

Significant Water Management Issues

Roe Local Management Area Action Plan and Update

December 2013

The Roe Local Management Area (LMA) Action plan published to NIEA website
http://www.doeni.gov.uk/niea/water-home/wfd/north_western_rbp/nw-actionplans.htm

- These LMA action plans are working documents which will evolve as new projects are committed to over time during the River Basin Planning cycle
- This summary provides an update on operational actions in the LMA. Many actions are based on implementation meetings with Lower Foyle Catchment Stakeholder Group members in 2011/2012
- If you, as an individual or organisation, can input additional information on actions or projects in the Roe Action Plan please contact margaret.gourley@doeni.gov.uk or telephone 028 9262 3223

LMA Action		Progress report
1	Complete desktop study and risk analysis using available catchment data to identify areas under pressure and allow further investigations on the ground to be carried out.	Data scrutiny completed by WMU water quality planners resulting in a comprehensive desktop study and risk analysis. Analysis of local data from different WMU teams, including historical monitoring data (biology/chemistry), occurrence of pollution incidents land use, run-off risk, soil type, soil cohesion. 15 additional sites were monitored on the Roe LMA between 15/8/2011 and the 17/11/2011. Investigations involved site assessments, kick sampling and invertebrate identification both in field and in lab. The additional sampling identified areas within the catchment for further investigation through carrying out 10 river walks within the LMA.
2	Carry out monitoring and assessment to identify and address pressures throughout the Roe LMA.	10 river walks identified and carried out between February and June 2012. Walks carried out when possible with Loughs Agency staff, Natural Heritage and Roe Angling Ltd River Bailiff to ensure best use of resources and shared knowledge and expertise. The additional information informed the need for investigative walks in the following areas – see 3
3	Carry out a river walks and spot check to determine and address sources of organic pollution affecting aquatic invertebrates.	Castle River - bank erosion , bank collapse Freehall Burn – bank erosion, bank collapse Woodburn River – 4 agricultural incidents, 3 resulted in breaches under Cross-compliance and 1 resulted in an advisory visit. Bovevagh River – 1 agricultural incident resulting in advisory visit and letter, 1 on-going agricultural investigation, 1 septic tank issue passed to Regulation Team. Bannagher Glen – heavily modified due to Altnaheglis Reservoir. Forestry felling on-going – no noted impacts. 2 significant impoundments. Pound Burn – litter key issue, litter pick organised jointly with Limavady BC and with the help of the Roe Angling Club, Drombroughil Community Association, Loughs Agency and local volunteers. This took place on 27 th June 2012 at 7pm with the removal of 2 lorry loads of litter. A follow-up clean-up took place on

LMA Action		Progress report
		<p>Sat 22nd Sept. Thanks to all who helped!</p> <p>Following on from the cleanup 2 chemical investigation samples were lifted in the Pound Burn. Analysis on 3/7/2012 showed that water quality was good at both locations. Full report T1201200234 available on request.</p> <p>Ballykelly (spot checks) – nothing significant noted Gelvin River (spot checks) – nothing significant noted Owenbeg (spot checks) – nothing significant</p> <p>River Roe, Dungiven – Roe Valley Country Park (10km) and Roe Valley Country Park to Swan Bridge (11km). Deep straightened channel, high flood banks. Excessive bank erosion and bank collapse (even in well fenced areas), invasive species significant issue throughout the whole River.</p>
4	Upgrading of Waste Water Treatment Works (WWTW)	<p>Glack – completed Ballykelly – March 2015 Drumraighland – completed Dungiven - completed Ballyquin - completed Largy- completed Feeny - completed Ballymonie (which is now called Foreglen) - completed Gortnahey – Dec 2020 Bonnanaboigh – on-going maintenance upgrade by March 2020 Myroe – completed Drumsurn – Mar 2020 Benone, Aughil, Drumavally, MOD sites and Magilligan Prison all to go to new works at Magilligan – The Benone Area Sewerage Scheme - operational before the end of November 2013.</p>
5	Carry out monitoring and assessment of herbicides.	<p>The Ballykelly river at Ballykelly Bridge is part of the 2012 AMAP Investigative monitoring project for herbicides. Monthly spot samples are being taken in 2012 and analysed for the Urea herbicides (Diuron, Linuron etc.). This area was selected as it is an extensive arable growing area. Preliminary results show positive detections of Diuron, Isoproturon and Linuron at Ballykelly Bridge. Based on the data so far there are no EQS failures. This sampling will continue until December.</p>
6	Assess significance of sheep dip usage and review groundwater authorisations where appropriate in identified area between Killibleught Bridge and Lower Gelvin Bridge.	<p>Review of groundwater authorisations on-going and to be complete by Dec 2012. No evidence on the ground of impacts from sheep-dip.</p>
7	Promote environmental best practice in the use and disposal of sheep dip at identified areas.	<p>No impacted areas identified.</p>
8	Carry out compliance assessment at industrial consented sites, WWTW and cross-compliance inspections at selected farms within the Roe LMA.	<p>LMA Cross Compliance inspections by WMU Agricultural Regulations Team 58 cross-compliance visits took place in the Roe catchment in 2011 resulting in 15 breaches.</p>
9	Carry out pollution prevention and enforcement measures if necessary at active quarries.	<p>5 quarries in LMA – all visited on regular basis – one pending prosecution for incident in 2011, no issues at other 4.</p>
10	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien	<p>Invasive species noted and recorded during river walks. These records are not quantitative for the full waterbody just the area walked within each waterbody.</p>

