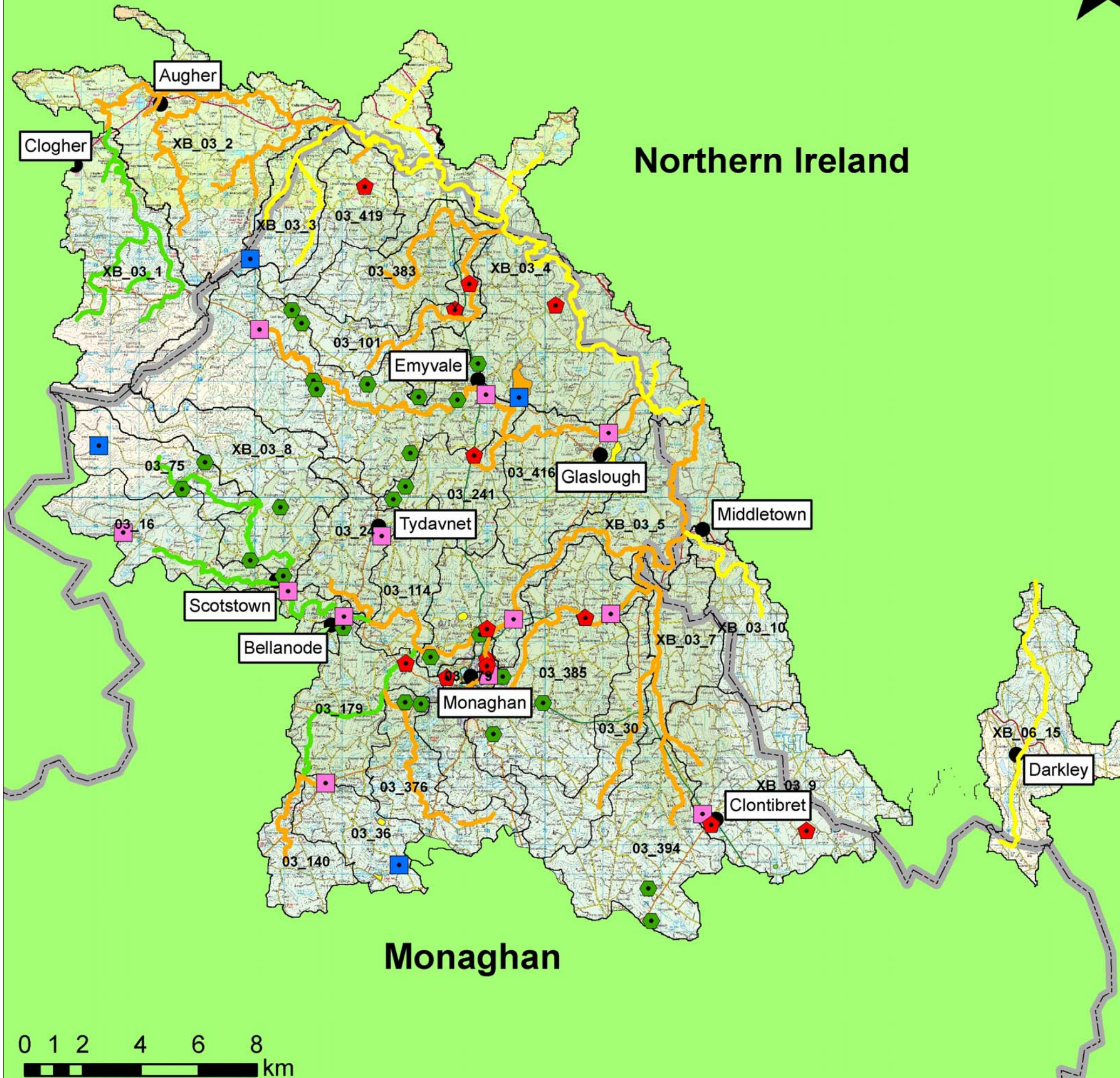


Blackwater WMU

Blackwater Water Management Unit Action Plan



Legend

- Towns and Villages
- Wastewater Treatment Plants
- EPA Licensed Facility (IPPC)
- Local Authority Licensed Discharge
- Water Treatment Plants
- NI Boundary

