3rd Cycle Draft Moy and Kilalla Bay Catchment Report (HA 34)

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

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

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

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1 Introduction

This report aims to provide an overview of the water quality status, risk, key issues and significant pressures for all waterbodies in the catchment based on the Characterisation Assessment undertaken for the 3rd Cycle River Basin Management Plan. In addition, a comparative overview of the water quality in the Moy and Kilalla Bay catchment between Cycle 2 and Cycle 3 characterisation is provided along with a summary of the progress made in the 2nd Cycle Areas for Action. The recommended list for the 3rd Cycle Areas for Action is also provided.

To provide context, the Moy and Kilalla Bay catchment includes the area drained by the River Moy and all streams entering tidal water in Killala Bay between Benwee Head and Lenadoon Point, Co. Sligo. This drains a total area of 2,345km² (Figure 1). The largest urban centre in the catchment is Castlebar. The other main urban centres are Ballina, Tubbercurry, Kiltimagh, Swinford, Foxford, Enniscrone and Crossmolina. The total population of the catchment is approximately 77,260 with a population density of 33 people per km².

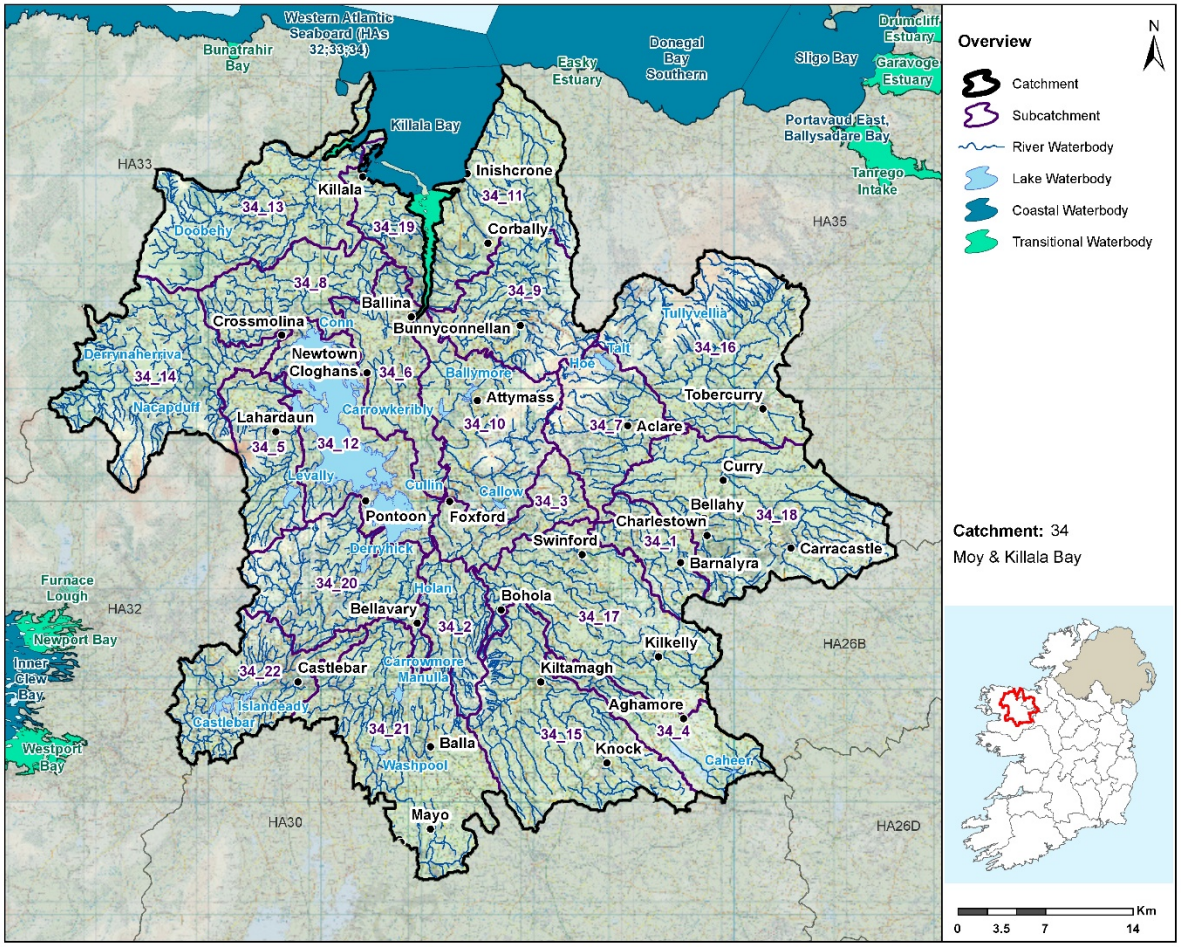


Figure 1: Overview of subcatchments in the Moy and Kilalla Bay catchment

The Moy and Kilalla Bay catchment is divided into 22 subcatchments (Figure 1) with 115 river waterbodies, 19 lakes, two transitional, four coastal waterbodies and 37 groundwater bodies (Figure 2).

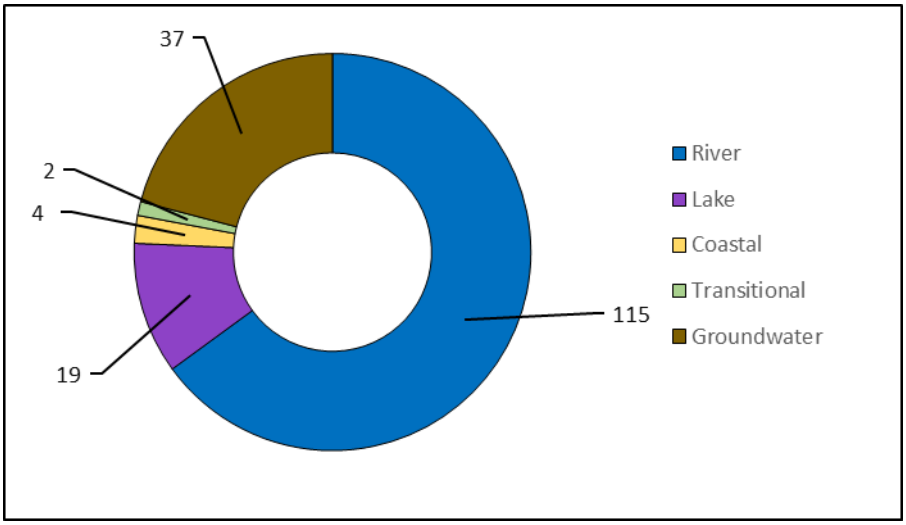


Figure 2: Waterbody types and numbers in the Moy and Kilalla Bay Catchment.

2 Waterbody Overview

2.1 Waterbody Status

- This assessment to inform the 3rd Cycle RBMP is largely based on WFD monitoring data for the period 2013-2018, which is the latest WFD monitoring assessment period for which all data are available.

- For this assessment to inform Cycle 3, there are 16 waterbodies achieving High status, 91 achieving Good Status, 23 achieving Moderate Status, 12 achieving Poor Status and there are no Bad Status waterbodies. There are 35 waterbodies that do not have status assigned for Cycle 3. All waterbodies must achieve at least Good Ecological status.

- There are two lake waterbodies and 25 river waterbodies that must achieve High Ecological Status (HES) in this catchment. These waterbodies are listed in Appendix 1. Of the 27 HES Environmental Objective waterbodies, 15 are achieving High Status (all rivers), while 11 are at Good Status, one is at Moderate Status and there are no waterbodies at Poor Status or at Bad Status.

- There have been reductions of six waterbodies (all rivers) achieving High Status and three waterbodies (all rivers) achieving Good Status between Cycle 2 and Cycle 3. There have been increases in four waterbodies (all rivers) achieving Moderate Status and five waterbodies (all rivers) achieving Poor Status (Figure 3 & Table 1).

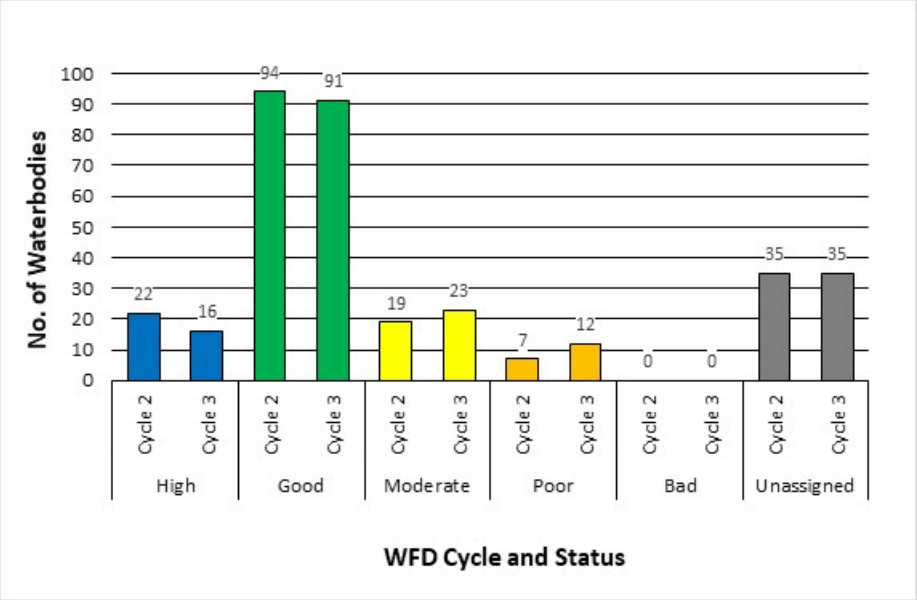


Figure 3: Waterbody Status Breakdown (All waterbodies)

Table 1: Waterbody Status Breakdown Table (All Waterbodies)

2013-2018 Status	River		Lake		Transitional		Coastal		Groundwater		Total	
	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	Cycle 2	Cycle 3	**Cycle 2**	**Cycle 3**
High	22	16	0	0	0	0	0	0	0	0	**22**	**16**
Good	53	50	3	3	0	0	1	1	37	37	**94**	**91**
Moderate	15	19	3	3	1	1	0	0	0	0	**19**	**23**
Poor	7	12	0	0	0	0	0	0	0	0	**7**	**12**
Bad	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Un-assigned	18	18	13	13	1	1	3	3	0	0	**35**	**35**
Total	115	115	19	19	2	2	4	4	37	37	**177**	**177**

- Figure 4 illustrates the change in status between Cycle 2 (assessment based largely on 2010-2015 WFD Monitoring data) and Cycle 3 (assessment largely based on 2013-2018 WFD monitoring data.

- Over this period 11 (8%) waterbodies have improved in status, 107 (75%) waterbodies have remained unchanged and 24 (17%) waterbodies have declined in status.[1]

- There is an overall decline in the status of 13 waterbodies across the catchment since the Cycle 2 assessment.

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

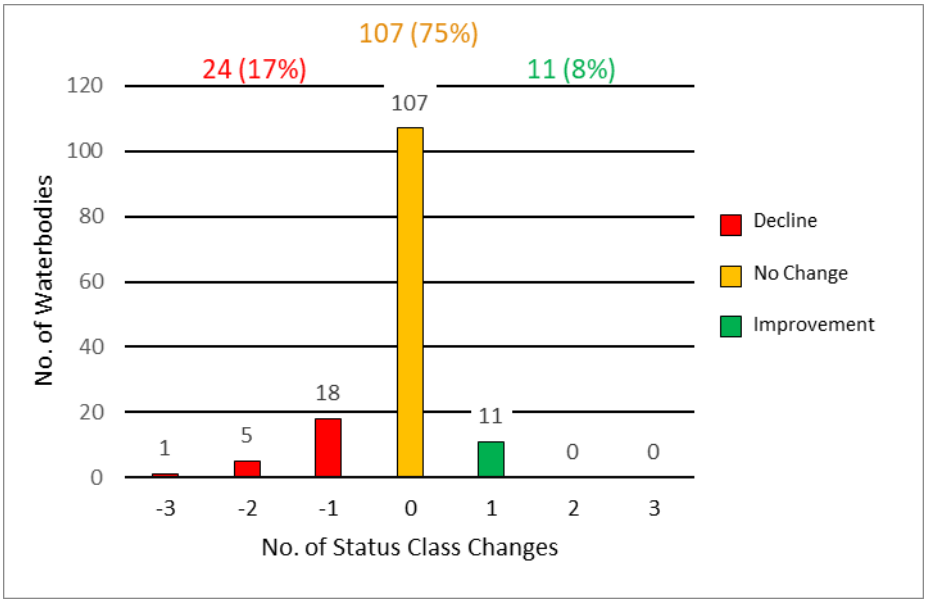


Figure 4: Status Class Changes between Cycle 2 and Cycle 3

2.2 Protected Areas

2.2.1 Drinking Water

- There are nine surface waterbodies in the catchment identified as Drinking Water Protected Areas (DWPA) based on water abstraction data on the abstraction register and from other sources in 2018. All groundwater bodies nationally are identified as DWPA. DWPA layers can be viewed at https://gis.epa.ie/EPAMaps/Water - see *Protected Areas - Drinking Water*.

- 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 two bathing waters in or directly adjacent to the catchment identified under the Bathing Water Regulations 2008.
- Ross Beach – Killala bathing water had an Excellent classification in 2020, Enniscrone Beach had a Good classification.

- 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
Killala Bay	IEPA2_0060	Killala Bay	IE_WE_420_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.

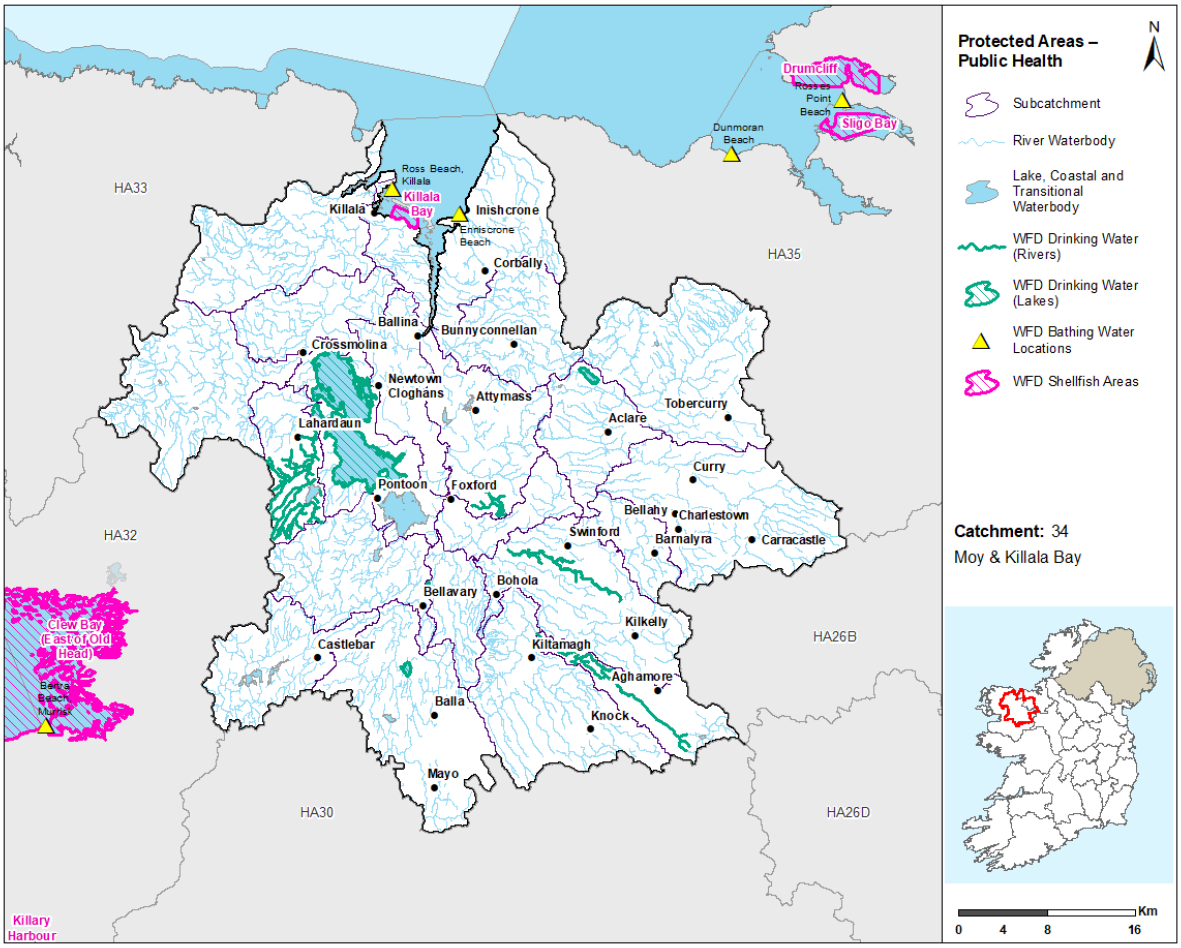


Figure 5: Protected Areas – Public Health

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 10 SACs in this catchment, nine 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	72	44	20	8
Lakes	10	6	2	2
Transitional & Coastal	4	3	1	0

**As the waterbody status was unassigned.*

- There are no river waterbodies with FWPM habitats in the catchment.

