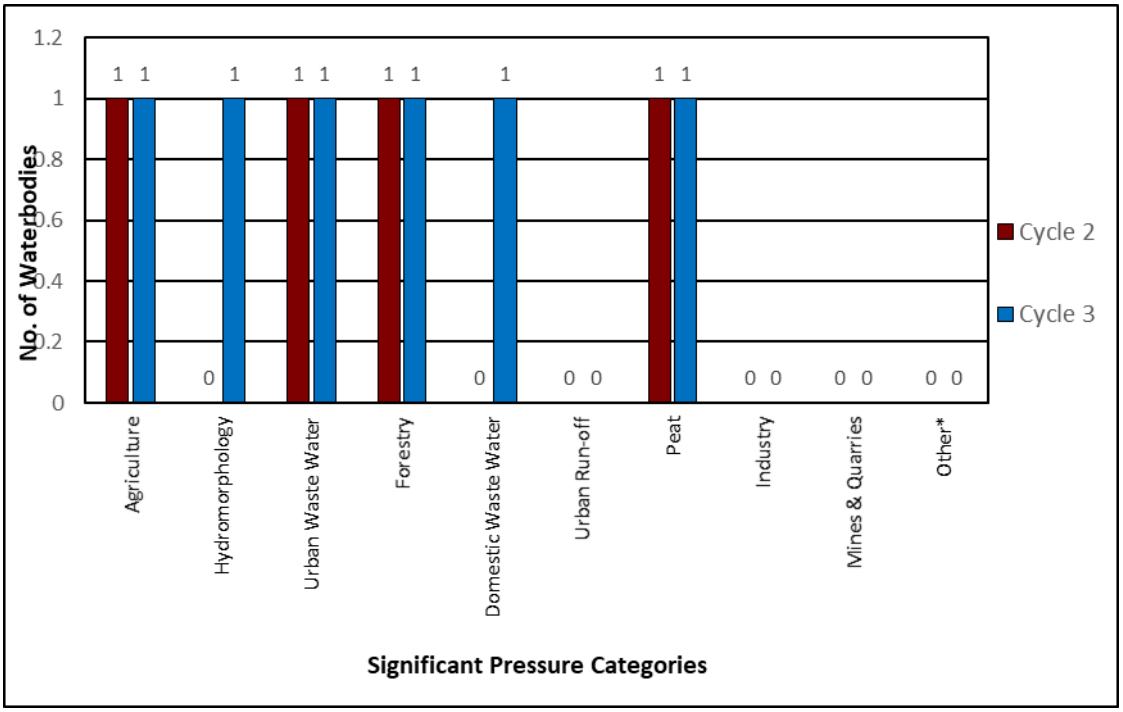


Figure 16: Locations of Waterbodies where Hydromorphological Pressure are Significant

5.2 High Status Objective Waterbodies

- There are three *At Risk*, High Status Objectives waterbodies in the catchment. Gartan lough is affected by hydromorphological pressures. Agriculture, domestic wastewater and urban wastewater are impacting the Carn Low_010 river waterbody and forestry and peat are the pressures impacting the Glaskeelan_010.



*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 pasture, discharges from urban waste water and arable land are responsible for 48%, 14% and 12% of the nitrogen load respectively while land in pasture, discharges from urban waste water, peat and forestry contribute 32%, 29%, 13% and 13% of the phosphorus loadings for the catchment respectively (Figure 17).

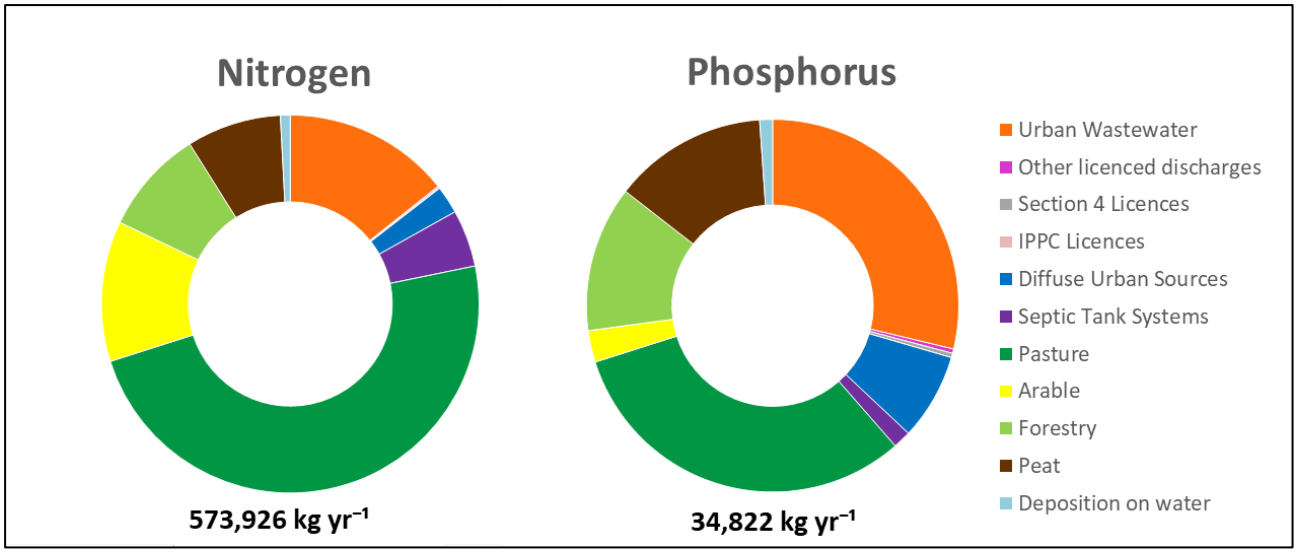


Figure 18: Estimated Proportions of N & P from Each Sector in the Lough Swilly Catchment

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 Lough Swilly 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.