River Status

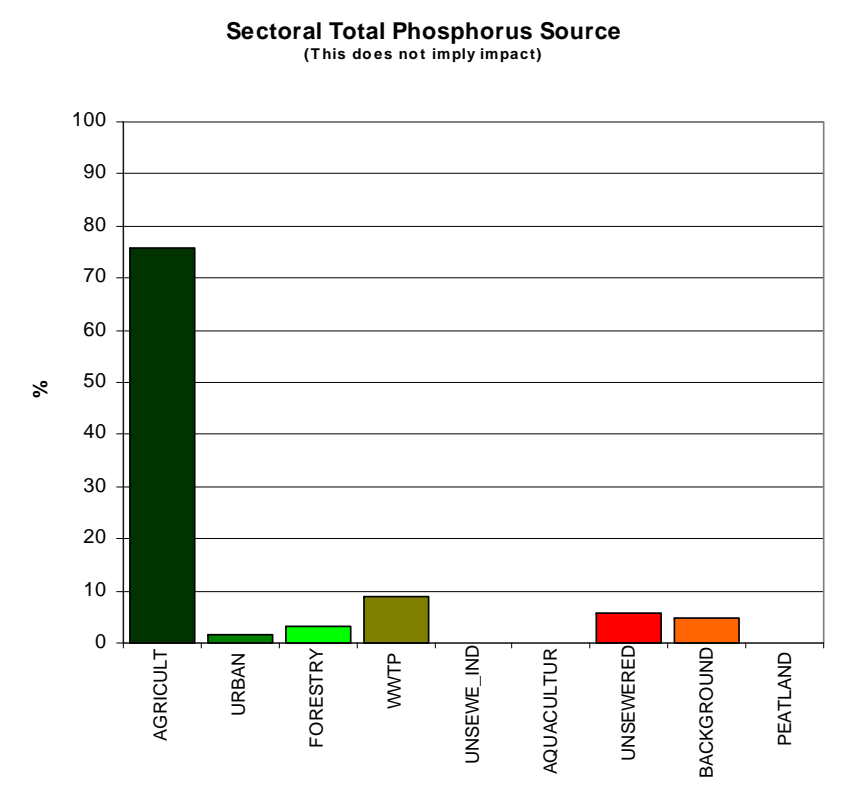
- High
- Good
- Moderate
- Poor
- Bad

Lake Status

- High
- Good
- Moderate
- Poor
- Bad

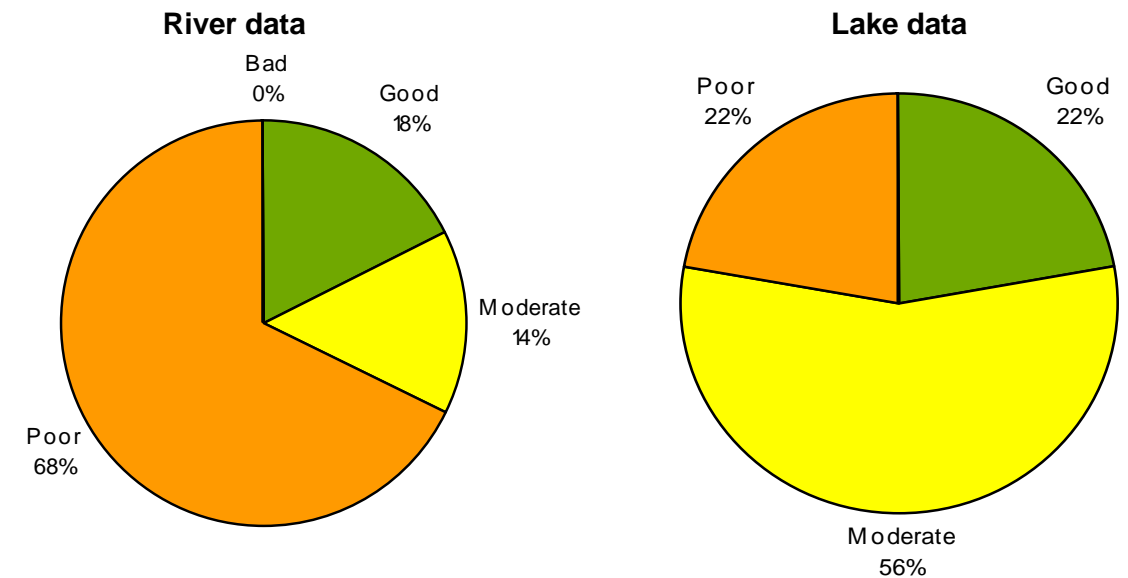


Name	Blackwater Water Management Unit
Area	550 km ²
River Basin District	Neagh Bann IRBD
Main Counties	Monaghan
Protected Areas	5 drinking water abstractions - Lough More, Emy Lough, Glaslough Lake, Corcaghan Lough, Grove Lough 1 UWWTD - River Blackwater (from River Shambles to Newmills Bridge)



Blackwater Water Management Unit Action Plan

STATUS/IMPACTS	
Overall status	Mainly poor (19 water bodies at poor status) with 5 water bodies at good status, 4 at moderate status. (Total of 28 water bodies). There are 9 lakes within the WMU, 2 at good, 2 at poor and 5 at moderate status.
Status elements	Macroinvertebrates (Q score) dictates status for most water bodies excluding 4 cross-border water bodies which fail on Phys-Chemical status. Chemical status passes on Blackwater main channel.
Possible Impacts - EPA Water Quality Reports	<p>BLACKWATER (MONAGHAN) – (XB_03_8, Status 2009 – Good) -Sewage and industrial discharges suspected.</p> <p>CLONTIBRET STREAM – (XB_03_9, Status 2009 – Poor) considerably polluted at each of the three locations surveyed : agriculture and sewage suspected. The village at Clontibret is partially sewered.</p> <p>CONAWARY (LOWER) – (NB_03_114, Status 2009 – Poor) Agriculture is suspected as the cause of the continuing poor quality of this small stream in which the very unbalanced macroinvertebrate fauna continues to be devoid of sensitive species. Unsatisfactory.</p> <p>MOUNTAIN WATER – (XB_03_06, Status 2009 – Poor) considerably polluted by suspected sewage and possibly other discharges below the village of Emyvale.</p> <p>SCOTSTOWN – (XB_03_8, Status 2009 – Good) the appearance of filamentous algae, indicative of increasing eutrophication at Dromscor ,and considerable siltation and substratum compaction upstream of Scotstown.</p>