- There is one groundwater body (GWDTE-Turloughmore Sligo (SAC000637)) delineated and assessed as Groundwater Dependent Terrestrial Ecosystems for this catchment. The associated groundwater is at Good Status (2013-2018).

- Water dependent SACs/ SPAs and salmonid waters in the catchment are illustrated in Figure 6.

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

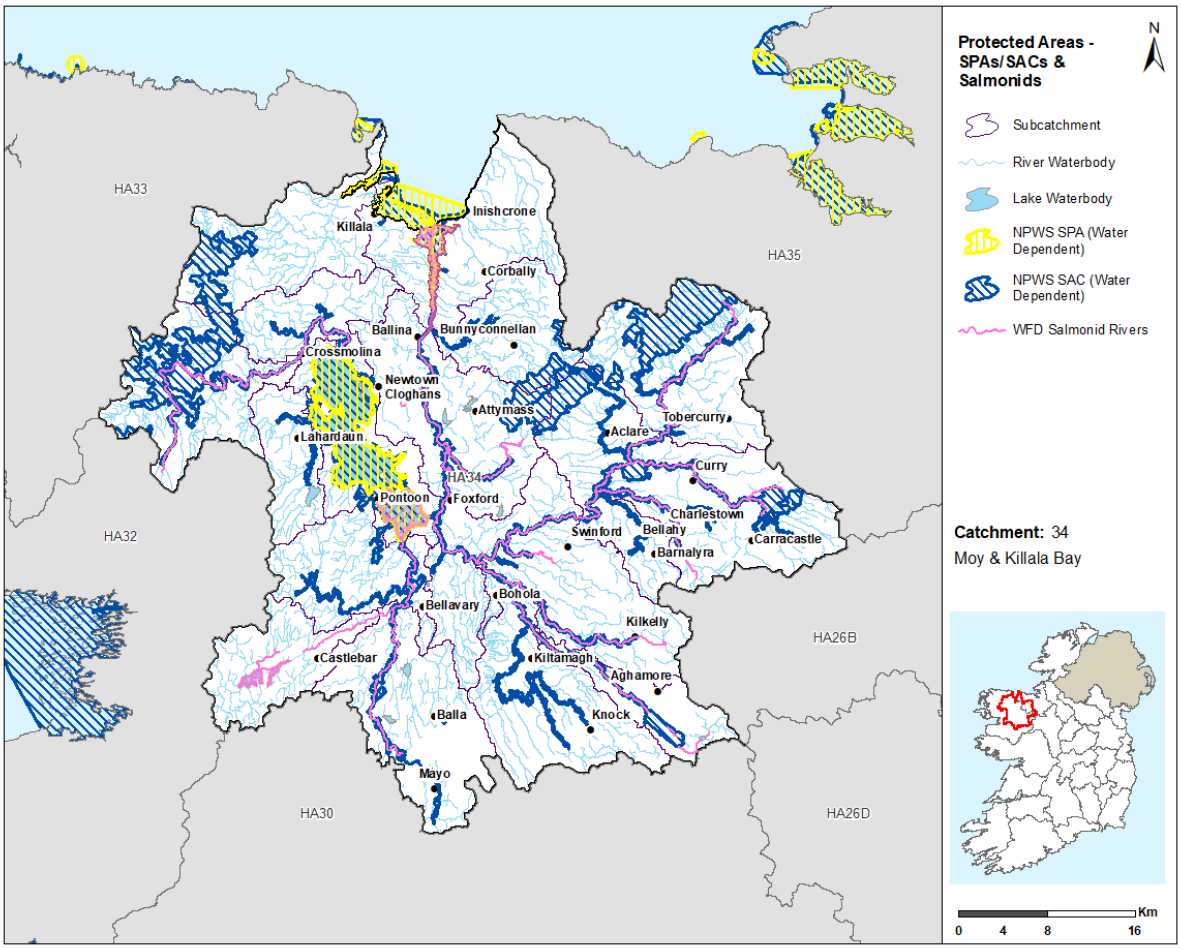


Figure 6: Water Dependent SPAs / SACs and Salmonid Waters

2.2.5 Nutrient Sensitive Areas

- The EPA carried out a review of Nutrient Sensitive Areas (NSAs) downstream of large urban waste water discharges in 2020. Once the regulations are in place, and nutrient sensitive areas have been identified, additional nutrient removal must be applied (if not already applied) to waste water treatment plants discharging to the sensitive area. If this treatment was in place the objective was deemed to have been met.

- There are two NSAs in the catchment and these are downstream of Castlebar urban wastewater agglomerations. The list of NSAs, associated agglomerations and intersecting water bodies are provided in Table 4.

- NSA objectives are being met in both of the NSAs in the catchment.

Table 4: Nutrient sensitive areas in the catchment

Nutrient Sensitive Area	Agglomeration		Water body		Objective met?		Comment
	Name	Code	Name	Code	Yes	No	
Castlebar River (020 to 040)	Castlebar	D0047-01	Castlebar_020	IE_WE_34C010300	✓		Tertiary Treatment in place
			Castlebar_030	IE_WE_34C010400			
			Castlebar_040	IE_WE_34C010500			
Lough Cullin	Castlebar	D0047-01	Cullin	IE_WE_34_406a	✓		Tertiary Treatment in place

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 artificially modified water bodies (AWBs) in the 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 177 waterbodies in the Moy & Killala Bay Catchment and 44 (25%) are currently *At Risk*, 35 (20%) in *Review* and 98 (55%) are *Not At Risk*.

3.2 Surface Waters

- For the 115 rivers waterbodies, 37 (32%) are *At Risk*, 18 (16%) are in *Review* and 60 (52%) are *Not At Risk*.

- For the 19 lake waterbodies, four (21%) are *At Risk*, 12 (63%) are in *Review* and three (16%) are *Not At Risk.* Conn, Cullin, Castlebar & Washpool are the lake waterbodies *At Risk.*

- For the two transitional waterbodies, one (50%) is *At Risk* and one (50%) is *Not At Risk*. The Moy Estuary (transitional waterbody) is *At Risk.*

- For the four coastal waterbodies, one (25%) is in *Review* and three (75%) are *Not At Risk*. There are no coastal waterbodies *At Risk* in the catchment.

- The largest proportion of *At Risk* waterbodies are found in rivers, accounting for 37 (86%) of 44 *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 three *Review* waterbodies, and a decrease of 10 *Not At Risk* waterbodies between Cycle 2 and Cycle 3.

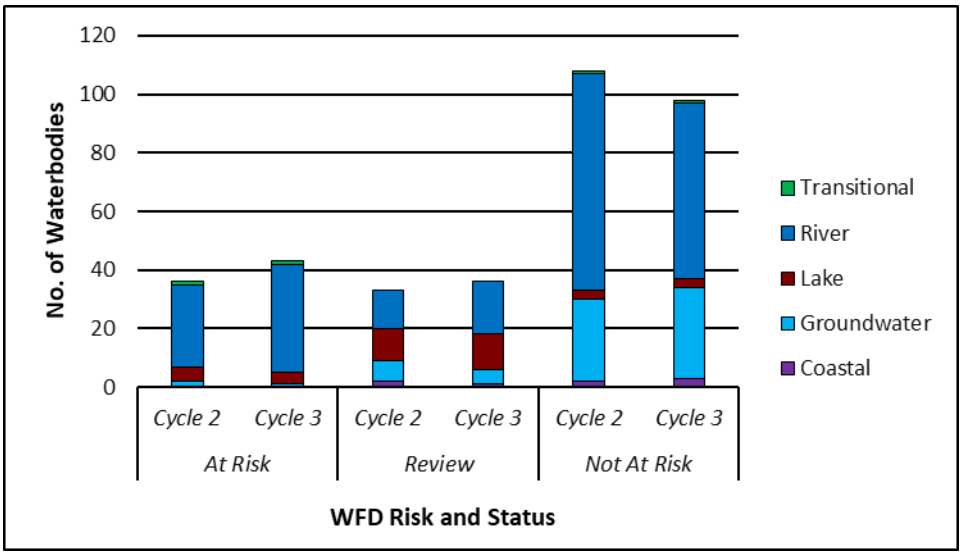


Figure 7: Number of waterbodies in each risk category

- The location of the *At Risk, Review and Not At Risk* surface waterbodies for Cycle 3 are shown in Figure 8 while the surface waterbodies that have experienced a change in risk between Cycle 2 and Cycle 3 are shown in Figure 9.

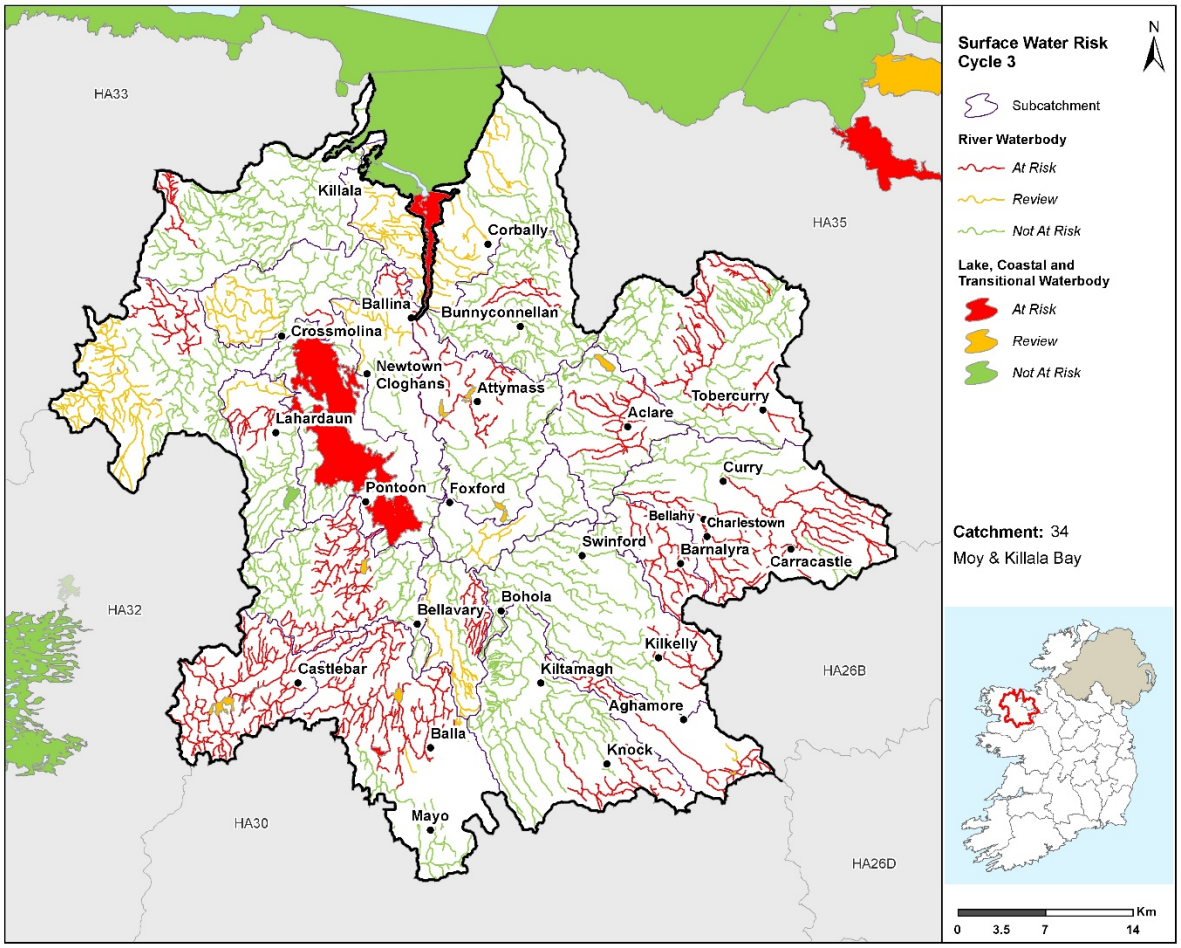


Figure 8: Surface Water Risk Cycle 3

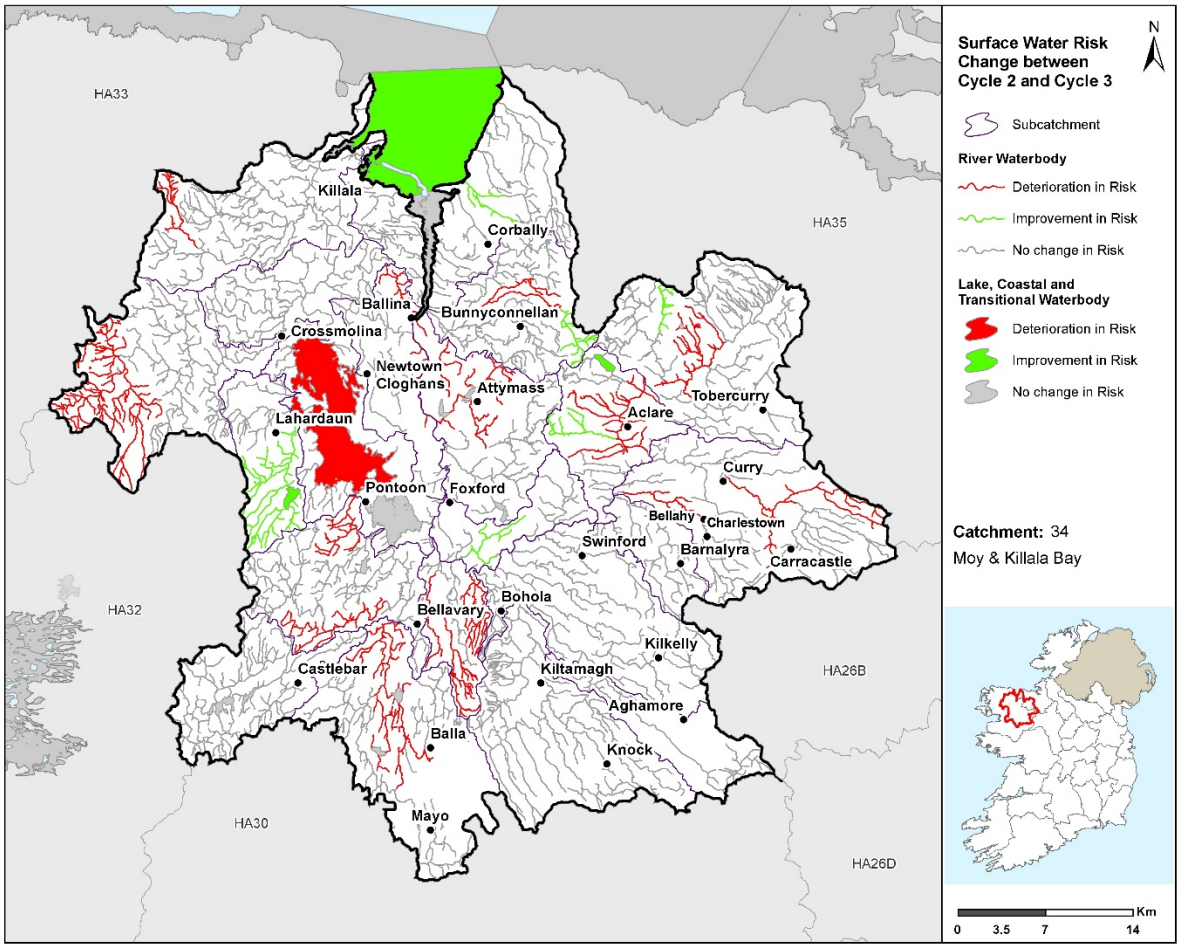


Figure 9: Surface Water Risk Change between Cycle 2 and Cycle 3

3.3 Groundwater

- For the 37 groundwater bodies, 31 (84%) are *Not At Risk*, four (11%) are in *Review* and two (5%) are *At Risk* (Cong-Robe & Clare-Corrib). Most of the Clare-Corrib groundwater body underlies the Corrib Catchment (HA30) and only a very small portion underlies the Moy and Killala Bay Catchment.