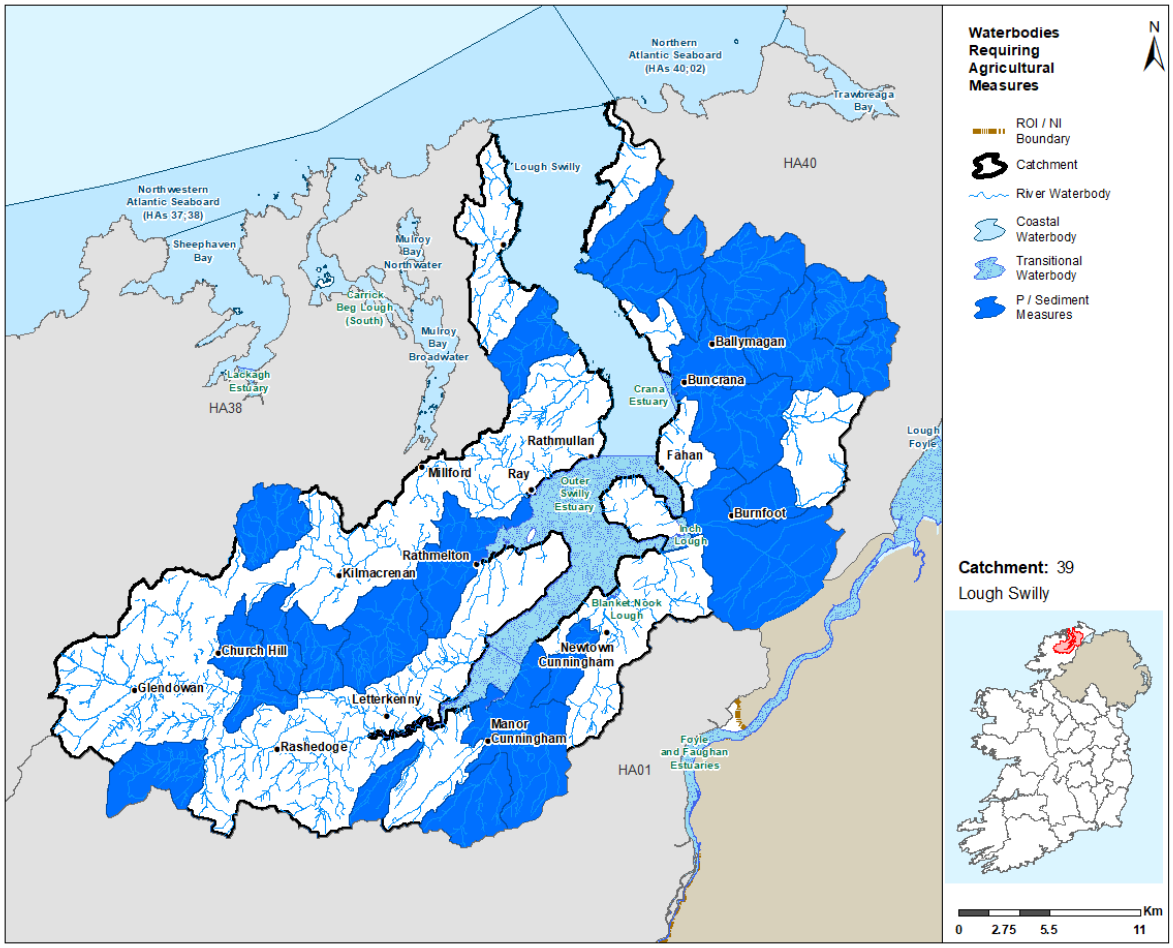


Figure 19: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- There was one Area for Action, comprising of 11 waterbodies, selected for further characterisation and action in the catchment for the 2nd Cycle River Basin Management Plan. The Areas for Action in the catchment are listed in Table 6 and shown in Figure 20. LAWPRO, in conjunction with local authorities and stakeholders from the Borders Regional Operational Committee, have been working in these areas since 2018.

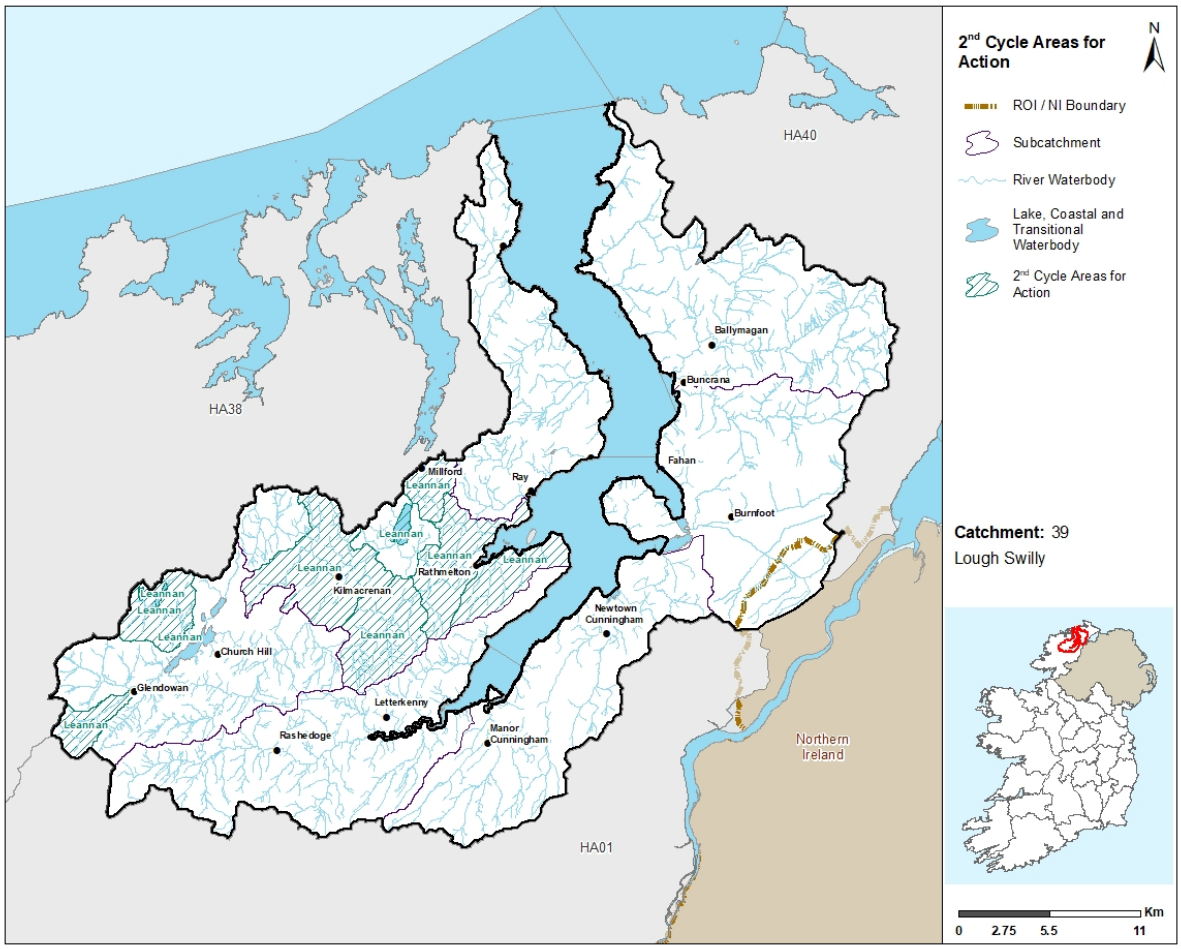


Figure 20: 2nd Cycle Areas for Action Locations

Table 6: 2nd Cycle Areas for Action

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Leannan	11	39_5, 39_7	Donegal	• Two Deteriorated water bodies, one of which is a High Ecological status objective water body. • Four *At Risk* water bodies are not meeting their Protected Area objective. • Freshwater Pearl Mussel and salmonid catchment. • Build on Ramelton and Milford WWTP planned upgrades as well as forestry and agricultural improvements. • Opportunity for community engagement. • Starting at the Headwaters • Incorporating three unassigned lakes and one unassigned river water bodies. • Multiple pressures that can be investigated at the same time.