PRESSURES/RISKS	
Nutrient sources	Over 85% of phosphorus load is diffuse (agriculture, forestry, septic tanks plus natural background), whilst the main point source of phosphorus comes from WWTP (10%).
Point pressures	<p>There are six WWTP > 500 Population Equivalent (PE) (Monaghan, Emyvale, Scotstown, Ballinode, Glaslough, Knockaconny), and six WWTP < 500 PE (Threemilehouse, Clontibret, Tyholland, Tydavnet, Knockatallon, Carrickroe)</p> <p>12 local authority licenced (Section 4) discharges</p> <p>Five EPA licenced (IPPC) discharges to surface or groundwater (on site wastewater treatment systems)</p> <p>Other licenced facilities which do not discharge directly to waters include, IPPC threshold pig and poultry units and Waste Licenced facilities also may impact on water indirectly. (26 IPPC licenses in total)</p> <p>Waste Licence composting facility at Castleshane – site drainage.</p> <p>4 WTPs: Emy Lough, Lough More, Glaslough Lake, Corcaghan Lough</p>
Wastewater Treatment Plants (WWTP) and Industrial Discharges	<p>Monaghan, Glaslough, Emyvale and Knockaconny WWTP are all considered to place water bodies they discharge into at risk of failing to achieve WFD objectives. However EPA licence information suggests that Emyvale and Knockaconny are not having an impact on their receiving waters as there is adequate dilution in the river. Sewage discharge combined with channelisation may be a factor.</p> <p>33 IPPC licenced facilities within WMU with intensive agriculture of poultry the main licenced activity.</p>
Quarries, Mines & Landfills	None at risk. Siltation issues for quarry in XB_03_06
Agriculture	11 water bodies at risk ; (NB_03_114, NB_03_140, NB_03_179, NB_03_24, NB_03_241, NB_03_30, NB_03_36, NB_03_385, NB_03_394, NB_03_479, XB_03_8)
On-site systems	There are 5682 septic tanks in this WMU, 199 are at risk. 8 water bodies have been assessed to be at risk due to unsuitable hydrogeological conditions and the high density and location of unsewered properties: (NB_03_24, NB_03_36, XB_03_2, XB_03_3, XB_03_4, XB_03_6, XB_03_8, XB_03_9).
Forestry	No water bodies are at risk from forestry, however there are forestry and felling activities in the North Monaghan area (NB_03_75 and XB_03_6).
Dangerous substances	No water bodies are at risk from dangerous substances
Morphology	7 water bodies at risk; (NB_03_114, NB_03_179, NB_03_385, NB_03_416, XB_03_5 and XB_03_7). Extensive Arterial Drainage in the past may have some impacts (Blackwater Drainage Scheme included extensive drainage of Mountain Water and River Blackwater upstream and downstream of Monaghan Town. XB_03_06 potentially impacted by morphology downstream of Emyvale.)
Abstractions	4 water bodies at risk; NB_03_114, NB_03_179, NB_03_36 and NB_03_75. 1 lake at risk – Lough More (NB_03_87)
Other	General Land drainage/dredging, construction activities (siltation and other problems), diffuse rural other than agriculture. Unsewered urban areas particularly in Monaghan Town and Emyvale. Historic build up of Soil P levels due to intensive agriculture – Teagasc study will inform this information.

SELECTED ACTION PROGRAMME	
<i>NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply</i>	
Point Sources	<p>WWTP measures are summarised in the Table below. WWTP upgrades & licensing to be implemented where required.</p> <p>Examine the terms of discharge authorisations to determine whether they require review for the purpose of compliance with water body objectives including protected area objectives and environmental quality standards.</p>
Diffuse Sources	<p>Good Agricultural Practice Regulations inspections/enforcement</p> <p>Septic tanks - The 199 at risk septic tanks are to be prioritised for inspections. Subsequent upgrade or connection to municipal systems depends on inspection and economics tests.</p>
Other	<p>Channelisation investigation required for Morphology</p> <p>Abstractions - future licensing</p> <p>NB All relevant basic measures apply plus general supplementary measures/surveys</p>
Future Developments	Throughout the river basin management cycle future pressures and developments will need to be managed to ensure compliance with the objectives of the Water Framework Directive and the Programme of Measures will need to be developed to ensure issues associated with these new pressures are addressed.

OBJECTIVES	
Good status 2015	<p>6 river water bodies are currently at satisfactory condition and must retain this good status.</p> <p>2 lake water bodies are currently at satisfactory condition and must retain this good status.</p>
Alternative Objectives	<p>Heavily Modified Water body - Emy Lough (NB_03_102)</p> <p>Artificial Water body - Ulster Canal</p> <p>Extended Deadlines - There are extended deadlines to 2021 proposed for 22 river water bodies and 7 lakes within the WMU.</p>