- In Cycle 2 there were two groundwater bodies (Clare-Corrib & Carrick on Shannon) *At Risk* in this catchment in Cycle 2, seven in *Review* and 28 *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 artificially modified water bodies (AWBs) in the catchment.

4 Significant Issues in *At Risk* Waterbodies

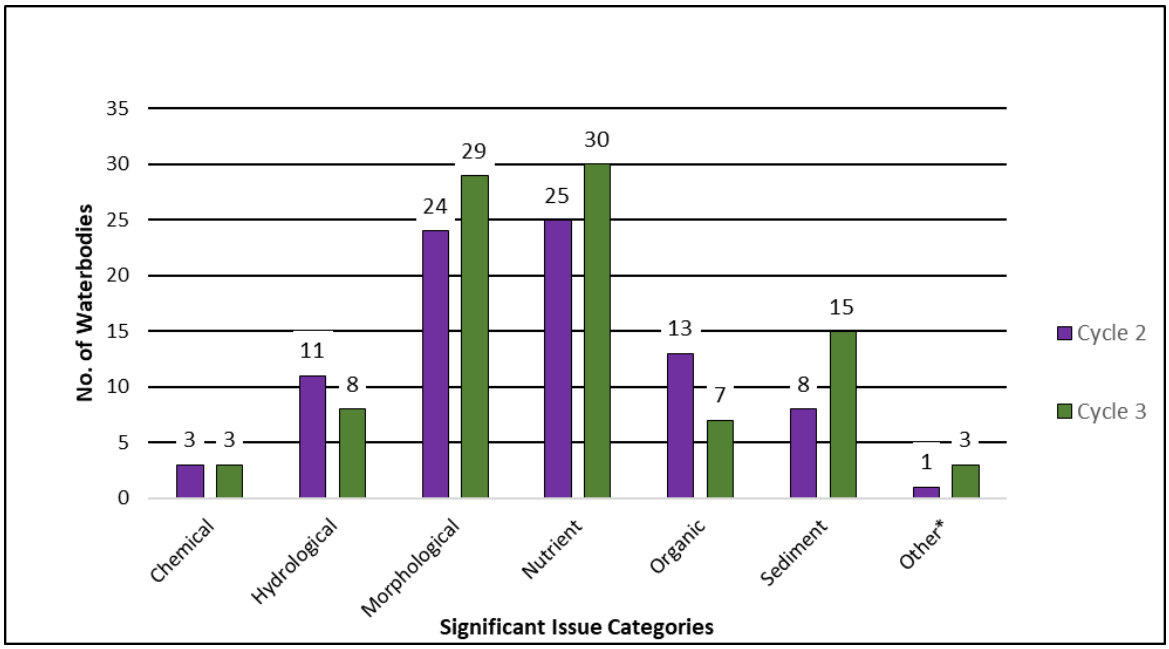
4.1 All Waterbodies

- Excess nutrients and morphological impacts remain the most prevalent issues in the Moy and Kilalla Bay catchment (Figure 10) with each impacting 30 waterbodies in Cycle 3. Sediment is impacting 15 waterbodies, and hydrological and organics are impacting eight and seven waterbodies, respectively.
    - For rivers, the main significant issues are morphological impacts (28), nutrient pollution (25), sediment (13), organic pollution (7) and hydrological impacts (7).
    - For Lakes, the main significant issues are nutrient pollution (2), sediment (2), morphological impacts (1) and hydrological impacts (1).
    - For the only *At Risk* transitional waterbody (Moy Estuary) the significant issue is nutrient pollution.
    - For the two *At Risk* groundwater bodies (Clare-Corrib & Cong-Robe) the significant issues are nutrient pollution and diminution of quality of associated surface waters for chemical reasons.

- Between Cycle 2 and Cycle 3 the number of waterbodies with nutrients issues have increased by five from 25 to 30 and the number of waterbodies impacted by morphological issues has increased by five from 24 to 29.

- The numbers of waterbodies with hydrological and organic issues have reduced from 11 and 13 respectively in Cycle 2 to eight and seven in Cycle 3.

- The number of waterbodies impacted by sediment has increased from eight in Cycle 2 to 15 in Cycle 3.



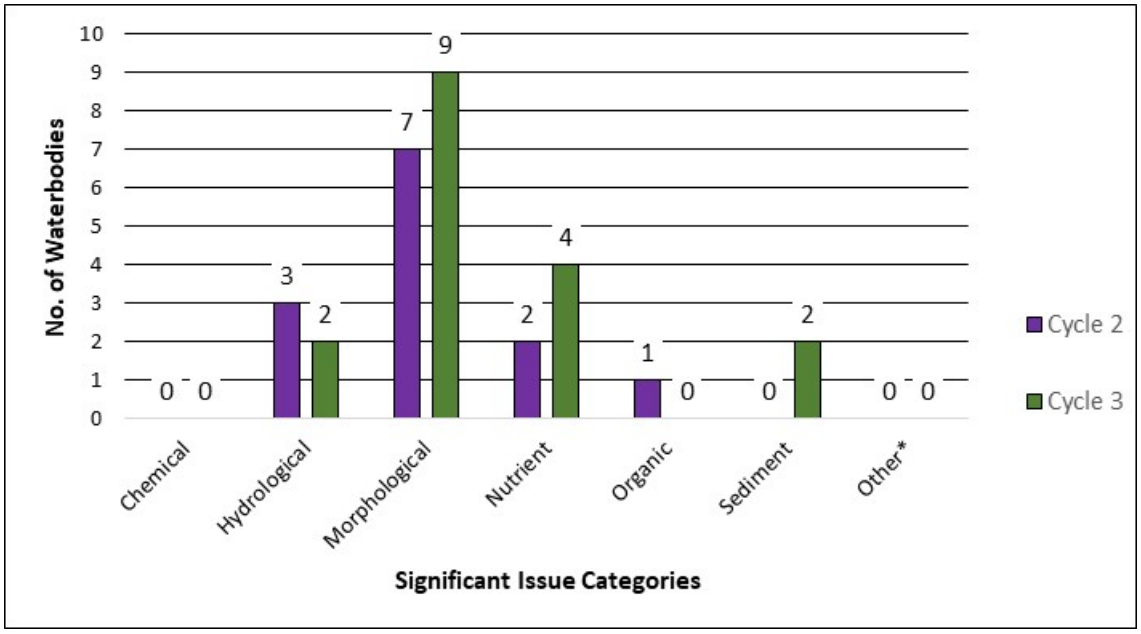
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 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 morphological issues are impacting nine of the 11 High Status Objective waterbodies currently *At Risk* (Figure 11). Nutrients are impacting four waterbodies, while sediment and hydrological issues are both impacting two waterbodies.
    - For rivers, the main significant issues are morphological impacts (9), nutrient pollution (4), sediment (2), and hydrological impacts (1).
    - For the one High Status Objective lake, the significant issue is hydrological impacts.

- Between Cycle 2 and Cycle 3 the number of waterbodies with morphological issues, nutrients and sediment have increased (by seven to nine, two to four, and zero to two respectively) while the number of waterbodies impacted by hydrological issues has declined (from three to two).



*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

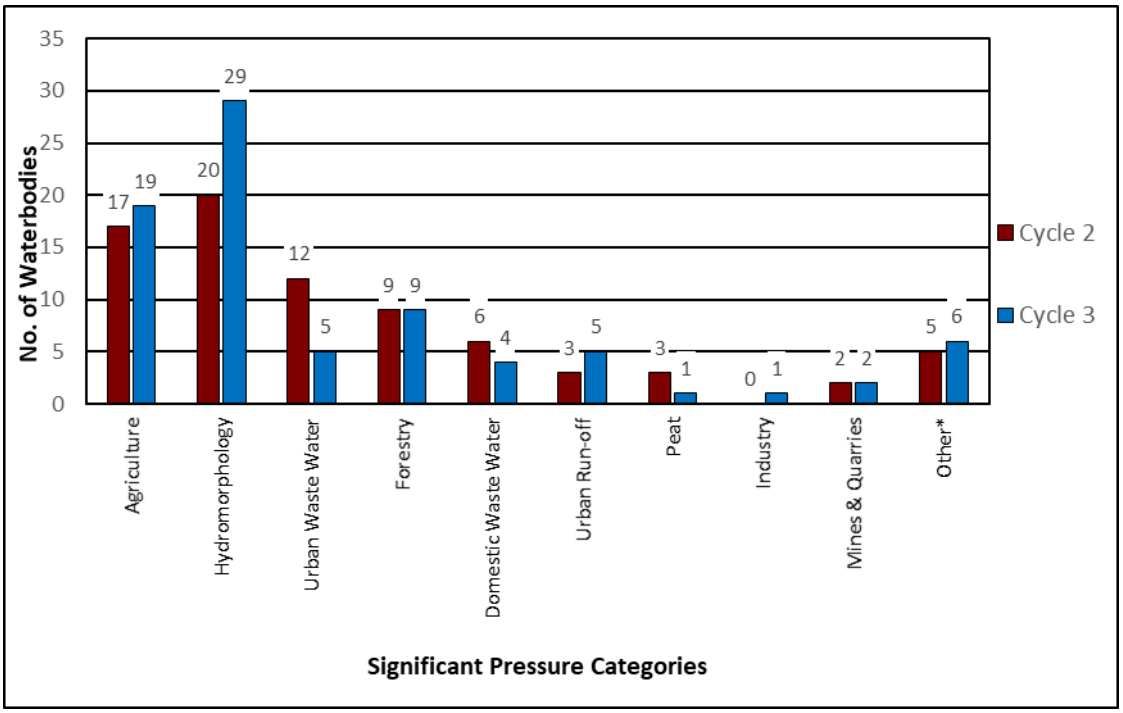
5.1 All Waterbodies

- 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 hydromorphology, followed by agriculture, forestry, urban waste water, domestic waste water, other[6], diffuse urban, peat and mines and quarries.

- When comparing Cycle 2 and Cycle 3 the biggest change is an increase of nine waterbodies where hydromorphology is a significant pressure, from 20 waterbodies in Cycle 2 to 29 waterbodies in Cycle 3.

- The increase in hydromorphology significant pressures is likely to be associated with more detailed assessment by the EPA based on the recently developed Morphological Quality Index tool and associated increasing awareness of hydromorphology rather than new significant hydromorphology pressures since Cycle 2.



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

Figure 12: Significant Pressure (All *At Risk* Waterbodies)

5.1.1 Pressure Type

5.1.1.1 Hydromorphology

- Hydromorphology is a significant pressure in 28 river waterbodies and one lake waterbody (Washpool). Channelisation is the dominant hydromorphology subcategory in the catchment with several river waterbodies within the catchment subject to extensive modification due to arterial drainage. The Shanvolahan_010 river waterbody has undergone extensive modification for peat extraction historically. Extensive land drainage exists within several river waterbodies of the Moy and Pollagh subcatchments in addition to a lake waterbody (Washpool) within the Castlebar_SC_020 subcatchment.

[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

5.1.1.2 Agriculture

- Agriculture is a significant pressure in 14 rivers, two lakes (Castlebar & Cullin), one transitional waterbody (Moy Estuary) and two groundwater bodies (Clare-Corrib & Cong-Robe) in Cycle 3. The issues related to farming in this catchment are predominantly due to phosphorus loss from pastures 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. MCPA spraying has been identified as a major issue in the Glore [Mayo]_SC_010 subcatchment, with chemicals identified as significant issues in Glore (Mayo)_010 and Glore (Mayo)_020 river waterbodies.

5.1.1.3 Forestry

- Forestry has remained a significant pressure in nine river waterbodies in Cycle 3. The significant issues are arising primarily as a result of clearfelling and associated operations, which results in increased sediment and nutrient loads.

5.1.1.4 Other significant pressures

- *Invasive species*
  Invasive species (zebra mussels) have been identified as a significant pressure in two lake waterbodies (Cullin and Castlebar lakes).

- *Unknown anthropogenic*
  The significant pressures impacting two river waterbodies (Deel (Crossmolina)_060 and Glenree_010) and two groundwater bodies (Clare-Corrib & Cong-Robe) are unknown.

5.1.1.5 Urban Waste Water

- Urban Waste Water Agglomerations have been identified as a significant pressure in five *At Risk* waterbodies (four river waterbodies and the Moy Estuary). One of these *At Risk* waterbodies (Charlestown Stream_010) is impacted by the Charlestown agglomeration. Charlestown WWTP is scheduled to be upgraded in 2021, however, the agglomeration network has been identified as causing the impact.

Table 5: Urban Waste Water Treatment Agglomerations identified as significant pressures in *At Risk* waterbodies in Cycle 3

Facility name	Facility Type	Waterbody	2013-18 Ecological Status	Irish Water's Expected CIP Completion Date[7]
Bohola A0557	Agglomeration PE < 500	CARROWARD_010	Moderate	N/A
Balla D0216	Agglomeration PE of 1,001 to 2,000	LOUGHNAMINOO STREAM_010	Poor	N/A
Kilkelly D0357	Agglomeration PE of 500 to 1,000	TRIMOGE_010	Moderate	N/A
Tubbercurry D0092	Combined Sewer Overflows	TUBBERCURRY STREAM_010	Poor	2021
Ballina D0016	Agglomeration PE > 10,000	Moy 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.

- Urban waste water significant pressures impacted seven less waterbodies than in Cycle 2 (a reduction from 12 to five waterbodies impacted). The following Agglomerations were listed as pressures in Cycle 2 but have been removed from the list of significant pressures in Cycle 3.
    - Knock (D0065)
    - Castlebar (D0047)
    - Charlestown (D0214)
    - Lahardane (D0380)
    - Killala (D0067)
    - Tubbercurry (D0092)
    - Knock Airport (D0354)
- Bohola (A0557) has been added to the list of significant pressures in Cycle 3.

5.1.1.6 Domestic waste water

- Domestic waste water has been identified as a significant pressure in two river waterbodies (Castlebar_010 & Loughnaminoo Stream_010), one lake waterbody (Castlebar), and one transitional waterbody (Moy estuary). The significant issues arise from inadequate domestic waste water systems, many of which are sited on areas of high pollution impact potential/poorly draining soils, that result in enrichment and potential for microbial/organic contamination.

5.1.1.7 Diffuse urban

- Diffuse urban pressures, caused by misconnections, leaking sewers and runoff from paved and unpaved areas, have been identified as a significant pressure in five river waterbodies from Ballina (Moy_120), Castlebar (Castlebar_010 & Castlebar_020) and Tobercurry (Tubbercurry_010 & Tubbercurry Stream_010). Nutrient and organic pollution are the significant issues.

5.1.1.8 Extractive industry

- *Peat*

  Peat drainage and extraction has been identified as a significant pressure in one river waterbody (Shanvolahan_010). This has resulted in increased sediment loads, which alters habitats, morphology and hydrology. As reported in the Cycle 2 Catchment Report, the Bord na Mona Energy Oweninny site on Shanvolahan_010 has ceased operation and habitat rehabilitation/regeneration measures have been installed. However, the waterbody remains *At Risk* with invertebrate conditions still scoring less than good at Eskeragh Bridge.

5.1.1.9 Mines & Quarries

Quarries have remained a significant pressure in two river waterbodies (Trimoge_010 and Sonnagh (Moy)_010). The significant issues are a combination of sediment release, nutrient pollution and morphological impacts on Sonnagh (Moy)_010, while hydrological impacts on Triomge_010.