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
				• Build on status improvements of two of the tributaries. • Supports improvement of the Swilly estuary.

8.2 Status Change in 2nd Cycle Areas for Action

- For Cycle 3, of the 11 waterbodies in the 2nd Cycle Areas for Action, there are four waterbodies at Good Status, three waterbodies at Poor Status and four 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.[8]

- Of the seven waterbodies within the 2nd Cycle Areas for Action which had status assigned, four experienced no change in status between Cycle 2 and Cycle 3, two waterbodies experienced an improvement and one was subject to deterioration in status (Figure 21). Both waterbody improvements and the one waterbody decline were in the Leannan Area for Action.

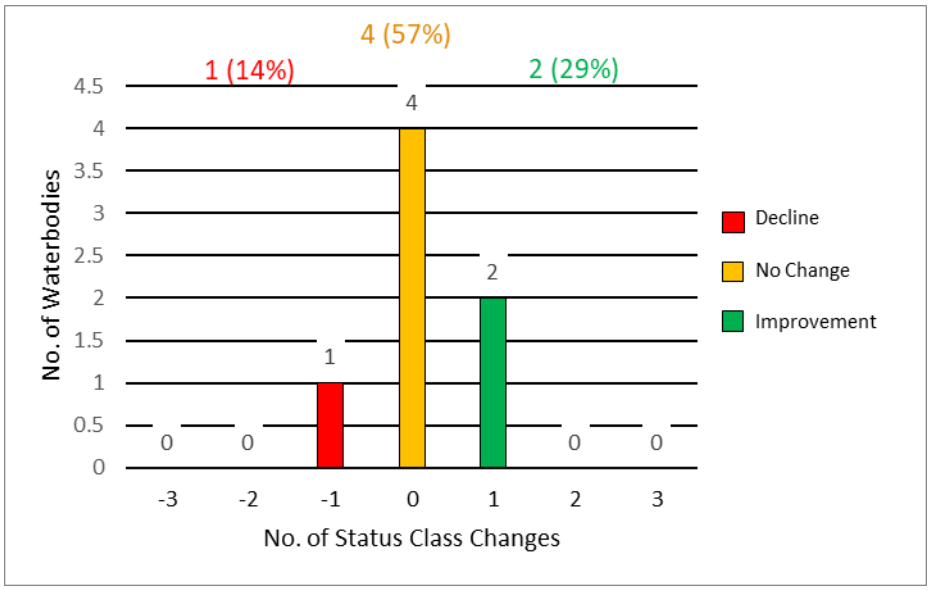


Figure 21: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

[8] Status class change cannot be calculated for waterbodies where status has not been assigned in either cycle 2 or 3 and therefore these waterbodies are not represented in Figure 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.

8.3 Waterbody Risk in 2nd Cycle Areas for Action

- For the 11 waterbodies in the 2nd Cycle Area for Action, six (55%) of these are currently *At Risk* and five (45%) in *Review*.
- For the seven river waterbodies, five (71%) are *At Risk* and two (29%) are in *Review*.
- Of the four lake waterbodies (Inshagh, Fern, Nambradden and Claggan), one (25%) is *At Risk* and three (75%) are in *Review*. Fern is the lake waterbody *At Risk.*
- The largest proportion of the *At Risk* waterbodies are found in river waterbodies, accounting for five (83%) of the six *At Risk* waterbodies. 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 reduction in the number of *At Risk* waterbodies (from seven to six) in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3.

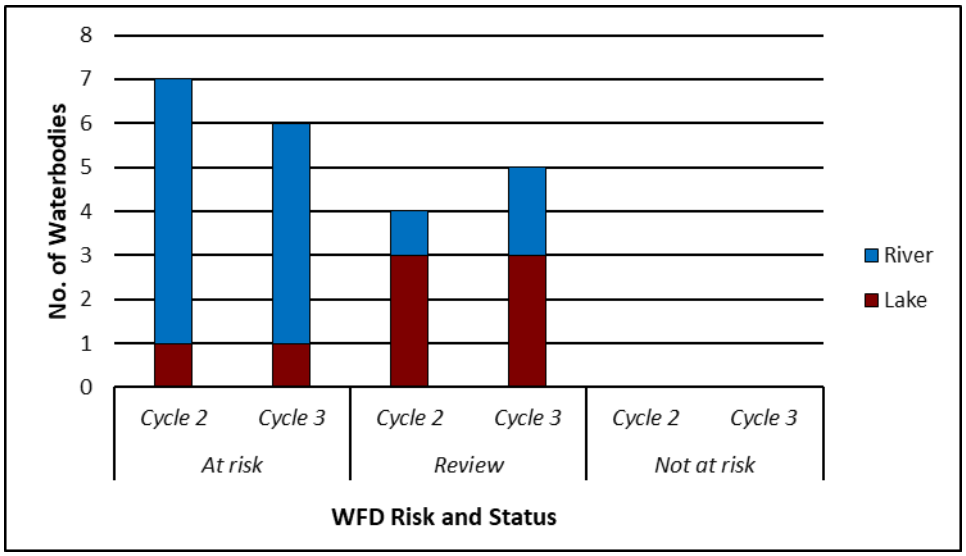
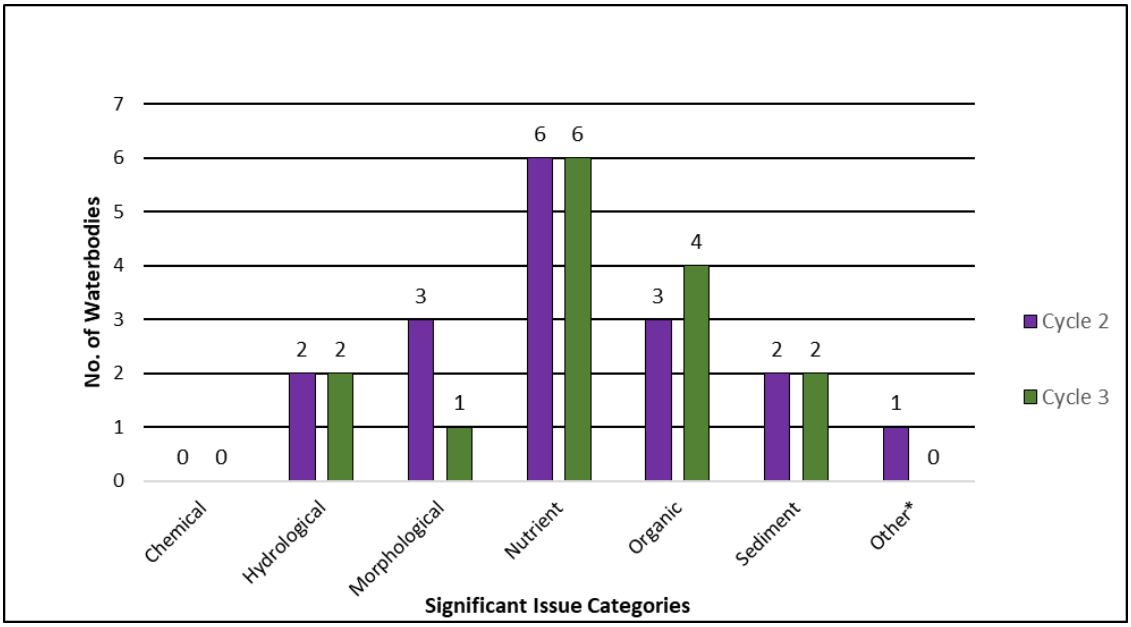