Blackwater Water Management Unit Action Plan

WWTP Data

Point Source Discharge	County	Priority	Measure (Capital Works)	Date	WMU
Clontibret WWTP	Monaghan	2	Increase capacity of treatment plant.	2015+	Blackwater
Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)	Date	WMU
Monaghan WWTP	Monaghan	3	Investigate the need for tertiary treatment or for the relocation of the outfall.	2015+	Blackwater
Threemilehouse	Monaghan	3	Investigate the need for increase in capacity of treatment plant.	2015	Blackwater
Point Source Discharge	County	Priority	Measure - Plants requiring the Implementation of Performance Management System	Date	WMU
Ballinode WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Emyvale WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Glaslough WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Knockaconny WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Knockatallon WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Scotstown WWTP	Monaghan	1	Implementation of Performance Management System	2012	Blackwater
Point Source Discharge	County	Priority	Measure (Plants requiring the investigation of Combined Sewer Overflows)	Date	WMU
Monaghan WWTP	Monaghan	3	Plants requiring the investigation of Combined Sewer Overflows	2015+	Blackwater
Point Source Discharge	County	Priority	Measure (Plants required to ensure capacity of treatment plant is not exceeded)	Date	WMU
Ballinode WWTP	Monaghan	3	Plants required to ensure capacity of treatment plant is not exceeded	2010	Blackwater
Emyvale WWTP	Monaghan	3	Plants required to ensure capacity of treatment plant is not exceeded	2010	Blackwater

Lake Data

IE_NB_Blackwater																	
Member State Code	Name	Monitored Y (Extrapolated N)	Biological Elements			Supporting Elements			Ecological Status	Chemical Status	Protected Areas					Objective	Date objective to be achieved
			Macrophytes	Chlorophyll	Fish	Morphology	Nutrient Enrichment	Physico Chemical			Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters	Bathing Water	Drinking Water		
NB_03_102	Emy Lough	Y	P	M		M	M	M	P						Y	GEP	2021
NB_03_3	Grove Lough	N							M							GES	2021
NB_03_51	Greagh Lough	N							M					Y	GES	2021	
NB_03_71	Corcaghan Lough	Y	M	P		G	M	M	P					Y	GES	2021	
NB_03_79	Glaslough Lake	N							M							GES	2021
NB_03_86	White Lough	N							G							GES	2009
NB_03_87	More (Lough)	N							G							GES	2009
NB_03_90	Lambs Lough	N							M							GES	2021
NB_03_97	Ballagh Lough	N							M							GES	2021

Blackwater Water Management Unit Action Plan

River Data

IE_NB_Blackwater																	
Member State Code	Monitored Y (Extrapolated N)	Donor water body	Biological Elements				Supporting Elements				Protected Areas				Objective	Date objective to be achieved	
			Macroinvertebrates (O)	FreshWater Pearl Mussel	Fish	Phytobenthos (Diatoms)	Morphology	Specific Pollutants	Physio-chemical	Ecological Status	Chemical Status	Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters			Drinking Water
NB_03_101	N	NB_03_416								P						GES	2021
NB_03_114	Y		P							G	P					GES	2021
NB_03_140	Y		P							G	P					GES	2021
NB_03_16	Y									G	G		Y			GES	2009
NB_03_179	Y									G	G					GES	2009
NB_03_24	N	NB_03_114									P					GES	2021
NB_03_241	N	NB_03_114									P					GES	2021
NB_03_30	N	NB_03_140									P					GES	2021
NB_03_36	N	NB_06_406									P					GES	2021
NB_03_376	N	NB_03_140									P					GES	2021
NB_03_383	N	NB_03_416									P					GES	2021
NB_03_385	N	NB_03_479									P					GES	2021
NB_03_394	N	NB_06_406									P					GES	2021
NB_03_416	Y		P							G	P					GES	2021
NB_03_419	N	NB_03_416									P					GES	2021
NB_03_479	Y		P							M	P					GES	2021
NB_03_75	N	NB_03_16									G		Y			GES	2009
XB_03_1	Y		G							M	G		Y			GES	2009
XB_03_10	Y		M								M					GES	2021
XB_03_2	Y		G			P				G	P					GES	2009
XB_03_3	N	XB_03_2									M					GES	2021
XB_03_4	Y		M							G	M					GES	2021
XB_03_5	Y		P		M			H		M	P	G		Y		GES	2021
XB_03_6	Y		P							M	P		Y			GES	2021
XB_03_7	Y		P							G	P					GES	2021
XB_03_8	Y		G							H	G		Y			GES	2009
XB_03_9	Y		P							M	P					GES	2021
XB_06_15	Y		G							G	M					GES	2021