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

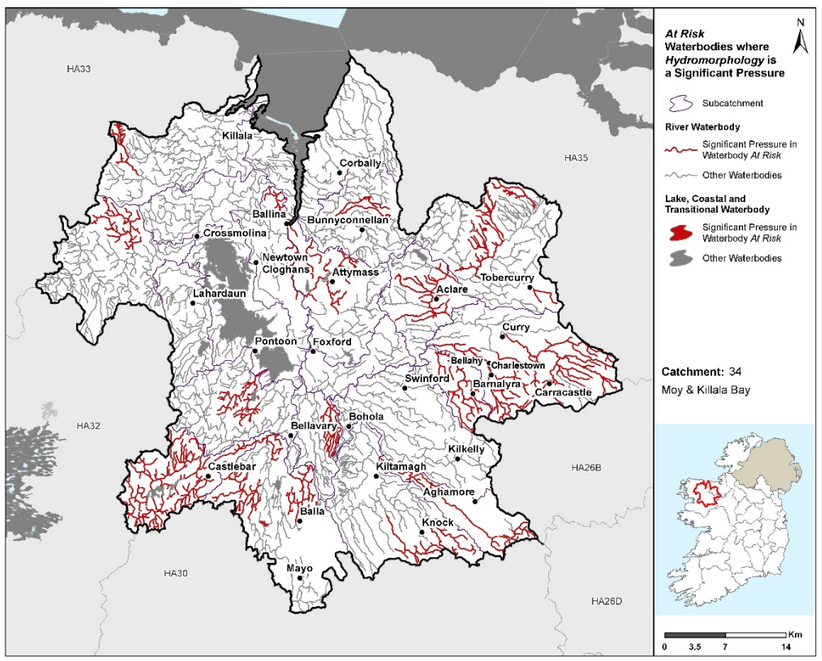


Figure 13: Locations of Waterbodies where Hydromorphology is a Significant Pressure

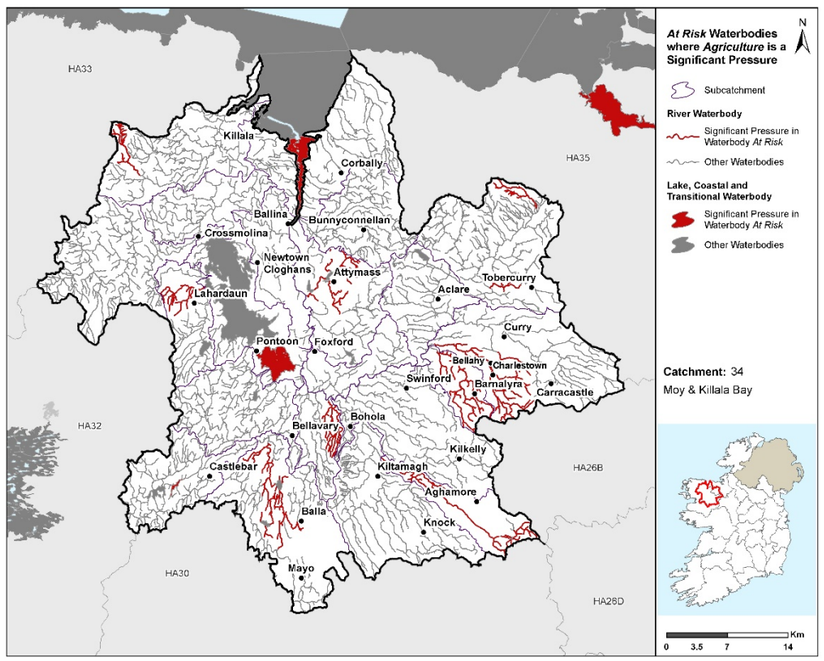


Figure 14: Locations of Waterbodies where Agriculture is a Significant Pressure

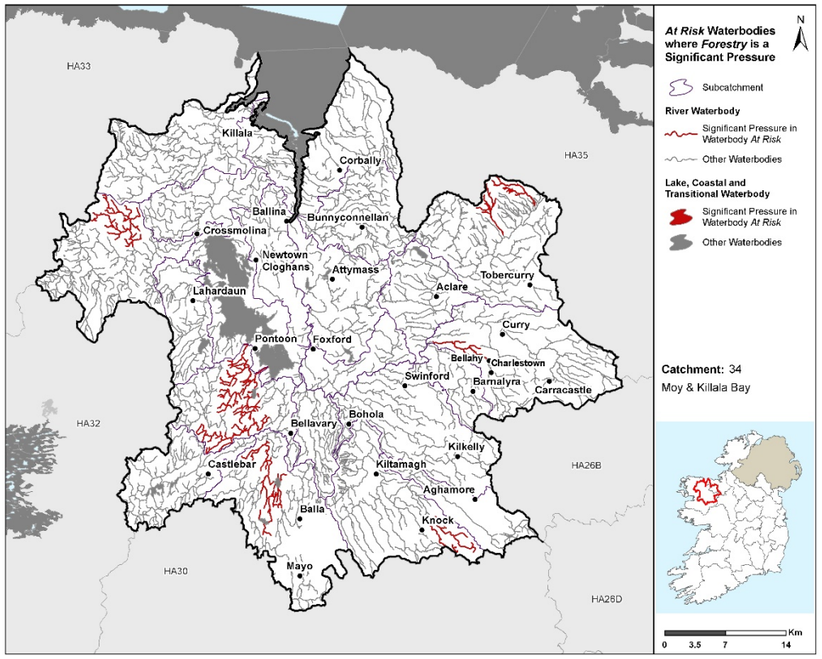


Figure 15: Locations of Waterbodies where Forestry is a Significant Pressure

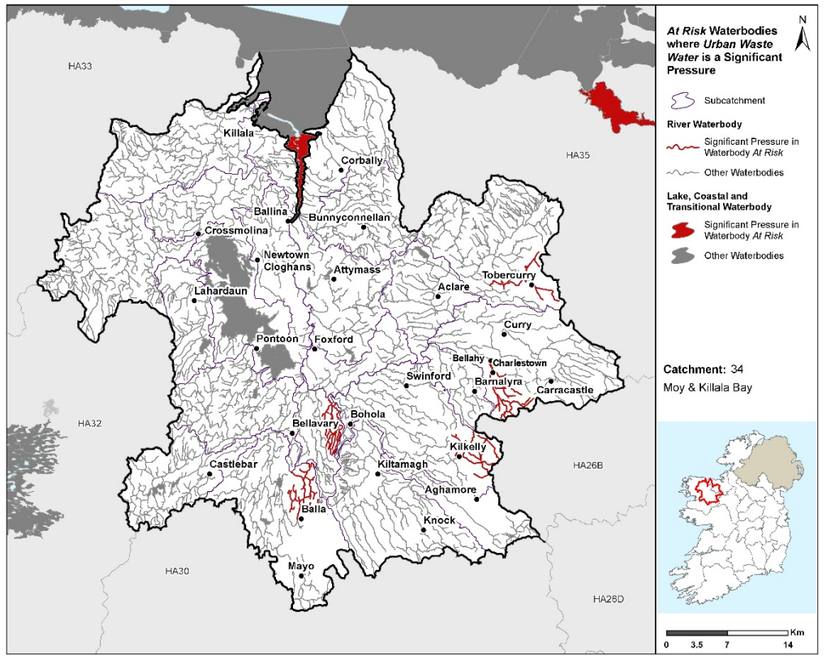
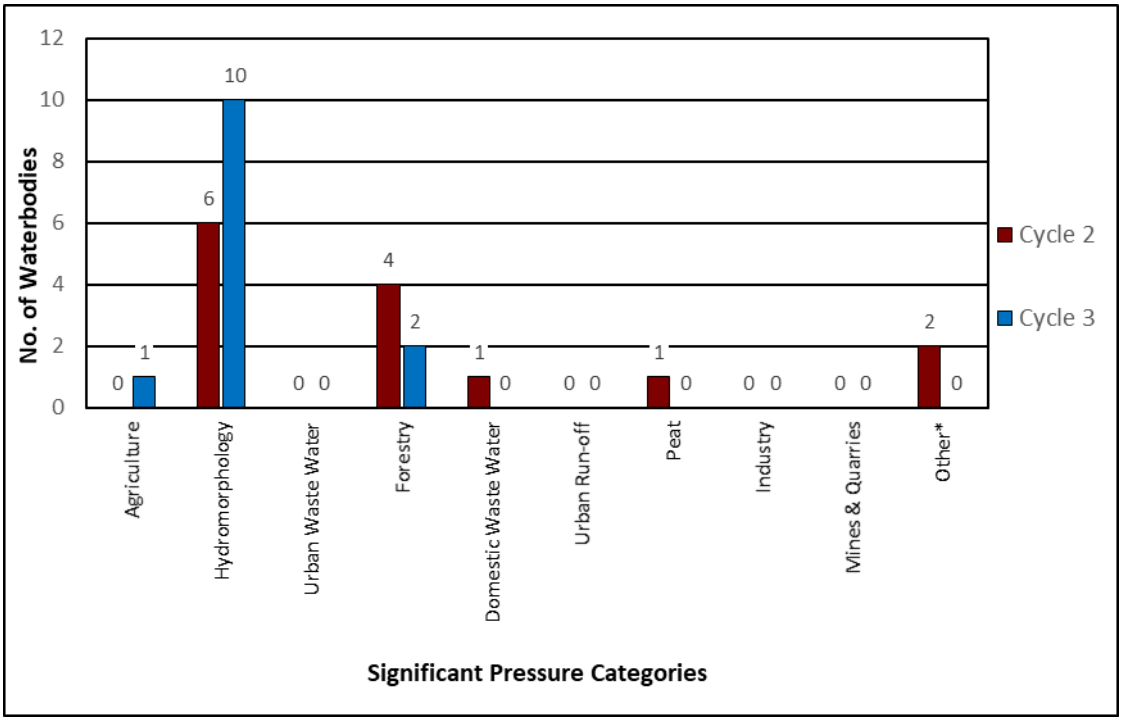


Figure 16: Locations of Waterbodies where Urban Waste Water is a Significant Pressure

5.2 High Status Objective Waterbodies

- Hydromorphology is also the dominant significant pressure in High Status Objective waterbodies, with hydromorphological pressures identified in 10 out of the 11 *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 pasture is responsible for 73% of the nitrogen load while land in pasture, peat and forestry contribute 37%, 22% and 15% of the phosphorus loadings for the catchment respectively (Figure 17).

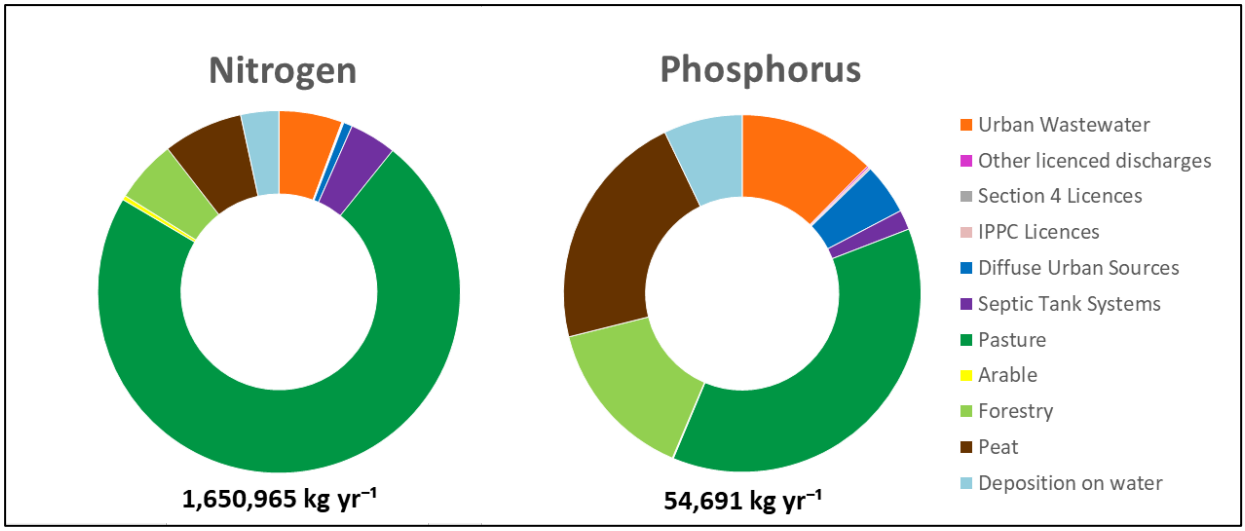


Figure 18: Estimated Proportions of N & P from Each Sector in the Moy and Kilalla Bay Catchment

7 Load Reduction Assessment

7.1 Nitrogen Load Reduction

- An assessment was undertaken to determine if nitrogen reductions in rivers, streams and lakes are required for Transitional and Coastal (TRACs) waterbodies to achieve their WFD environmental objective. The outcome of the assessment indicated that 10 of the 46 catchments require N reductions in our inland waters to restore some TRAC waterbodies. Nitrogen load reduction to meet TRAC WFD objectives are not required in the Moy 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.

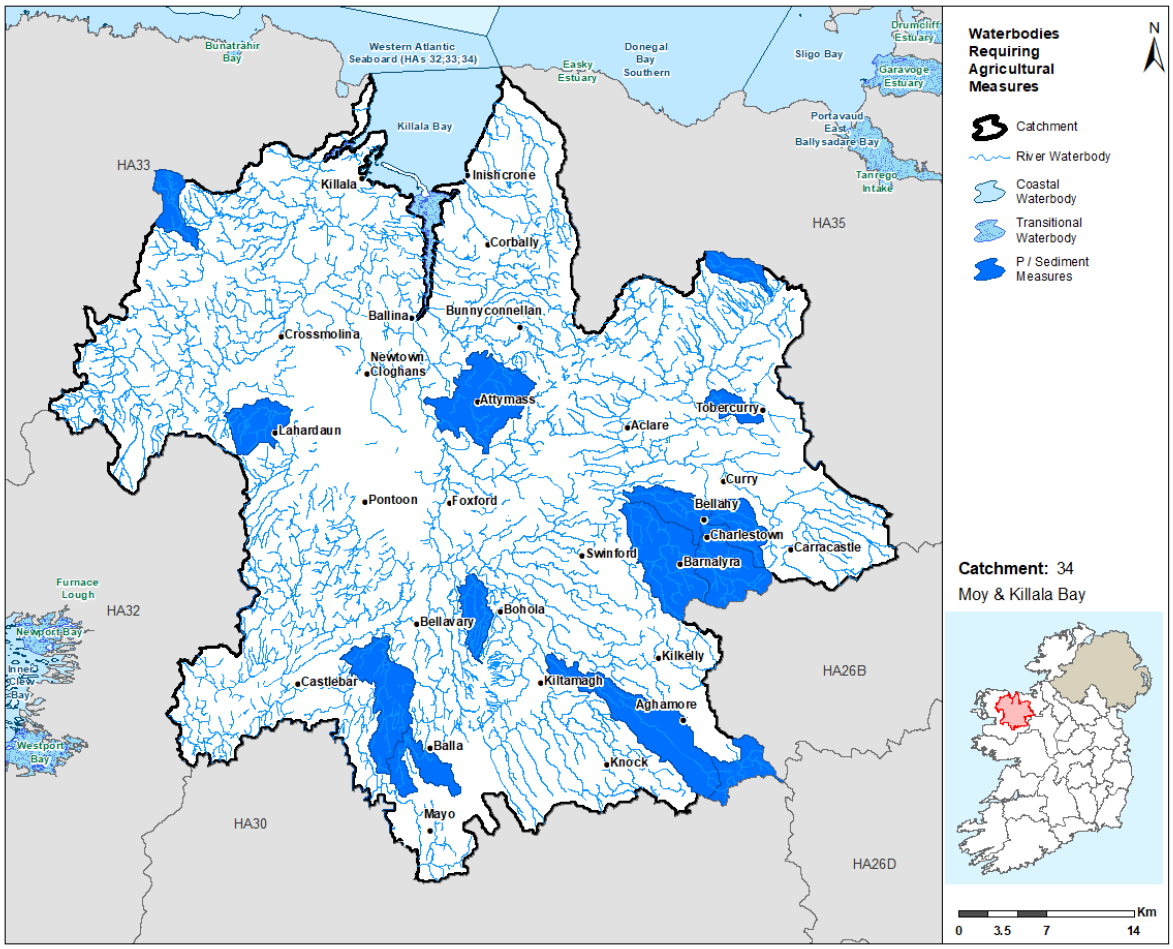


Figure 19: Waterbodies where Agricultural Measures should be Targeted

8 2nd Cycle Areas for Action

8.1 Area for Action Overview

- There were eight Areas for Action, comprising of 43 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 Mayo CoCo and stakeholders from the Western Regional Operational Committee, have been working in these areas since 2018.