Figure 22: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

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 nutrient and organic pollution, impacting six and four waterbodies respectively (Figure 23). This is followed by sediment and hydrological issues which are impacting two waterbodies and morphological issues are impacting one waterbody.
- The number of 2nd Cycle Areas for Action waterbodies associated with hydrological issues, nutrient pollution and sediment has remained unchanged since Cycle 2. There has been an increase by one in the number of waterbodies impacted by organic pollution and a decrease by two in the number of waterbodies impacted by morphological issues between Cycle 2 and Cycle 3.

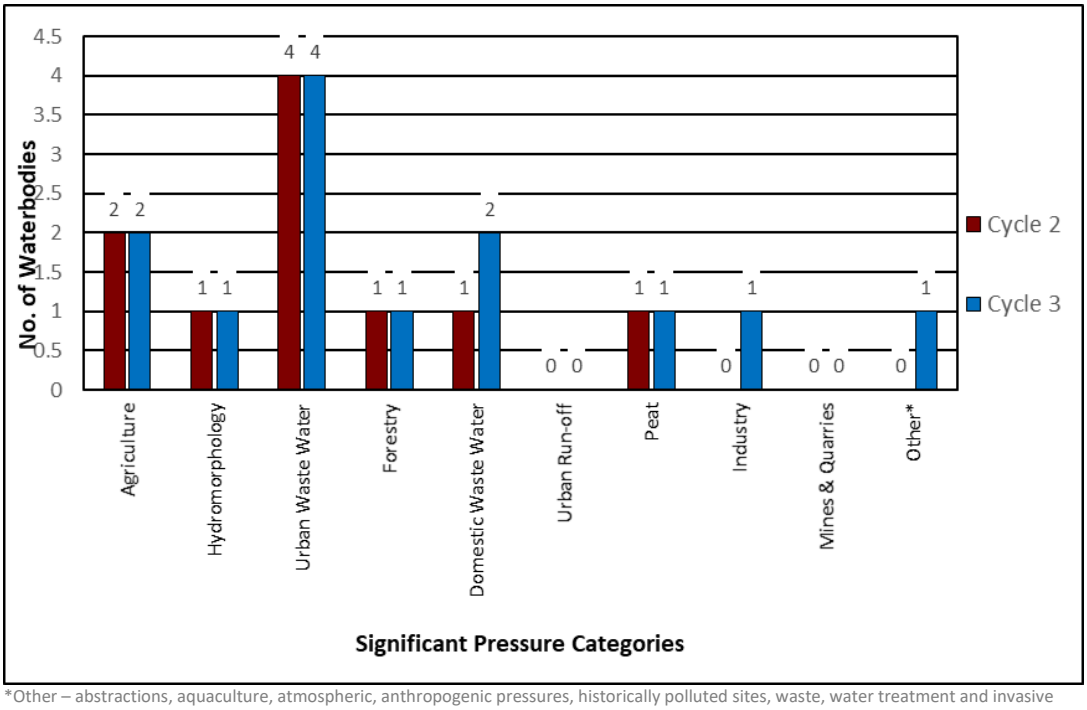


*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

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:
  - Urban waste water significant pressures impacting waterbodies remains unchanged since the previous cycle, impacting four waterbodies in both cycles.
  - Other pressures, domestic waste water and industry related pressures have all increased by one waterbody between the two cycles.
  - Agriculture remains impacting two waterbodies in Cycle 3 similarly to Cycle 2.
  - Forestry, hydromorphology and peat pressures are all impacting one waterbody each in both cycles.
- When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has been no change in all significant pressure categories in the catchment with the exception of domestic waste water, industry and other pressures which all experienced increases.



*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 five Recommended Areas for Action, comprising of 31 waterbodies, selected for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 18 of the 31 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, five are in *Review* and eight are *Not At Risk.* The five Recommended Areas for Action consist of five Areas for Restoration. LAWPRO are the proposed lead organisation in four Recommended Areas for Action and Donegal County Council are the proposed lead on the remaining Recommended Area for Action. The Areas for Action in the catchment are listed in Table 7 and shown in Figure 25. The reason for selecting for each waterbody in a Recommended Area for Action is provided in Appendix 3.