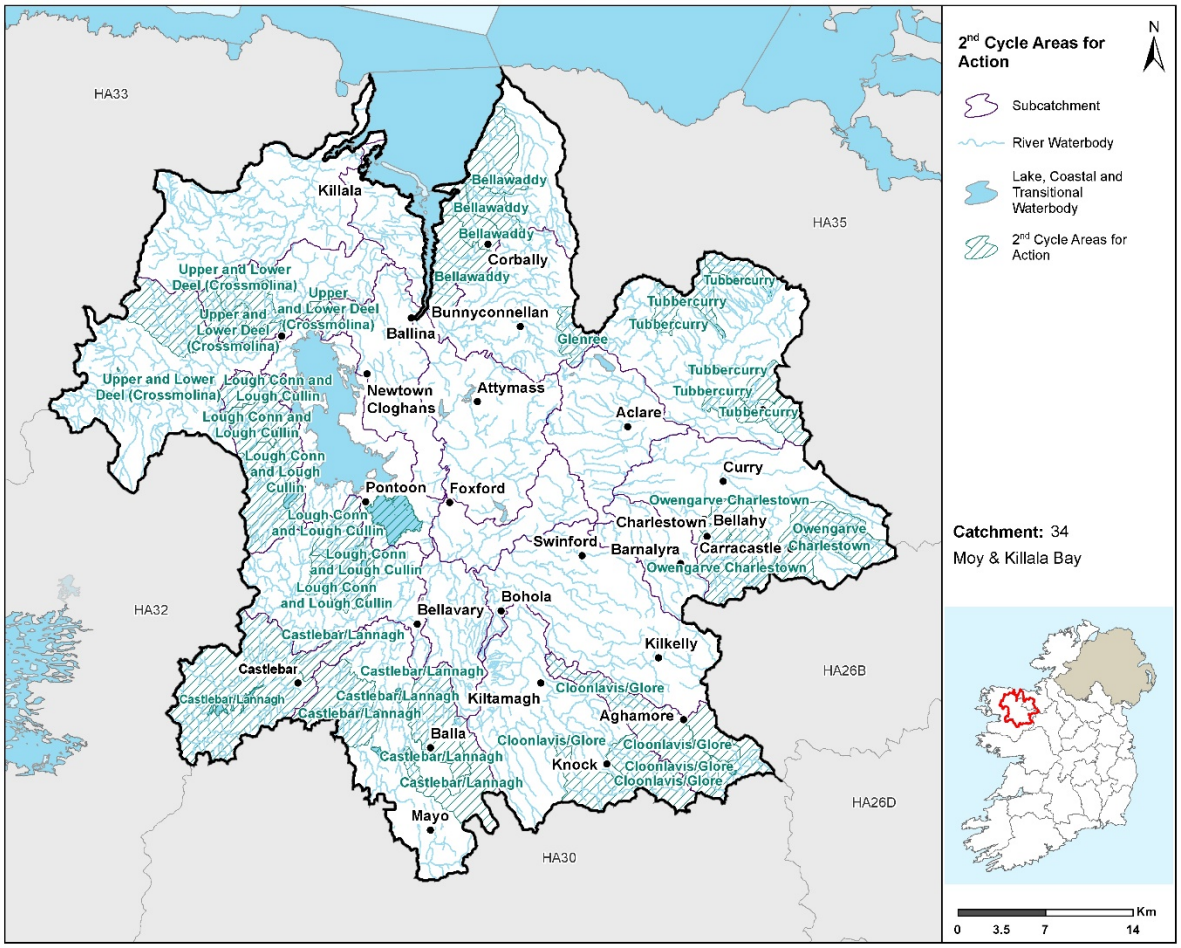


Figure 20: 2nd Cycle Areas for Action Locations

Table 6: 2nd Cycle Areas for Action

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Glenree	1	34_9	Mayo	• It is suspected that deterioration was event based and that focussed efforts should be able to return the waterbody to high status relatively quickly. • One *At Risk* High Ecological Status objective deteriorated waterbody. • Headwater to *Not At Risk* High Ecological Status objective waterbody.
Owengarve Charleston	3	34_18	Mayo	• Building on planned improvements at Charlestown WWTP. • One deteriorated waterbody. • One *At Risk* High Ecological Status objective waterbody. • Headwater to *Not At Risk* High Ecological Status objective waterbody.

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
Cloonlavis/Glore	6[8]	34_4, 34_15,	Mayo	• Local authority currently working to address water quality issues associated with agriculture. Two deteriorated waterbodies. • One *At Risk* High Ecological Status objective waterbody. • One waterbody failing to meet protected area objectives for drinking water (MCPA). • Two *At Risk* waterbodies with protected area objectives for Salmon. • Subcatchment headwaters.
Cullin/Crumlin	8	34_5, 34_12, 34_20	Mayo	• Lough Cullin is important for both tourism and drinking water. • Two deteriorated waterbodies. • One deteriorated High Ecological Status objective waterbody.
Castlebar/Lannagh	9	34_22, 34_21	Mayo	• Important public amenity. • Building on improvements completed at Castlebar WWTP. • One deteriorated waterbody. • One *At Risk* High Ecological Status objective waterbody. • Two waterbodies with Natura designations for salmon. • One waterbody with Natura designations for crayfish.
Upper and Lower Deel	6	34_8 34_14	Mayo	• High priority for Inland Fisheries Ireland. • Building on peatland restoration. • One deteriorated waterbody. • Two *At Risk* waterbodies that are failing to meet protected area objectives for crayfish.
Tubbercurry	6	34_16	Sligo	• Building on planned improvements at Tubbercurry WWTP. • Subcatchment headwaters. • One *At Risk* High Ecological Status objective waterbody. • One deteriorated waterbody.
Bellawaddy	4	34_11	Sligo	• One deteriorated waterbody. • Discharges into designated bathing

[8] Initially there were 8 waterbodies within the Cloonlavis/Glore Cycle 2 Area for Acrion, since then Island Mo and Mannin Lake waterbodies are no longer considered as WFD waterbodies.

2nd Cycle Area for Action	Number of waterbodies	Sub-catchment	Local Authority	Reason for Selection
				water (Inishcrone beach). • Important for tourism.

8.2 Status Change in 2nd Cycle Areas for Action

- For Cycle 3, of the 43 waterbodies in the 2nd Cycle Areas for Action, there are two waterbodies at High Status, seven waterbodies at Good Status, 12 waterbodies at Moderate Status, six waterbodies at Poor Status, and 16 waterbodies where status has not been assigned.

- There is an overall improvement in the status of seven of the 2nd cycle Areas for Action waterbodies across the catchment.[9]

- Of the 27 waterbodies within the 2nd Cycle Areas for Action which had status assigned, 16 experienced no change in status between Cycle 2 and Cycle 3, nine waterbodies experienced an improvement and two were subject to deterioration in status (Figure 21). Of the nine waterbody improvements five were across Bellawaddy, Castlebar/Lannagh, Cloonlavis/Glore, Glenree and Owengarve Charlestown Areas for Action, two in Lough Conn and Lough Cullin Area for Action and two in Tubbercurry Area for Action. Both waterbodies which experienced decline were in Castlebar/Lannagh Area for Action.

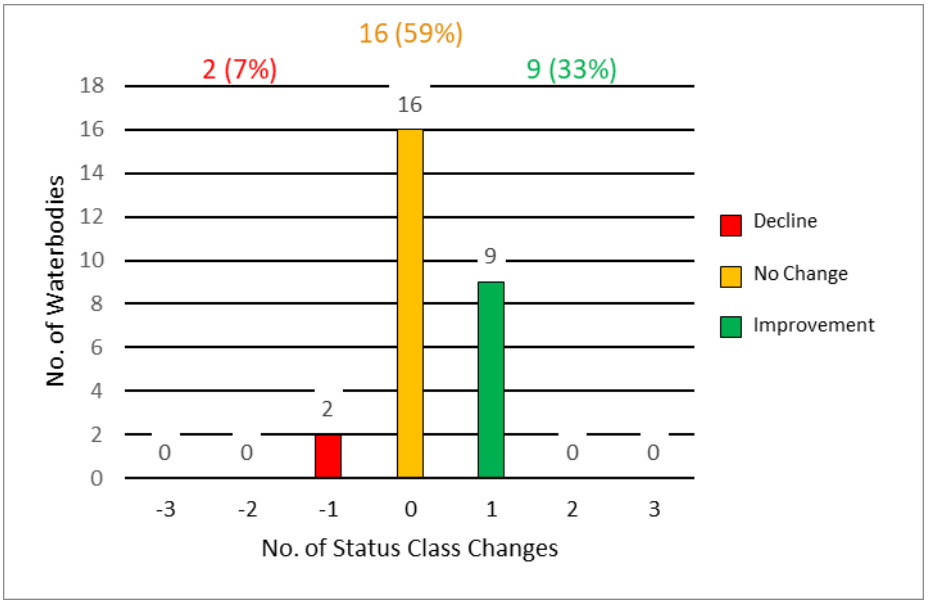


Figure 21: 2nd Cycle Area for Action Waterbody Status Class Changes between Cycle 2 and Cycle 3

[9] 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 43 waterbodies in the 2nd Cycle Areas for Action, 24 (56%) of these are currently *At Risk,* 14 (33%) in *Review* and five (12%) are *Not At Risk*.

- For the 33 river waterbodies, 21 (64%) are *At Risk, eight (24%)* are in *Review* and four (12%) are *Not At Risk.*

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

- The largest proportion of *At Risk* waterbodies are found in river waterbodies, accounting for 21 (88%) of 24 *At Risk* waterbodies.

- Overall there is a decrease from 28 to 24 *At Risk* waterbodies in 2nd Cycle Areas for Action between Cycle 2 and Cycle 3. Addergoole_010, Bellawaddy_020, Glenree_010, Loughanaboll_010 and Levally all improved from *At Risk* to *Not At Risk*, whilst Attiappleton_010 deteriorated from *Not At Risk* to *At Risk* in Cycle 3.

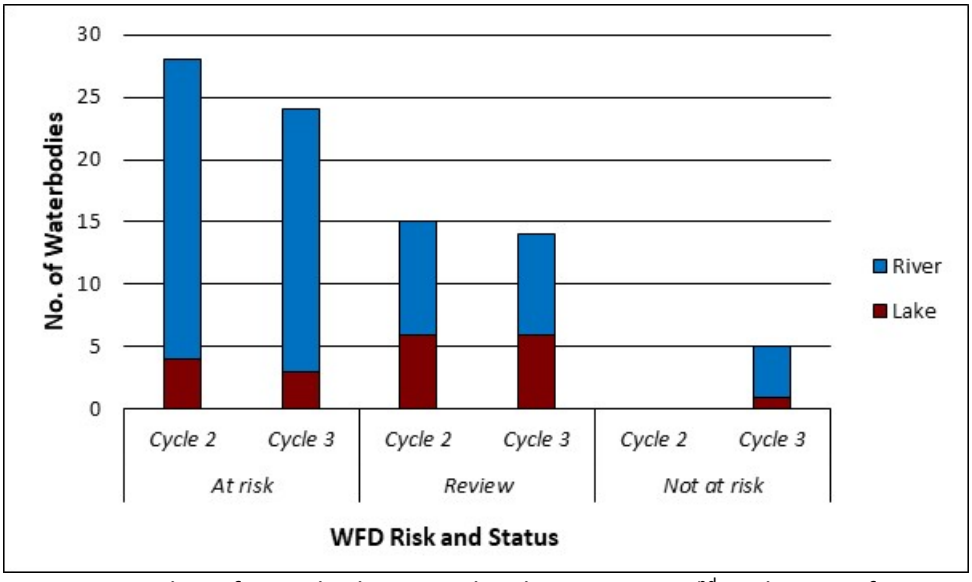
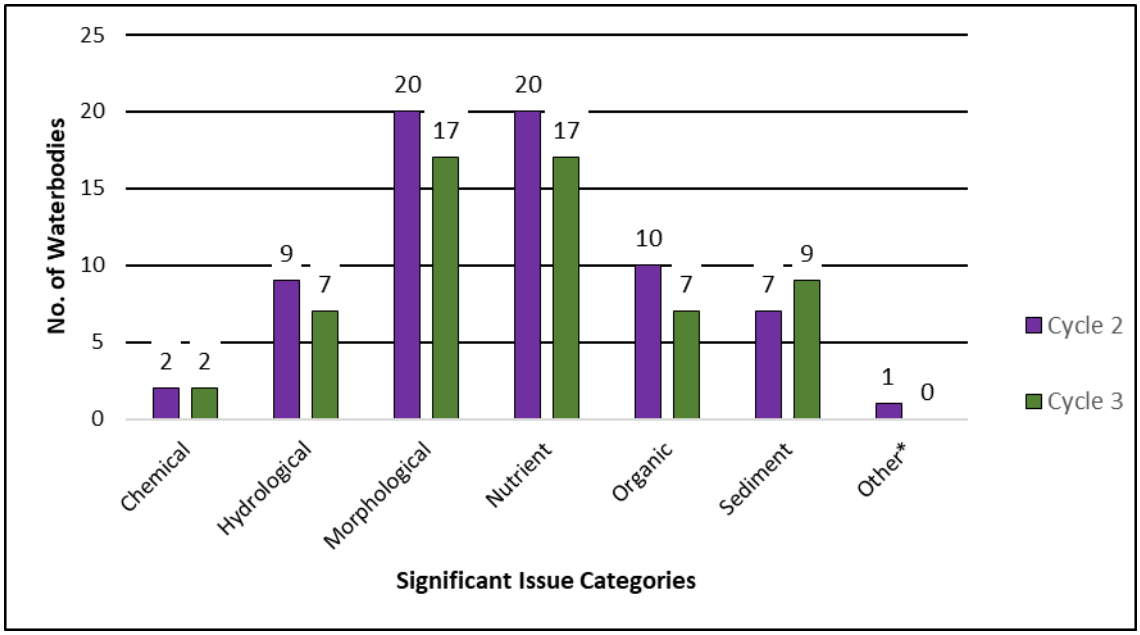


Figure 22: Number of waterbodies in each risk category in 2nd Cycle Areas for Action

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 and nutrient pollution, each impacting 17 waterbodies (Figure 23). This is followed by sediment which is impacting nine waterbodies and hydrological and organic impacts, each impacting seven waterbodies.

- The number of 2nd Cycle Areas for Action waterbodies associated with each of the significant issues categories has reduced between Cycle 2 and Cycle 3 except for sediment which has increased from seven to nine waterbodies.



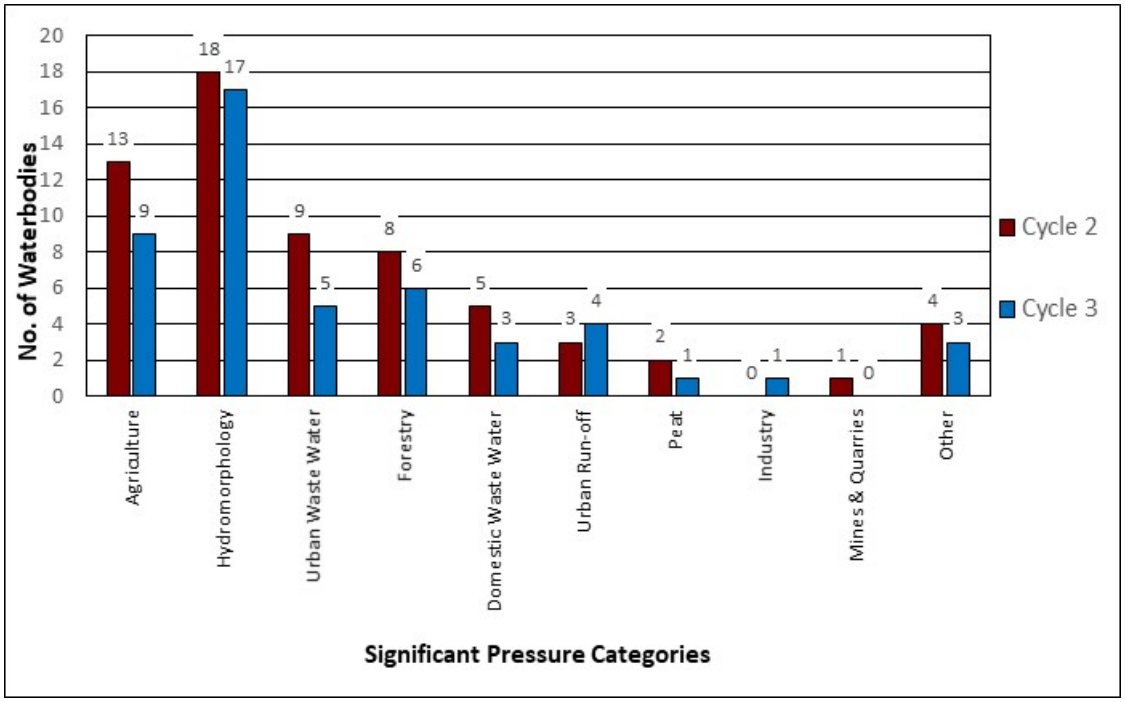
*Other - Acidification, saline intrusion, elevated temperature, litter, microbiological pollution and unknown impacts have all been grouped into the "Other" issues category for the purpose of this report

Figure 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:
  - Hydromorphology - 17 waterbodies are impacted compared to 18 impacted in Cycle 2.
  - Agriculture – nine waterbodies are impacted compared to 13 impacted in Cycle 2.
  - Forestry - six waterbodies are impacted compared to eight impacted in Cycle 2.
  - Urban Waste Water Significant Pressures impacted four less waterbodies in Cycle 3 than in Cycle 2 (a reduction of nine to five waterbodies impacted). The following Agglomerations were listed as pressures in Cycle 2 but have been removed from the list of significant pressures in Cycle 3.
    - Knock (D0065)
    - Castlebar (D0047)
    - Lahardane (D0380)
  - Urban run-off - four waterbodies are impacted compared to one waterbody impacted in Cycle 2.

- When comparing the significant pressures in the 2nd Cycle Areas for Action between Cycle 2 and 3 there has been a decrease in all significant pressure categories in the catchment with the exception of Urban run-off (considered a pressure in Tubbercurry stream_010 and Tubbercurry_010 in Cycle 3 while no longer considered a pressure in Bellawaddy_020) and industry (Section 4 licence at Breaffy National School considered a Cycle 3 pressure in Manulla_030).



*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 19 Areas for Action, comprising of 108 waterbodies, recommended for further characterisation and action in the catchment for the 3rd Cycle River Basin Management Plan. 41 of the 108 waterbodies in the 3rd Cycle Recommended Areas for Action are *At Risk*, 27 are in *Review* and 40 are *Not At Risk.* The 19 Recommended Areas for Action consist of four Areas for Protection and 15 Areas for Restoration. LAWPRO are the proposed lead organisation in 15 Recommended Areas for Action and NFGWS are the proposed lead on the remaining four Recommended Areas for Action. The Recommended Areas for Action in the catchment are listed in Table 7 and shown in Figure 25. The reason for selecting each waterbody in a Recommended Area for Action is provided in Appendix 3.

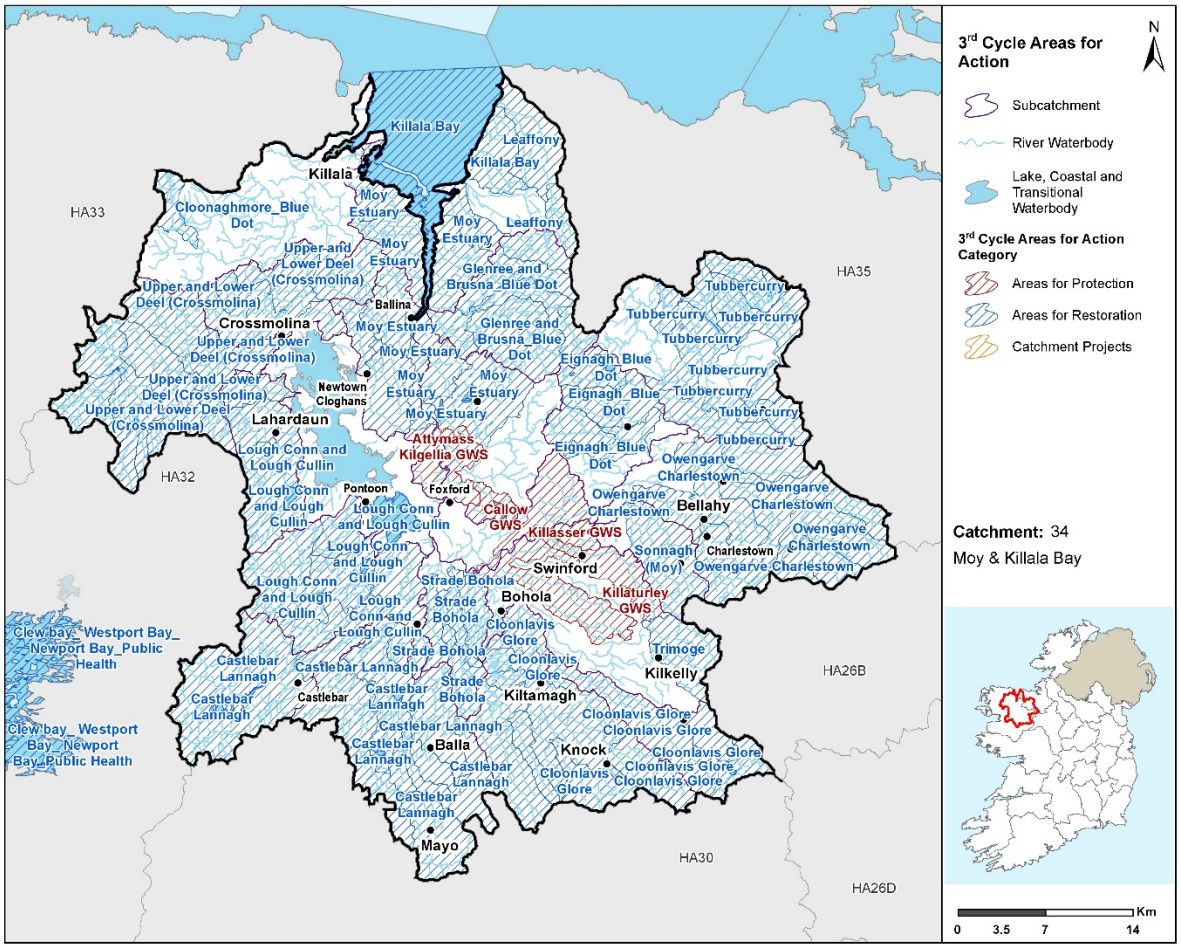


Figure 25: 2nd & 3rd Cycle Recommended Areas for Action Locations

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
Lough Conn and Lough Cullin	12	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Upper and Lower Deel (Crossmolina)	13	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Eignagh_Blue Dot	6	Restoration	Blue Dot Areas for Action LAWPRO and Others	LAWPRO
Glenree & Brusna_Blue Dot	6	Restoration	Blue Dot Areas for Action LAWPRO and Others	LAWPRO
Owengarve Charlestown	8	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Castlebar Lannagh	14	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
Cloonaghmore_Blue Dot	1	Restoration	Blue Dot Areas for Action LAWPRO and Others	LAWPRO
Moy Estuary	11	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Callow GWS	2	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Strade Bohola	4	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Cloonlavis Glore	12	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Leaffony	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Tubbercurry	10	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Killasser GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Attymass Kilgellia GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Killala Bay	2	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Sonnagh (Moy)	1	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO
Killaturley GWS	1	Protection	Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA	NFGWS
Trimoge	1	Restoration	Prioritised Areas for Action LAWPRO	LAWPRO

10 Catchment Summary

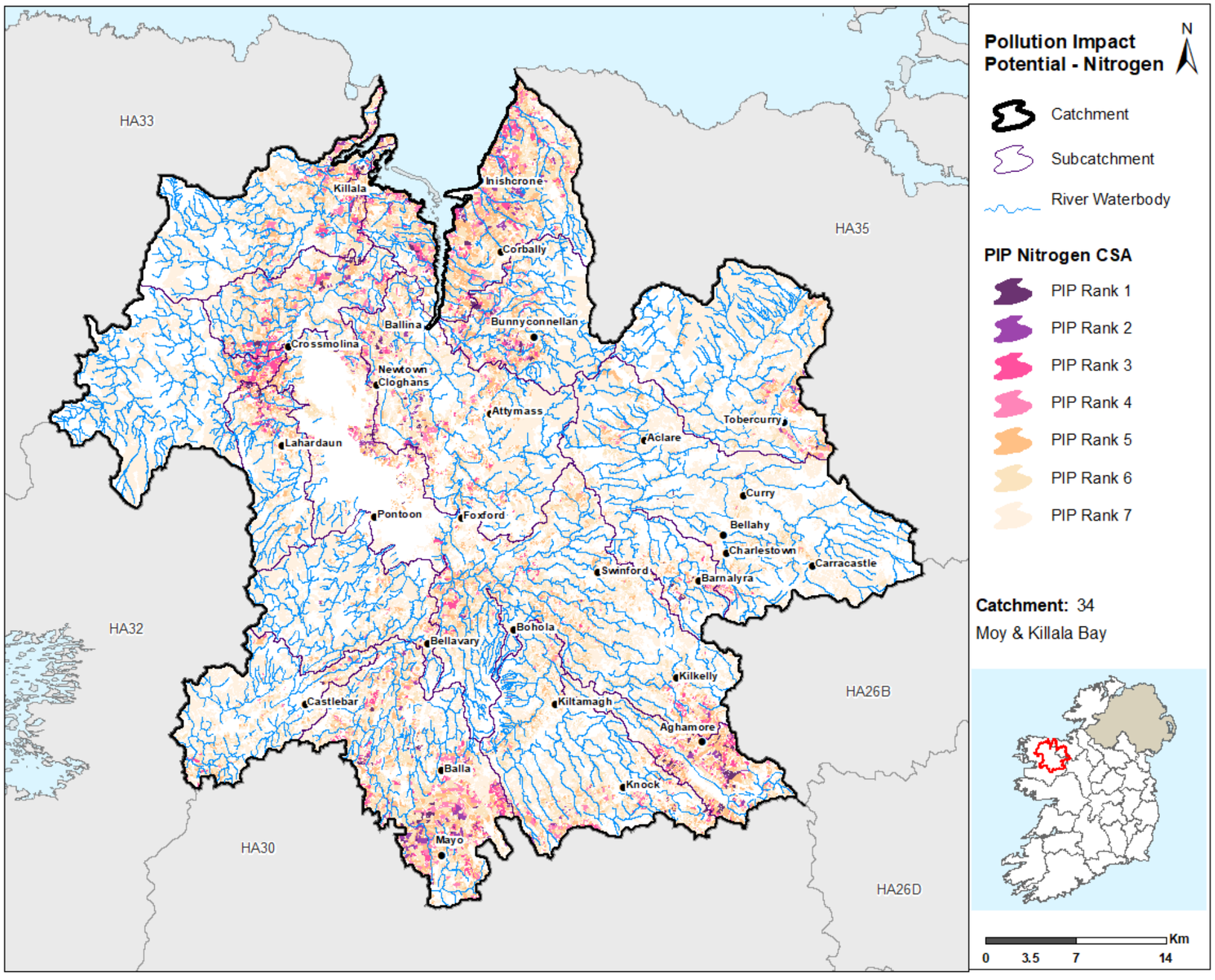
- Of the 115 river waterbodies, 28 are *At Risk* of not meeting their WFD objectives.
- Five out of 21 lake waterbodies are *At Risk* of not meeting their WFD objectives.
- The Moy Estuary (IE_WE_420_0300) is *At Risk* and is impacted by eutrophication. Urban waste water, agriculture and domestic waste water are the significant pressures.
- There are no *At Risk* groundwater bodies.
- There has been an overall deterioration across the catchment with 43 waterbodies *At Risk* in Cycle 3 compared to 25 waterbodies *At Risk* in Cycle 2.

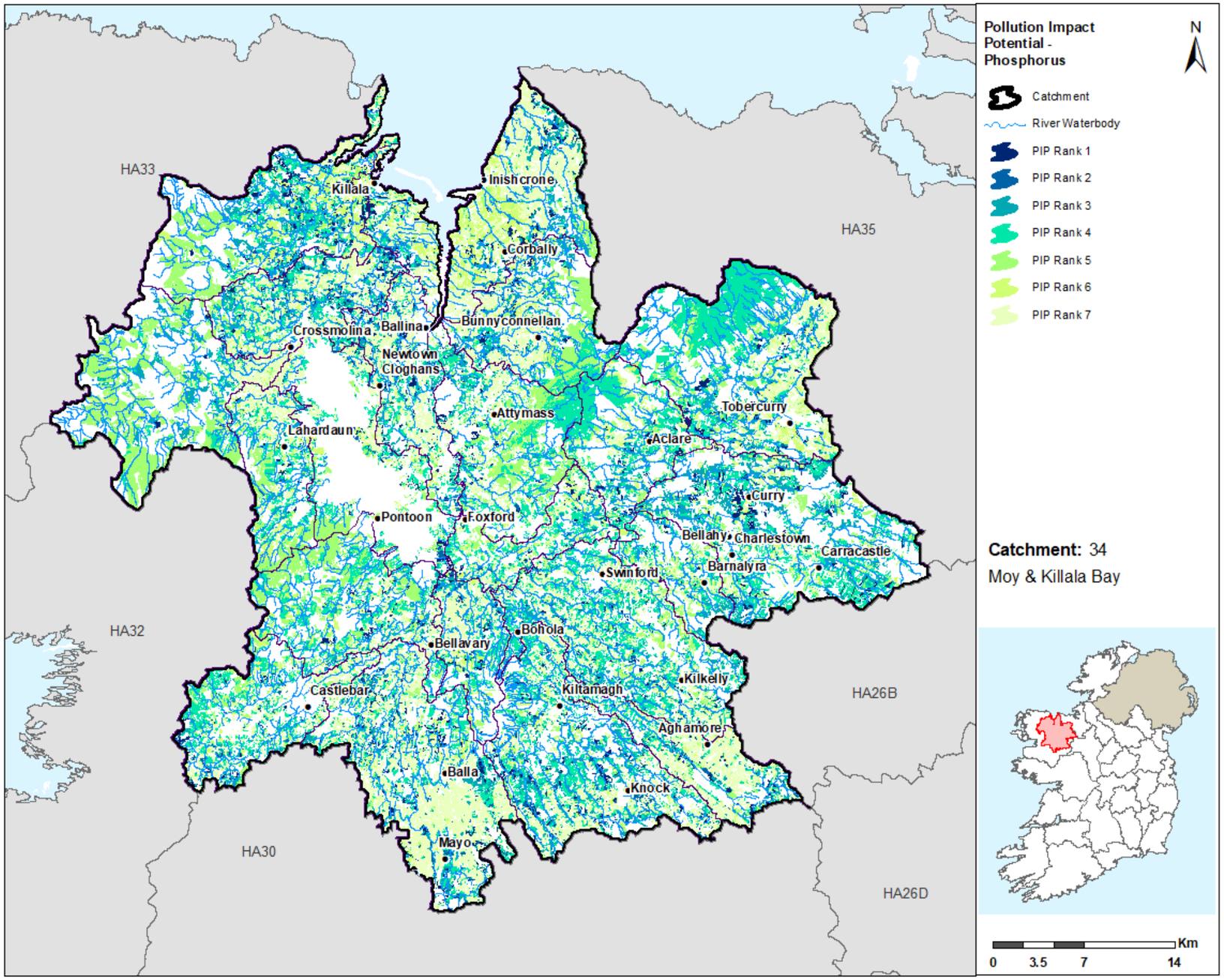
- The main significant issues are from nutrients pollution and hydromorphological impacts, followed by sediment, hydrological impacts and organic pollution.
- The main significant pressures are hydromorphological pressures followed by agriculture, forestry and urban waste water.
- The main impacts and pressures driving the change between Cycle 2 and Cycle 3 are increases in waterbodies impacted by nutrient pollution 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, 28 waterbodies were *At Risk* in Cycle 2 and 24 waterbodies are *At Risk* in Cycle 3.
- There are 19 3rd Cycle Recommended Areas for Action for Cycle 3. They comprise of 108 waterbodies with 41 waterbodies *At Risk*, 27 in *Review* and 40 *Not At Risk*.