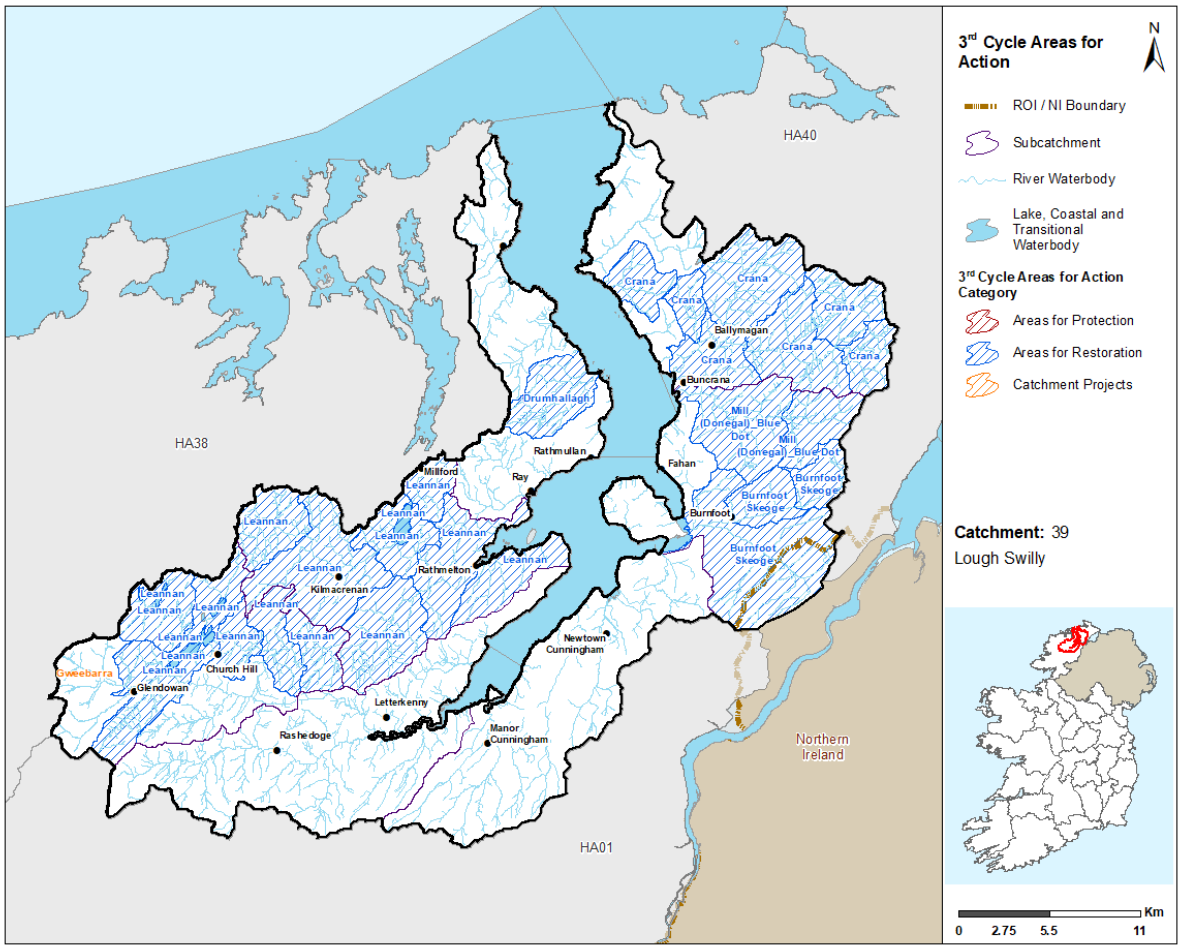


Figure 25: 3rd Cycle Recommended Areas for Action Locations

Table 7: 3rd Cycle Recommended Areas for Action Breakdown

3rd Cycle Recommended Areas for Action	Number of Waterbodies	Recommended Areas for Action Category	Recommended Areas for Action Sub-category	Lead Organisation
Crana	7	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Burnfoot Skeoge	3	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Drumhallagh	1	Restoration	LA Areas for Restoration Local Authorities	Donegal County Council
Leannan	18	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Mill (Donegal)_Blue Dot	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