Appendix 1
High ecological status objective waterbodies

Waterbody Name	Waterbody Type	Waterbody Code	Status 2013-2018
BELLANAMEAN_010	River	IE_WE_34B040500	High
CALLOW LOUGHS STREAM_010	River	IE_WE_34C080300	High
CLOONAGHMORE_010	River	IE_WE_34C030030	Good
CLOONAGHMORE_030	River	IE_WE_34C030150	High
CLOONLAVIS_010	River	IE_WE_34C100300	Good
CLYDAGH (CASTLEBAR)_020	River	IE_WE_34C050200	Good
CRUMLIN (LOUGH CULLIN)_010	River	IE_WE_34C110300	Good
EIGNAGH_010	River	IE_WE_34E010100	High
EIGNAGH_020	River	IE_WE_34E010200	Good
EIGNAGH_030	River	IE_WE_34E010300	Good
GLENREE_010	River	IE_WE_34G010020	High
GLENREE_020	River	IE_WE_34G010060	Good
GWEESTION_020	River	IE_WE_34G030200	High
LENYVEE_010	River	IE_WE_34L060300	High
LOUGHANABOLL_010	River	IE_WE_34L070100	High
MOY_040	River	IE_WE_34M020300	Moderate
OWENAHER_010	River	IE_WE_34O010050	High
OWENGARVE (SLIGO)_010	River	IE_WE_34O030050	Good
OWENGARVE (SLIGO)_020	River	IE_WE_34O030100	Good
OWENGARVE (SLIGO)_030	River	IE_WE_34O030200	High
POLLAGH_010	River	IE_WE_34P010100	High
POLLAGH_020	River	IE_WE_34P010200	High
Talt	Lake	IE_WE_34_405	Good
TRIMOGE_030	River	IE_WE_34T010500	High
Washpool	Lake	IE_WE_34_402	Good
YELLOW (FOXFORD)_010	River	IE_WE_34Y010100	High
YELLOW (FOXFORD)_020	River	IE_WE_34Y010400	High

Appendix 2
Pollution Impact Potential Mapping





Pollution Impact Potential - Phosphorus

N

Catchment

River Waterbody

PIP Rank 1

PIP Rank 2

PIP Rank 3

PIP Rank 4

PIP Rank 5

PIP Rank 6

PIP Rank 7

Catchment: 34
Moy & Killala Bay

Km
0 3.5 7 14

Appendix 3
Summary information on all waterbodies in the Moy and Kilalla Bay Catchment

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_5	IE_WE_34A010600	ADDERGOOLE_010	River	*At Risk*	*Not At Risk*	Moderate	Good	No		Lough Conn and Lough Cullin	Existing PAA WB. Keep to ensure full SC is included.
34_20	IE_WE_34A120980	ATTIAPPLETON_010	River	*Review*	*At Risk*	Unassigned	Unassigned	No	For	Lough Conn and Lough Cullin	Existing PAA WB. Unassigned & LCA to start in 2021.
34_8	IE_WE_34A350930	ABBEYTOWN_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Upper and Lower Deel (Crossmolina)	Existing PAA WB. LCA confirms *At Risk*. Keep to plan actions in 3rd cycle. Crossmolina Eskeragh GWS.
34_14	IE_WE_34B020200	BAR DEELA_010	River	*Not At Risk*	*Review*	Good	Poor	No		Upper and Lower Deel (Crossmolina)	Expand PAA. Risk says *Review*, but appears to be AR with deterioration to poor. IFI: The Deel River and its tributaries are important salmon and trout spawning habitat, particularly for spring salmon in the River Moy system and for the Lough Conn fishery. The deterioration in ecological status in these catchments is of concern to IFI. These catchments are proposed for restoration.
34_7	IE_WE_34B040500	BELLANAMEAN_010	River	*At Risk*	*Not At Risk*	Good	High	Yes		Eignagh_Blue Dot	NAR - not proposed. Could be included as Eignagh PAA for multiple Blue Dot WBs
34_11	IE_WE_34B050150	BELLAWADDY_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_11	IE_WE_34B050300	BELLAWADDY_020	River	*At Risk*	*Not At Risk*	Moderate	Good	No			
34_13	IE_WE_34B060600	BREAGHWY_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_9	IE_WE_34B070200	BRUSNA (NORTH MAYO)_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Glenree & Brusna_Blue Dot	Headwaters. Include to complete SC. Support all other Blue Dot WBs/Sites in this SC.
34_9	IE_WE_34B070600	BRUSNA (NORTH MAYO)_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Glenree & Brusna_Blue Dot	HS Site in non HSO WB not achieving High
34_9	IE_WE_34B080400	BEHY (NORTH MAYO)_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Glenree & Brusna_Blue Dot	HS Site in non HSO WB not achieving High
34_18	IE_WE_34B120180	BLACK (SLIGO)_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, Hymo	Owengarve Charlestown	Existing *At Risk* PAA WB. LCA not started yet.
34_8	IE_WE_34B180860	BALLAGHAMUCK_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Upper and Lower Deel (Crossmolina)	Existing PAA WB. LCA confirms *At Risk*. Keep to plan actions in 3rd cycle.
34_6	IE_WE_34B400840	BALLYMANAGH_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Lough Conn and Lough Cullin	Proposed by NPWS. LAWPRO discussed with MCC. Important to understand decline in Lough Conn.
34_22	IE_WE_34C010180	CASTLEBAR_010	River	*At Risk*	*At Risk*	Moderate	Poor	No	DWW, Hymo, UR	Castlebar Lannagh	LCA yet to start. Keep.
34_22	IE_WE_34C010300	CASTLEBAR_020	River	*At Risk*	*At Risk*	Poor	Moderate	No	Hymo, UR	Castlebar Lannagh	LCA yet to start. Keep.
34_21	IE_WE_34C010400	CASTLEBAR_030	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Hymo	Castlebar Lannagh	Expand PAA. *At Risk* WB. MCC also proposing.
34_20	IE_WE_34C010500	CASTLEBAR_040	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Lough Conn and Lough Cullin	Add to existing PAA to ensure full SC is included. NAR.
34_5	IE_WE_34C020460	CASTLEHILL_010	River	*At Risk*	*At Risk*	Unassigned	Unassigned	No	Ag	Lough Conn and Lough Cullin	Existing PAA WB. Unassigned & LCA to start in 2021.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_13	IE_WE_34C030030	CLOONAGHMORE_010	River	*Not At Risk*	*At Risk*	High	Good	Yes	Ag, Hymo	Cloonaghmore_Blue Dot	*At Risk* HSO WB. MCC proposed for LAWPRO.
34_13	IE_WE_34C030100	CLOONAGHMORE_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_13	IE_WE_34C030150	CLOONAGHMORE_030	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_13	IE_WE_34C030200	CLOONAGHMORE_040	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_13	IE_WE_34C030270	CLOONAGHMORE_050	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_13	IE_WE_34C030300	CLOONAGHMORE_060	River	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
34_20	IE_WE_34C050100	CLYDAGH (CASTLEBAR)_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Lough Conn and Lough Cullin	Add to existing PAA to ensure full SC is included. HS site requires restoration.
34_20	IE_WE_34C050200	CLYDAGH (CASTLEBAR)_020	River	*Not At Risk*	*At Risk*	High	Good	Yes	For	Lough Conn and Lough Cullin	Add to existing PAA - WB now AR. Also HSO.
34_6	IE_WE_34C060200	CORROY_010	River	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No		Moy Estuary	LAWPRO discussed with MCC. Important to understand decline in Moy_120.
34_10	IE_WE_34C070600	CARROWKERIBLY LOUGH STREAM_010	River	*Not At Risk*	*At Risk*	Good	Poor	No	Ag, Hymo	Moy Estuary	Proposed by MCC & NPWS. Has a Blue Dot Site to protect. Other site is at poor. LAWPRO to prioritise RWB.
34_10	IE_WE_34C080300	CALLOW LOUGHS STREAM_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes		Callow GWS	The NFGWS would like to propose that the Callow Lough catchment is included within a PAA on the basis of Public Health. The lake is used for water abstraction by Callow GWS. The lake is currently unclassified, while the downstream waterbodies (Callow Lough Stream_010 and Moy_110) are classified as being of 'High' to 'Good' status and worthy of protection. In addition, the lake outflow flows into the River Moy SAC. Callow GWS
34_2	IE_WE_34C090700	CARROWARD_010	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Ag, Hymo, UWW	Strade Bohola	MCC: Declined waterbody, gone from Good Status to Moderate status in latest EPA Report, located on the main channel of the Moy.
34_15	IE_WE_34C100300	CLOONLAVIS_010	River	*At Risk*	*At Risk*	Moderate	Good	Yes	Hymo	Cloonlavis Glore	Existing PAA. LCA yet to start.
34_20	IE_WE_34C110300	CRUMLIN (LOUGH CULLIN)_010	River	*At Risk*	*At Risk*	Good	Good	Yes	For, Hymo	Lough Conn and Lough Cullin	Existing PAA WB. AR. Also HSO.
34_16	IE_WE_34C120400	CORSALLAGH STREAM_010	River	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
34_18	IE_WE_34C280100	CHARLESTOWN STREAM_010	River	*At Risk*	*At Risk*	Poor	Moderate	No	Ag, Hymo, UWW	Owengarve Charlestown	Existing *At Risk* PAA WB. LCA not started yet.
34_5	IE_WE_34C700920	CREEVY_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Lough Conn and Lough Cullin	Existing PAA WB. Unassigned & LCA to start in 2021. Killeen Errew GWS
34_14	IE_WE_34D010006	DEEL (CROSSMOLINA)_010	River	*Not At Risk*	*Review*	Good	Moderate	No		Upper and Lower Deel (Crossmolina)	Expand PAA. Risk says *Review*, but appears to be AR with deterioration to moderate. IFI: The Deel River and its tributaries are important salmon and trout spawning habitat, particularly for spring salmon in the River Moy system and for the Lough Conn fishery. The deterioration in ecological status in these catchments is of concern to IFI. These catchments are proposed for restoration.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_14	IE_WE_34D010010	DEEL (CROSSMOLINA)_020	River	*Not At Risk*	*Review*	Good	Moderate	No		Upper and Lower Deel (Crossmolina)	Expand PAA. Risk says *Review*, but appears to be AR with deterioration to moderate. IFI: The Deel River and its tributaries are important salmon and trout spawning habitat, particularly for spring salmon in the River Moy system and for the Lough Conn fishery. The deterioration in ecological status in these catchments is of concern to IFI. These catchments are proposed for restoration.
34_14	IE_WE_34D010025	DEEL (CROSSMOLINA)_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Upper and Lower Deel (Crossmolina)	NAR. Include to complete SC. u/s of WB where HS site is failing its obj.
34_14	IE_WE_34D010120	DEEL (CROSSMOLINA)_040	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Upper and Lower Deel (Crossmolina)	HS Site in non HSO WB not achieving High
34_8	IE_WE_34D010300	DEEL (CROSSMOLINA)_050	River	*Not At Risk*	*Not At Risk*	High	High	No		Upper and Lower Deel (Crossmolina)	Expand PAA to ensure SC is completely included.
34_8	IE_WE_34D010400	DEEL (CROSSMOLINA)_060	River	*At Risk*	*At Risk*	Moderate	Moderate	No	Other	Upper and Lower Deel (Crossmolina)	Existing PAA WB. LCA ongoing, but preliminary results are not impacted. Status is moderate for fish. IFI???
34_13	IE_WE_34D030800	DUVOWEN_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_11	IE_WE_34D310990	DOOYEAGHNY_or_CLOON LOUGHAN_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	Existing PAA - unassigned. LCA ongoing. May need to keep. Rename PAA as propose to drop Bellawaddy.
34_18	IE_WE_34D360920	DRUMBAUN_010	River	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No		Owengarve Charlestown	Add to completed SC.
34_7	IE_WE_34E010100	EIGNAGH_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes		Eignagh_Blue Dot	NAR - proposed by NPWS. Could be included as Eignagh PAA for multiple Blue Dot WBs
34_7	IE_WE_34E010200	EIGNAGH_020	River	*Not At Risk*	*At Risk*	High	Good	Yes	Hymo	Eignagh_Blue Dot	*At Risk* - proposed by NPWS. Could be included as Eignagh PAA for multiple Blue Dot WBs
34_7	IE_WE_34E010300	EIGNAGH_030	River	*Not At Risk*	*At Risk*	High	Good	Yes	Hymo	Eignagh_Blue Dot	*At Risk* - proposed by NPWS. Could be included as Eignagh PAA for multiple Blue Dot WBs
34_9	IE_WE_34G010020	GLENREE_010	River	*At Risk*	*Not At Risk*	Good	High	Yes		Glenree & Brusna_Blue Dot	Glenree is an existing 1 WB PAA which improved. But glenree_020 has now deteriorated.
34_9	IE_WE_34G010060	GLENREE_020	River	*Not At Risk*	*At Risk*	High	Good	Yes	Hymo	Glenree & Brusna_Blue Dot	*At Risk* HSO WB
34_9	IE_WE_34G010200	GLENREE_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Glenree & Brusna_Blue Dot	HS Site in non HSO WB not achieving High
34_4	IE_WE_34G020010	GLORE (MAYO)_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, Hymo	Cloonlavis Glore	Existing PAA. LCA yet to start.
34_4	IE_WE_34G020200	GLORE (MAYO)_020	River	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, Hymo	Cloonlavis Glore	Existing PAA. LCA yet to start.
34_15	IE_WE_34G030100	GWEESTION_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Cloonlavis Glore	Add to complete subcatchment. NAR.
34_17	IE_WE_34G030200	GWEESTION_020	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_11	IE_WE_34L010100	LEAFFONY_010	River	*Not At Risk*	*Not At Risk*	High	Good	No		Leaffony	SCC: Water quality has deteriorated from high to good status. Restoration of water quality status may be a quick fix in terms of bringing about a restoration to high status.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
											Restoration of high status is important in terms of reversing the national trend in the loss of existing high status sites. Some initial investigations have been carried out by the Environment Section in relation to the issue.
34_11	IE_WE_34L010260	LEAFFONY_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Leaffony	Include with _010 - change PAA name from Killala Bay
34_2	IE_WE_34L020500	LITTLE (STRADE)_010	River	*Not At Risk*	*Review*	Good	Poor	No		Strade Bohola	HS Site in non HSO WB not achieving High. MCC proposed for LAWPRO.
34_21	IE_WE_34L040200	LOUGHNAMINOO STREAM_010	River	*At Risk*	*At Risk*	Poor	Poor	No	DWW, Hymo, UWW	Castlebar Lannagh	In existing PAA. LCA yet to start. Keep.
34_3	IE_WE_34L050600	LOUGH MUCK STREAM_010	River	*At Risk*	*Review*	Moderate	Good	No			
34_16	IE_WE_34L060300	LENYVEE_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_16	IE_WE_34L070100	LOUGHANABOLL_010	River	*At Risk*	*Not At Risk*	Good	High	Yes		Tubbercurry	Existing PAA - requires further characterisation. Blue Dot WB
34_21	IE_WE_34M010100	MANULLA_010	River	*Not At Risk*	*At Risk*	Good	Poor	No	Ag	Castlebar Lannagh	Expand PAA. *At Risk* WB. MCC also proposing.
34_21	IE_WE_34M010225	MANULLA_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Castlebar Lannagh	Expand PAA. Keep subcatchment complete.
34_21	IE_WE_34M010300	MANULLA_030	River	*At Risk*	*At Risk*	Moderate	Poor	No	Hymo, Ind	Castlebar Lannagh	In existing PAA. LCA yet to start. Keep.
34_21	IE_WE_34M010500	MANULLA_040	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Ag, For	Castlebar Lannagh	Expand PAA. *At Risk* WB. MCC also proposing.
34_16	IE_WE_34M020010	MOY_010	River	*At Risk*	*At Risk*	Poor	Poor	No	Ag, For, Hymo	Tubbercurry	Existing PAA - requires further characterisation
34_16	IE_WE_34M020050	MOY_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Tubbercurry	Expansion of existing PAA. NAR - proposed by NPWS. Include under SC approach
34_16	IE_WE_34M020100	MOY_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Tubbercurry	Expansion of existing PAA. NAR - proposed by NPWS. Include under SC approach
34_16	IE_WE_34M020300	MOY_040	River	*Not At Risk*	*At Risk*	High	Moderate	Yes	Hymo	Tubbercurry	Expansion of existing PAA. *At Risk* - proposed by NPWS. Include under SC approach
34_16	IE_WE_34M020400	MOY_050	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Tubbercurry	Expansion of existing PAA. NAR - proposed by NPWS. Include under SC approach
34_18, 34_7	IE_WE_34M020470	MOY_060	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_1, 34_7	IE_WE_34M020500	MOY_070	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_17, 34_3	IE_WE_34M020650	MOY_080	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Killasser GWS	Killasser GWS. Proposed by NPWS.
34_2, 34_3	IE_WE_34M020750	MOY_090	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_12, 34_3	IE_WE_34M020800	MOY_100	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_10, 34_6	IE_WE_34M020850	MOY_110	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Attymass Kilgellia GWS	Attymass Kilgellia GWS
34_10, 34_6	IE_WE_34M021100	MOY_120	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Hymo, UR	Moy Estuary	Proposed by MCC for LAWPRO
34_18	IE_WE_34M030300	MULLAGHANOE_010	River	*Not At Risk*	*At Risk*	Good	Moderate	No	Ag, For, Hymo	Owengarve Charlestown	Expand PAA, to include this additional AR WB.
34_16	IE_WE_34M040100	MAD_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	For, Hymo	Tubbercurry	Existing PAA - requires further characterisation. Include under SC approach
34_21	IE_WE_34M050400	MEANDER_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Castlebar Lannagh	Expand PAA. Keep subcatchment complete.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_19	IE_WE_34M190890	MOYNE_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	Unassigned. West side of Moy Estuary. East side of estuary forms part of Bellawaddy PAA. This now covers all direct waterbodies to Moy Estuary.
34_4	IE_WE_34N190740	NORTH COOLNAHA_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Cloonlavis Glore	Existing PAA. LCA yet to start. Unassigned.
34_16	IE_WE_34O010050	OWENAHER_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_16	IE_WE_34O010100	OWENAHER_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_18	IE_WE_34O030050	OWENGARVE (SLIGO)_010	River	*At Risk*	*At Risk*	Good	Good	Yes	Hymo	Owengarve Charlestown	Existing *At Risk* PAA WB. HSO WB. LCA not started yet.
34_18	IE_WE_34O030100	OWENGARVE (SLIGO)_020	River	*Not At Risk*	*At Risk*	High	Good	Yes	Hymo	Owengarve Charlestown	Expand PAA, to include this additional AR WB. Barnaderg Gortbeg GWS
34_18	IE_WE_34O030200	OWENGARVE (SLIGO)_030	River	*Not At Risk*	*Not At Risk*	High	High	Yes		Owengarve Charlestown	Add to completed SC.
34_18	IE_WE_34O040200	OWENLOBNAGLAUR_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Owengarve Charlestown	Add to completed SC. u/S of Owengarve (Sligo)_010
34_2	IE_WE_34O050400	OUGHTAGH_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Strade Bohola	Tributary of the Moy_090 achieving GES and NAR. Not hydrologically connected to CARROWARD_010, LITTLE (STRADE)_010 or STRADE_010. add to complete subcatchment.
34_15	IE_WE_34P010100	POLLAGH_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes		Cloonlavis Glore	Add to complete subcatchment. NAR.
34_15	IE_WE_34P010200	POLLAGH_020	River	*Not At Risk*	*Not At Risk*	High	High	Yes		Cloonlavis Glore	Add to complete subcatchment. NAR. Kilcolman / Facefield GWS
34_15	IE_WE_34P010260	POLLAGH_030	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Cloonlavis Glore	Add to complete subcatchment. NAR.
34_15	IE_WE_34P010300	POLLAGH_040	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Cloonlavis Glore	Add to complete subcatchment. NAR.
34_11	IE_WE_34Q070710	Quigabar_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Killala Bay	Existing PAA - unassigned. LCA ongoing. May need to keep. Rename PAA as propose to drop Bellawaddy.
34_19	IE_WE_34R010200	RATHROEEN STREAM_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	Unassigned. West side of Moy Estuary. East side of estuary forms part of Bellawaddy PAA. This now covers all direct waterbodies to Moy Estuary.
34_14	IE_WE_34S010400	SHANVOLAHAN_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	For, Hymo, Peat	Upper and Lower Deel (Crossmolina)	Existing PAA WB. LCA ongoing. Referrals being drafted.
34_1	IE_WE_34S020100	SONNAGH (MOY)_010	River	*At Risk*	*At Risk*	Moderate	Poor	No	Ag, Hymo, M+Q	Sonnagh (Moy)	This is an important salmon and trout spawning habitat with pressure from agricultural land drainage and physical in-stream habitat damage/removal. This catchment is proposed for restoration. Declined to Poor status. A one water body subcatchment.
34_17	IE_WE_34S030200	SPADDAGH_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_2	IE_WE_34S040800	STRADE_010	River	*Not At Risk*	*Review*	High	Poor	No		Strade Bohola	MCC: Declined by 3 classes
34_17	IE_WE_34S050300	SWINFORD_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Killaturley GWS	Killaturley GWS
34_8	IE_WE_34S060400	SLIEVECLAUR_010	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Upper and Lower Deel (Crossmolina)	Expand PAA to ensure SC is completely included.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_11	IE_WE_34S610980	Scurmore_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	Existing PAA - unassigned. LCA ongoing. May need to keep. Rename PAA as propose to drop Bellawaddy.
34_17	IE_WE_34T010200	TRIMOGE_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	M+Q, UWW	Trimoge	Midfield GWS
34_17	IE_WE_34T010300	TRIMOGE_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_17	IE_WE_34T010500	TRIMOGE_030	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_16	IE_WE_34T020050	TUBBERCURRY_010	River	*At Risk*	*At Risk*	Poor	Poor	No	UR, UWW	Tubbercurry	Existing PAA - requires further characterisation
34_16	IE_WE_34T020200	TUBBERCURRY_020	River	*At Risk*	*At Risk*	Poor	Moderate	No	Ag, UWW	Tubbercurry	Existing PAA - requires further characterisation
34_16	IE_WE_34T030400	TUBBERCURRY STREAM_010	River	*At Risk*	*At Risk*	Poor	Poor	No	Hymo, UR, UWW	Tubbercurry	Existing PAA - requires further characterisation
34_21	IE_WE_34T560640	TULLYMORE (Mayo)_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Castlebar Lannagh	In existing PAA. LCA yet to start. Keep.
34_6	IE_WE_34T830920	TULLYEGAN_010	River	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	Proposed by NPWS. LAWPRO discussed with MCC. Important to understand decline in Moy_120.
34_10	IE_WE_34Y010100	YELLOW (FOXFORD)_010	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_10	IE_WE_34Y010400	YELLOW (FOXFORD)_020	River	*Not At Risk*	*Not At Risk*	High	High	Yes			
34_15	IE_WE_34Y020155	YELLOW (KNOCK)_010	River	*At Risk*	*At Risk*	Moderate	Moderate	No	For, Hymo	Cloonlavis Glore	Existing PAA. LCA yet to start.
34_15	IE_WE_34Y020400	YELLOW (KNOCK)_020	River	*Not At Risk*	*Not At Risk*	Good	Good	No		Cloonlavis Glore	Add to complete subcatchment. NAR.
34_14	IE_WE_34_251	Derrynaherriva	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Upper and Lower Deel (Crossmolina)	Existing PAA WB. Unassigned lakes LCAs ongoing.
34_16	IE_WE_34_297	Tullyvellia	Lake	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
34_21	IE_WE_34_304	Carrowmore Manulla	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Castlebar Lannagh	In existing PAA. LCA commenced. Keep.
34_4	IE_WE_34_315	Caheer	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Cloonlavis Glore	Existing PAA. LCA yet to start. Unassigned.
34_13	IE_WE_34_355	Doobehy	Lake	*Review*	*Review*	Unassigned	Unassigned	No			
34_5	IE_WE_34_368	Levally	Lake	*At Risk*	*Not At Risk*	Moderate	Good	No		Lough Conn and Lough Cullin	Existing PAA WB. Keep to ensure full SC is included.
34_22	IE_WE_34_376	Islandeady	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Castlebar Lannagh	LCA yet to start. Keep.
34_20	IE_WE_34_386	Derryhick	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Lough Conn and Lough Cullin	Existing PAA WB. Unassigned & LCA just started.
34_10	IE_WE_34_391	Ballymore	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	LAWPRO to prioritise LWB.
34_10	IE_WE_34_393	Callow	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Callow GWS	The NFGWS would like to propose that the Callow Lough catchment is included within a PAA on the basis of Public Health. The lake is used for water abstraction by Callow GWS. The lake is currently unclassified, while the downstream waterbodies (Callow Lough Stream_010 and Moy_110) are classified as being of 'High' to 'Good' status and worthy of protection. In addition, the lake outflow flows into the River Moy SAC. Callow GWS
34_21	IE_WE_34_402	Washpool	Lake	*At Risk*	*At Risk*	Good	Good	Yes	Hymo	Castlebar Lannagh	In existing PAA. LCA yet to start. Keep.
34_22	IE_WE_34_403	Castlebar	Lake	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, DWW, Other	Castlebar Lannagh	LCA yet to start. Keep.

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
34_7	IE_WE_34_405	Talt	Lake	*At Risk*	*Review*	Good	Good	Yes		Eignagh_Blue Dot	Proposed by IFI for Arctic char, Sligo for drinking water protection and NPWS. Blue Dot also
34_12	IE_WE_34_406a	Cullin	Lake	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, Other	Lough Conn and Lough Cullin	Existing PAA WB. AR. important lake for brown trout and other fish species, under pressure from invasives, and other factors.
34_12, 34_20, 34_5	IE_WE_34_406b	Conn	Lake	*Not At Risk*	*At Risk*	Good	Moderate	No	Other		
34_2	IE_WE_34_458	Holan	Lake	*Review*	*Review*	Unassigned	Unassigned	No			
34_14	IE_WE_34_688	Nacapduff	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Upper and Lower Deel (Crossmolina)	Existing PAA WB. Unassigned lakes LCAs ongoing.
34_7	IE_WE_34_773	Hoe	Lake	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No		Eignagh_Blue Dot	NAR - proposed by NPWS. Could be included as Eignagh PAA for multiple Blue Dot WBs
34_10	IE_WE_34_809	Carrowkeribly	Lake	*Review*	*Review*	Unassigned	Unassigned	No		Moy Estuary	LAWPRO to prioritise LWB.
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			
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
34_13	IE_WE_420_0200	Cartoon Lough, Killala Bay	Coastal	*Review*	*Review*	Unassigned	Unassigned	No			
34_11, 35_11, 35_12, 35_3	IE_WE_430_0000	Donegal Bay Southern	Coastal	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
34_13	IE_WE_420_0100	Cloonaghmore Estuary	Transitional	*Not At Risk*	*Not At Risk*	Unassigned	Unassigned	No			
34_10, 34_11, 34_19, 34_6, 34_9	IE_WE_420_0300	Moy Estuary	Transitional	*At Risk*	*At Risk*	Moderate	Moderate	No	Ag, DWW, UWW	Moy Estuary	BIM: Adjacent to Shellfish Protected Area IEPA2_0060. Concern over recent downgrading of shellfish area . MCC: Active public interest in the estuary that may be productive. Waterbodies on the estuary included and so this will form a productive use of resources.
26A_3, 26B_1, 26B_2, 26B_3, 26B_4, 26B_5, 26B_6, 26C_10, 26C_11, 26C_12, 26C_3, 26C_4, 26C_5, 26D_7, 26D_9, 26E_3, 34_4, 36_15	IE_SH_G_048	Carrick on Shannon	Groundwater	*At Risk*	*Review*	Good	Good	No			
26A_2, 26A_3, 26A_6, 26B_2, 26B_3, 26B_4, 26B_5, 26B_6, 26C_11, 34_1, 34_17, 34_18, 35_7, 35_9, 36_15	IE_SH_G_073	Curlew Mountains	Groundwater	*Review*	*Not At Risk*	Good	Good	No			

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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)
26B_1, 26B_2, 26B_6, 26D_8, 26D_9, 30_10, 34_4	IE_SH_G_224	Suck North	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
30_15, 30_16, 30_7, 31_2, 31_4, 32_1, 32_10, 32_11, 32_12, 32_13, 32_5, 32_6, 32_7, 32_8, 32_9, 34_20, 34_22, 34_5	IE_WE_G_0017	Clifden Castlebar	Groundwater	*Review*	*Not At Risk*	Good	Good	No			
30_1, 30_10, 30_11, 30_17, 30_18, 30_2, 30_3, 30_6, 30_9, 34_15, 34_21	IE_WE_G_0019	Cong-Robe	Groundwater	*Review*	*Review*	Good	Good	No			
26D_11, 26D_2, 26D_8, 26D_9, 29_4, 29_5, 29_6, 30_1, 30_10, 30_11, 30_12, 30_13, 30_18, 30_19, 30_2, 30_4, 30_5, 30_6, 30_8, 30_9, 34_15, 34_4	IE_WE_G_0020	Clare-Corrib	Groundwater	*At Risk*	*At Risk*	Good	Good	No	Ag		
30_7, 32_6, 34_22	IE_WE_G_0021	Aghagower	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
30_17, 30_3, 30_6, 30_7, 32_6, 34_21, 34_22	IE_WE_G_0022	Ballyhean	Groundwater	*Review*	*Review*	Good	Good	No			
32_2, 32_3, 32_5, 32_6, 34_5	IE_WE_G_0024	Beltra Lough South	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
32_5, 34_12, 34_5	IE_WE_G_0025	Beltra Lough North	Groundwater	*Not At Risk*	*Review*	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			
26A_2, 26A_3, 26B_3, 26B_5, 26B_6, 34_18, 35_5, 35_7, 35_9	IE_WE_G_0028	Gorteen	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_16, 34_18, 35_5	IE_WE_G_0029	Tobercurry	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
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			
26B_2, 26B_6, 34_1, 34_15, 34_16, 34_17, 34_18, 34_2, 34_20, 34_21, 34_4, 34_7, 35_4, 35_5, 35_7	IE_WE_G_0032	Kilkelly Charlestown	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
26B_2, 26D_9, 30_10, 30_3, 30_6, 30_7, 30_9, 32_6, 34_1, 34_15, 34_16, 34_17, 34_18, 34_2, 34_20, 34_21, 34_22, 34_3, 34_4, 34_7, 35_4	IE_WE_G_0033	Swinford	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			

Sub-catchment code	Waterbody Code	Waterbody name	Water body 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_5, 32_6, 34_10, 34_11, 34_12, 34_16, 34_17, 34_2, 34_20, 34_22, 34_3, 34_5, 34_6, 34_7, 34_9, 35_12, 35_4	IE_WE_G_0034	Foxford	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_10, 34_11, 34_12, 34_13, 34_14, 34_19, 34_5, 34_6, 34_8, 34_9	IE_WE_G_0035	Ballina	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
26A_2, 34_16, 34_18, 35_2, 35_4, 35_5, 35_6, 35_7, 35_9	IE_WE_G_0037	Ballymote	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_16, 35_2, 35_4, 35_5, 35_6, 35_9	IE_WE_G_0038	Lavagh-Ballintougher	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_16, 35_10, 35_2, 35_4, 35_6	IE_WE_G_0039	Ballygawley	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			
34_11, 34_16, 34_9, 35_1, 35_10, 35_11, 35_12, 35_2, 35_4	IE_WE_G_0048	Collooney	Groundwater	*Review*	*Not At Risk*	Good	Good	No			
34_11, 34_9, 35_12	IE_WE_G_0049	Easky West	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_11, 35_12	IE_WE_G_0050	Easky East	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			
26B_2, 30_10, 34_15, 34_4	IE_WE_G_0063	Corrib Gravels	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_16, 35_5	IE_WE_G_0104	GWDTE-Turloughmore Sligo (SAC000637)	Groundwater	*Review*	*Review*	Good	Good	No			
34_12, 34_14, 34_5, 34_8	IE_WE_G_0107	Crossmolina Gravels	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_1, 34_17, 34_18	IE_WE_G_0108	Swinford Gravels	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
26B_2, 34_17, 34_4	IE_WE_G_0112	Gweestion-Moy Gravels Group 1	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_11, 34_9	IE_WE_G_0113	Ballina Gravels Group 1	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_15, 34_4	IE_WE_G_0115	Gweestion-Moy Gravels Group 2	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			
34_10, 34_9	IE_WE_G_0116	Ballina Gravels Group 2	Groundwater	*Not At Risk*	*Not At Risk*	Good	Good	No			

Ag: Agriculture

DWW: Domestic Waste Water

For: Forestry

M+Q: Mines and Quarries

Peat: Peat Drainage and Extraction

UR: Urban Run-off

Hymo: Hydromorphology

UWW: Urban Waste Water

Ind: Industry

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