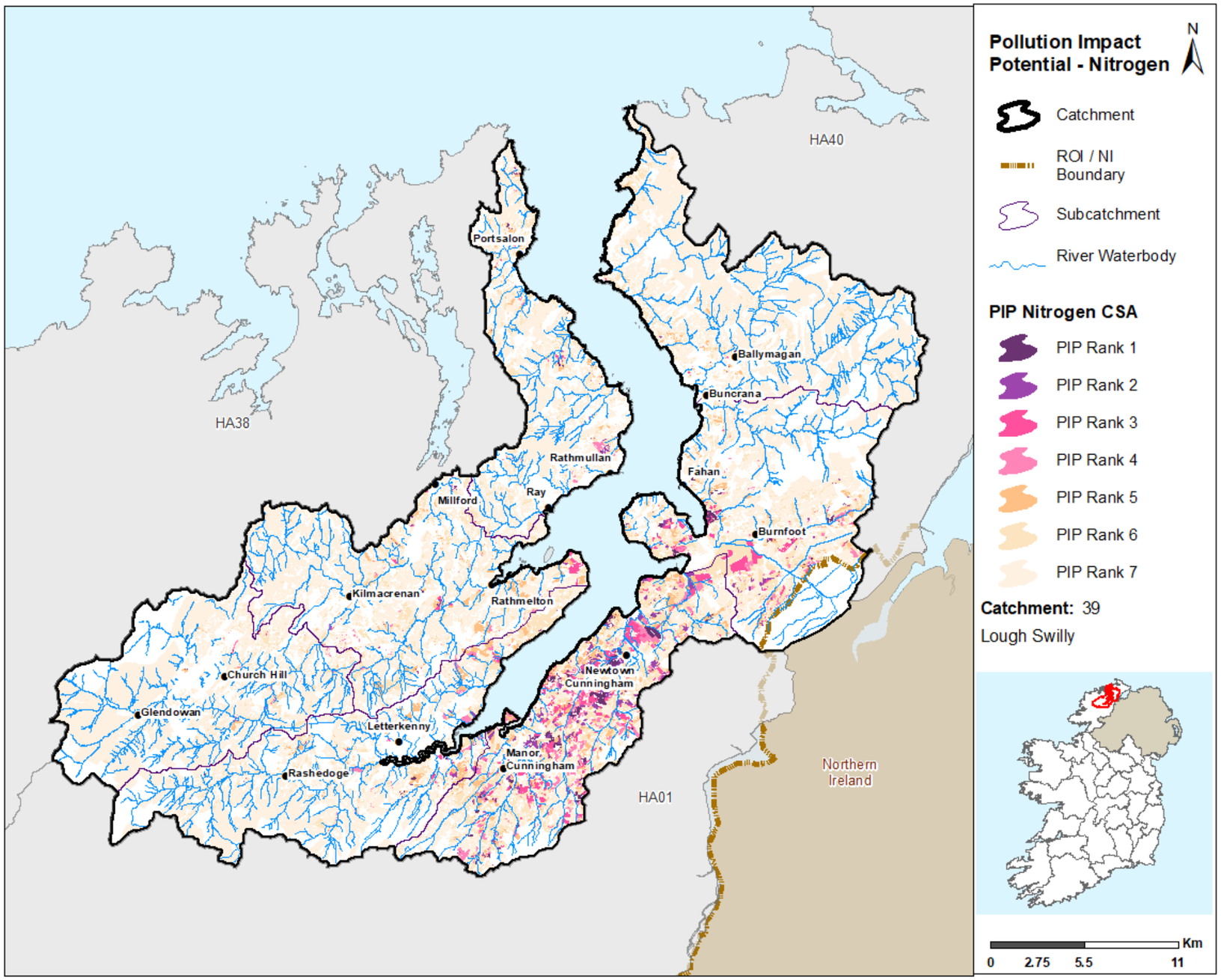
10 Catchment Summary

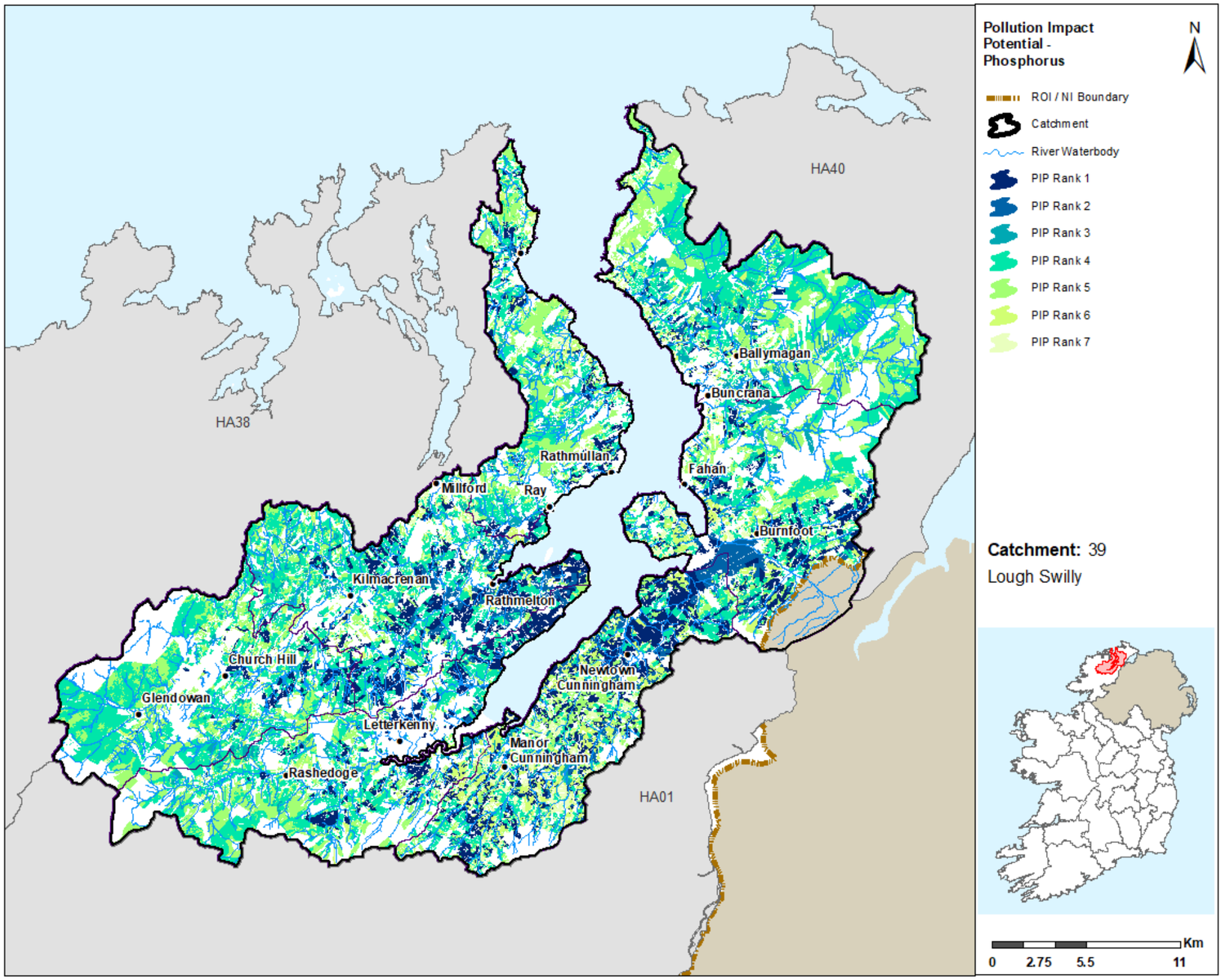
- Of the 51 river waterbodies, 24 are *At Risk* of not meeting their WFD objectives.
- Two out of nine lake waterbodies are *At Risk* of not meeting their WFD objectives. Gartan and Fern are the two lake waterbodies *At Risk*.
- Three of the five transitional waterbodies are *At Risk* of not meeting their WFD objectives. These are Swilly Estuary, Inch Lough and Outer Swilly Estuary.
- There are no *At Risk* groundwater bodies in the catchment.
- There has been an overall deterioration across the catchment with 29 waterbodies *At Risk* in Cycle 3 compared to 22 waterbodies *At Risk* in Cycle 2.
- The main significant issues are from nutrients pollution and chemical pollution followed by morphological impacts, organic pollution, hydrological impacts and sediment pollution.
- The main significant pressures are agriculture followed by urban waste water, domestic waste water and hydromorphological pressures.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by chemical, hydrological and sediment. The increase in hydromorphological impacts is likely to be associated with a stronger evidence base and increasing awareness of hydromorphology rather than new significant hydromorphology pressures since Cycle 2.
- In the 2nd Cycle Areas for Action, seven waterbodies were *At Risk* in Cycle 2 and six waterbodies are *At Risk* in Cycle 3.
- There are five 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 31 waterbodies with 18 waterbodies *At Risk*, five in *Review* and eight *Not At Risk*.

Appendix 1
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
BULLABA_010	River	IE_NW_39B010100	High
CARN LOW_010	River	IE_NW_39L012000	Good
Gartan	Lake	IE_NW_39_12	Good
GLASKEELAN_010	River	IE_NW_39G050100	Good
LEANNAN_010	River	IE_NW_39L010100	High
Lough Swilly	Coastal	IE_NW_220_0000	Good
MILL (DONEGAL)_010	River	IE_NW_39M020050	High
Northwestern Atlantic Seaboard (HAs 37;38)	Coastal	IE_NW_100_0000	High

Appendix 2
Pollution Impact Potential Mapping




HA40
HA38
HA01
Ballymagan
Buncrana
Rathmullan
Fahan
Milford
Ray
Burnfoot
Kilmacrenan
Rathmelton
Church Hill
Glendowan
Letterkenny
Newtown Cunningham
Manor Cunningham
Rashedoge
Pollution Impact Potential - Phosphorus
N
ROI / NI Boundary
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: 39
Lough Swilly
Km
0
2.75
5.5
11

Appendix 3
Summary information on all waterbodies in the Lough Swilly 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)
39_1	IE_NW_39A010400	AGHAWEEL_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Crana	Poor, At Risk - not proposed and not hydrologically connected but include under SC approach
39_7	IE_NW_39B010100	BULLABA_010	River	Not at risk	Not at risk	High	High	Yes			
39_2	IE_NW_39B020200	BURNFOOT_010	River	At risk	Review	Poor	Good	No		Burnfoot Skeoge	Discharges to SAC, Irish Water to upgrade WWTP & treat whole agglomeration - Good to Moderate
39_2	IE_NW_39B020600	BURNFOOT_020	River	At risk	At risk	Moderate	Poor	No	Ag, DWW, UWW	Burnfoot Skeoge	Discharges to SAC, Irish Water to upgrade WWTP & treat whole agglomeration - Good to Moderate
39_3	IE_NW_39B620890	BALLYNASHANNAGH_010	River	Not at risk	Review	Unassigned	Unassigned	No			
39_1	IE_NW_39C010200	CASHELNACOR_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW	Crana	Poor, At Risk - not proposed but trib of Crana_030 so include under SC approach
39_1	IE_NW_39C020100	CRANA_010	River	At risk	At risk	Poor	Poor	No	Ag, For, Peat	Crana	Toxic impacts - Proposed by LA, important local angling river. Continued Poor status- DWWTS, Agric, Sheep dip, forestry
39_1	IE_NW_39C020300	CRANA_020	River	At risk	At risk	Poor	Poor	No	Ag, Other, Peat	Crana	Toxic impacts - Proposed by LA, important local angling river. Continued Poor status- DWWTS, Agric, Sheep dip, forestry
39_1	IE_NW_39C020500	CRANA_030	River	Not at risk	At risk	Good	Poor	No	Ag	Crana	Toxic impacts - Proposed by LA, important local angling river. Continued Poor status- DWWTS, Agric, Sheep dip, forestry
39_6	IE_NW_39C030250	CORRAVADDY BURN_010	River	At risk	At risk	Poor	Poor	No	Ag, For, M+Q		
39_4	IE_NW_39C910930	CARROWEN_010	River	Review	Review	Unassigned	Unassigned	No			
39_3	IE_NW_39D010500	DRUMHALLAGH_010	River	At risk	Not at risk	Moderate	Good	No		Drumhallagh	Proposed by LA - Designated At Risk - Water quality deteriorated at lowest station, possible saline impact
39_4	IE_NW_39D020200	DOOBALLAGH BURN_010	River	Not at risk	Not at risk	Good	Good	No			
39_4	IE_NW_39D030600	DRUMBARNET STREAM_010	River	At risk	At risk	Poor	Poor	No	Ag, Hymo		
39_7	IE_NW_39G010200	GLASHAGH (UPPER)_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)
39_7	IE_NW_39G010400	GLASHAGH (UPPER)_020	River	Not at risk	Not at risk	Good	Good	No			
39_5	IE_NW_39G020200	GLASHAGH (LOWER)_010	River	At risk	At risk	Moderate	Poor	No	Ag, DWW, Hymo, Ind	Leannan	Within existing PAA
39_3	IE_NW_39G030180	GLENALLA_010	River	Not at risk	Not at risk	Good	Good	No			
39_3	IE_NW_39G040300	GLENVAR_010	River	Not at risk	At risk	Good	Moderate	No	Ag		
39_7	IE_NW_39G050100	GLASKEELAN_010	River	At risk	At risk	Good	Good	Yes	For, Peat	Leannan	Within existing PAA. Top 8 FPM, Blue Dot site. Fluctuating vetween High/Good. Pearl Mussel Project also active.
39_1	IE_NW_39G110630	GORTYARRIGAN_010	River	Review	Review	Unassigned	Unassigned	No			
39_2	IE_NW_39G170760	GLACK_or_BOHULLION_010	River	Review	Review	Unassigned	Unassigned	No			
39_4	IE_NW_39G380790	GLAR_010	River	Review	Review	Unassigned	Unassigned	No			
39_6	IE_NW_39K240610	KNOCKYBRIN_010	River	Review	Review	Unassigned	Unassigned	No			
39_7	IE_NW_39L010100	LEANNAN_010	River	Not at risk	Not at risk	High	High	Yes		Leannan	Expansion of PAA under SC approach - High status but surrounds L. Gartan which has deteriorated
39_7	IE_NW_39L010200	LEANNAN_020	River	Not at risk	Not at risk	Good	Good	No		Leannan	Expansion of existing PAA under SC approach - Good status but not meeting NPWS PA Objectives
39_7	IE_NW_39L010250	LEANNAN_030	River	Not at risk	Not at risk	Good	Good	No		Leannan	Expansion of existing PAA under SC approach - Good status but not meeting NPWS PA Objectives
39_7	IE_NW_39L010300	LEANNAN_040	River	Not at risk	Not at risk	Good	Good	No		Leannan	Expansion of existing PAA under SC approach - Good status but not meeting NPWS PA Objectives
39_5	IE_NW_39L010500	LEANNAN_050	River	At risk	At risk	Moderate	Good	No	UWW	Leannan	Within existing PAA
39_5	IE_NW_39L010600	LEANNAN_060	River	Not at risk	Not at risk	Good	Good	No		Leannan	Expansion of existing PAA under SC approach - Good status but not meeting NPWS PA Objectives
39_5	IE_NW_39L012000	CARN LOW_010	River	At risk	At risk	Good	Good	Yes	Ag, DWW, UWW	Leannan	Within existing PAA
39_5	IE_NW_39L020100	LURGY_010	River	Not at risk	At risk	Good	Poor	No	Ag	Leannan	Expansion of existing PAA under SC approach - recently deteriorated to Moderate status
39_4	IE_NW_39L050600	LESLIE HILL STREAM_010	River	Not at risk	At risk	Good	Poor	No	Ag		
39_4	IE_NW_39L050660	LESLIE HILL STREAM_020	River	Review	At risk	Unassigned	Unassigned	No	Ag, Hymo, UWW		
39_1	IE_NW_39L120930	LENAN_010	River	Review	Review	Unassigned	Unassigned	No			
39_2	IE_NW_39L170710	LISFANNAN_010	River	Review	Review	Unassigned	Unassigned	No			
39_5	IE_NW_39M010300	MAGGY'S BURN_010	River	At risk	At risk	Poor	Poor	No	Other, UWW	Leannan	Within existing PAA

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)
39_2	IE_NW_39M020050	MILL (DONEGAL)_010	River	Not at risk	Not at risk	High	High	Yes		Mill (Donegal)_Blue Dot	Blue Dot WB meeting its HSO, but d/s WB drops to Poor
39_2	IE_NW_39M020300	MILL (DONEGAL)_020	River	At risk	At risk	Moderate	Poor	No	Ag, For, Hymo, M+Q, Peat	Mill (Donegal)_Blue Dot	Poor status but is fed by HSO Blue Dot
39_3	IE_NW_39M130990	MILL_BROOK_010	River	Review	Review	Unassigned	Unassigned	No			
39_5	IE_NW_39N050990	NEWMILL_010	River	Review	Review	Unassigned	Unassigned	No		Leannan	Within existing PAA
39_1	IE_NW_39O020100	OWENERK_010	River	Not at risk	At risk	Good	Poor	No	Ag		
39_1	IE_NW_39O020200	OWENERK_020	River	Not at risk	At risk	Good	Poor	No	Ag		
39_7	IE_NW_39O030100	OWENWEE (LOUGH GARTAN)_010	River	At risk	Review	Moderate	Good	No			
39_1	IE_NW_39O040400	OWENBOY (CRANA)_010	River	At risk	At risk	Poor	Poor	No	Ag, DWW, Other	Crana	Poor, At Risk - not proposed but trib of Crana_030 so include under SC approach
39_1	IE_NW_39O050100	OWENNASOP_010	River	At risk	At risk	Poor	Poor	No	Ag, Hymo, Other	Crana	Poor, At Risk - not proposed but trib of Crana_020 so include under SC approach
39_6	IE_NW_39S020050	SWILLY_010	River	Not at risk	At risk	Good	Moderate	No	Ag, For		
39_6	IE_NW_39S020100	SWILLY_020	River	Not at risk	Not at risk	Good	Good	No			
39_6	IE_NW_39S020200	SWILLY_030	River	Not at risk	Not at risk	Good	High	No			
39_6	IE_NW_39S020300	Swilly (Donegal)_010	River	Review	Review	Unassigned	Unassigned	No			
39_2	UKGBNI1NW393901002	SKEOGE_010	River	At risk	At risk	Poor	Poor	No	Ag, UWW	Burnfoot Skeoge	Poor, At Risk - proposed by NPWS and should be included with inputting Burnfoot WBs
39_7	IE_NW_39_10	Inshagh	Lake	Review	Review	Unassigned	Unassigned	No		Leannan	Within existing PAA
39_7	IE_NW_39_11	Akibbon	Lake	Not at risk	Not at risk	Good	Good	No		Leannan	Expansion of existing PAA - Not at Risk but proposed by IFI and NPWS
39_7	IE_NW_39_12	Gartan	Lake	Not at risk	At risk	High	Good	Yes	Hymo	Leannan	Expansion of existing PAA - Blue Dot lake dropped from High to Good (hymo)
39_5	IE_NW_39_13	Fern	Lake	At risk	At risk	Poor	Poor	No	UWW	Leannan	Within existing PAA
39_3	IE_NW_39_44	Gort	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
39_7	IE_NW_39_47	Nambraddan	Lake	Review	Review	Unassigned	Unassigned	No		Leannan	Within existing PAA
39_7	IE_NW_39_51	Claggan	Lake	Review	Review	Unassigned	Unassigned	No		Leannan	Within existing PAA
39_1	IE_NW_39_52	Doo DL	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
39_7	IE_NW_39_68	Nacally	Lake	Not at risk	Not at risk	Unassigned	Unassigned	No			
37_4, 38_1, 38_3, 38_4, 38_5, 38_6, 38_8, 38_9, 39_1, 40_1	IE_NW_100_0000	Northwestern Atlantic Seaboard (HAs 37;38)	Coastal	Not at risk	Not at risk	High	High	Yes			

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)
38_3, 39_1, 39_2, 39_3	IE_NW_220_0000	Lough Swilly	Coastal	Not at risk	Not at risk	High	Good	Yes			
39_1, 40_1, 40_3, 40_4, 40_5	IE_NW_230_0000	Northern Atlantic Seaboard (HAs 40;02)	Coastal	Not at risk	Not at risk	Unassigned	Unassigned	No			
39_2, 39_3, 39_4, 39_5, 39_6	IE_NW_220_0100	Swilly Estuary	Transitional	At risk	At risk	Moderate	Moderate	No	DWW, UR, UWW		
39_4	IE_NW_220_0200	Blanket Nook Lough	Transitional	Not at risk	Review	Unassigned	Unassigned	No			
39_2, 39_4	IE_NW_220_0300	Inch Lough	Transitional	At risk	At risk	Poor	Moderate	No	Ag, Hymo		
39_1, 39_2	IE_NW_220_0400	Crana Estuary	Transitional	Review	Review	Unassigned	Unassigned	No			
0	IE_NW_220_0500	Outer Swilly Estuary	Transitional		At risk	0	Unassigned	No	DWW, UR, UWW		
01_3, 01_8, 37_3, 37_4, 37_5, 38_1, 38_2, 38_3, 38_4, 38_5, 38_6, 38_7, 38_8, 38_9, 39_3, 39_5, 39_7	IE_NW_G_049	Northwest Donegal	Groundwater	Review	Not at risk	Good	Good	No			
01_9, 39_4, 39_6	IE_NW_G_052	Manor Cunningham	Groundwater	Not at risk	Not at risk	Good	Good	No			
01_2, 01_6, 01_7, 01_9, 39_4	IE_NW_G_054	Raphoe	Groundwater	Not at risk	Not at risk	Good	Good	No			
01_2, 01_6, 01_8, 39_4, 39_6	IE_NW_G_058	Upper Deele	Groundwater	Not at risk	Not at risk	Good	Good	No			
01_1, 01_2, 01_3, 01_4, 01_6, 01_7, 01_8, 37_2, 37_5, 38_2, 38_9, 39_6, 39_7	IEGBNI_NW_G_048	Ballybofey	Groundwater	Not at risk	Not at risk	Good	Good	No			
39_1, 39_2, 40_1, 40_2, 40_3, 40_4, 40_5, 40_6	IEGBNI_NW_G_050	East Inishowen	Groundwater	Not at risk	Not at risk	Good	Good	No			
01_9, 39_2, 39_4, 40_6	IEGBNI_NW_G_051	River Foyle	Groundwater	Not at risk	Not at risk	Good	Good	No			
01_6, 01_8, 01_9, 38_2, 38_3, 38_5, 39_1, 39_2, 39_3, 39_4, 39_5, 39_6, 39_7, 40_1, 40_2, 40_6	IEGBNI_NW_G_059	Lough Swilly	Groundwater	Not at risk	Not at risk	Good	Good	No			

Ag: Agriculture

DWW: Domestic Waste Water

For: Forestry

Hymo: Hydromorphology

M+Q: Mines and Quarries

Peat: Peat Drainage and Extraction

UR: Urban Run-off

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.