LMA Action		Progress report	
	species.	Meet with Rivers Agency on invasive species spraying on the lower reaches of the Roe prior to Flood Defence work to inform stakeholders of times and dates etc. Promote invasive species at the Horticultural Show in Greenmount on 17 th Sept 2012	
11	Implement invasive species eradication and management of <i>Spartina Anglica</i> within the Roe Estuary Nature Reserve	No spraying took place this year in the Roe due to the weather. Most days either rained or had high winds so spraying couldn't take place.	
12	Carry out full RHAT assessment (River Hydromorphology Assessment Technique) to assess the hydromorphological classification and produce recommendations at a water body scale.	Completed Reports available on request.	
13	Investigate feasibility and practicality of implementing morphological mitigation measures as recommended.	On-going discussions for prioritisation with limited resources.	
14	Assess forestry operations by investigating the impact of forestry operations. Ascertain felling programme in the catchment and engage with technical field staff to ensure measures are in place to mitigate risks from felling.	Discussions with Forest Service on-going through regular meetings.	
15	Carry out agricultural advisory site visits where identified as an issue through river walks and spot checks or as identified by stakeholders.	Investigative walks were carried out in the following areas: <ol style="list-style-type: none"> 1. Castle River 2. Freehall Burn 3. Woodburn River 4. Bovevagh River 5. Bannagher Glen 6. Pound Burn 7. Ballykelly (spot checks) 8. Gelvin River (spot checks) 9. Owenbeg (spot checks) 10. River Roe 	6 agricultural incidents resulting in: 3 breaches under cross-compliance 2 advisory visits 1 on-going investigation.
16	Carry out fish monitoring and assessment for annual report on catchment status and WFD fish monitoring programme.	Annual redd counting and electrofishing surveys completed. Roe Catchment Status Report available at http://www.loughs-agency.org/fs/doc/publications/river-roe-and-tributaries-catchment-status-report-2011.pdf	
17	Carry out fish habitat improvement works at identified areas within the LMA Loughs Agency have been developing a native riparian tree planting programme within the catchment and hope to complete this in 2012.	No works were completed in the Roe during this period. The Roe Angling Association have completed a number of in-channel and riparian habitat improvement projects during this period. Glenshane Riparian Planting Scheme – see 31	
18	Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland.	Completed – Roe LMA Water Resource Assessment 2011 - report available on request	

LMA Action		Progress report
19	Create an inventory of physical structures within the river channel and bank structures where identified by stakeholders as an issue.	NIEA staff have been trained in the use of this tool and are beginning to carry out assessments. If you are aware of any barriers in the Roe and would like to have this assessed using the UK Fish Passability Tool please let me know.
20	Assess road schemes on the A6 Londonderry to Dungiven dualling scheme.	Major Project Client Interface Group set up to oversee all major projects. Water Framework Directive Assessment Paper developed to ensure that the WFD is fully taken account of in the planning stages.
21	Obtain data on reservoir / lake levels, catchment flows and transfers of water from other water body sources to inform the review of the current abstraction / impoundment licence at Altnaheglish reservoir. Agree monitoring plans and include details on augmented flows returned to the waterway below.	Initial discussions with NIW are on-going.
22	Review the current abstraction licence to finalise maximum abstraction volumes, take account of seasonal variations and ensure the ecological need for compensation flows are fully considered at Altnaheglish reservoir.	Initial discussions with NIW are on-going.
23	Identification of contamination risks from 'source to tap' through the development of drinking water safety plans at Caugh Hill WTW.	The Drinking Water Safety Plan for the Caugh Hill WTWs Catchment is on Issue 002 issued on the 23/12/11, details of mitigations within the risk assessment in relation to the catchment. Mitigation measures identified include regular inspections carried out in catchment, and liaison with Forestry Service over potential of tree felling to affect raw water quality from Banagher dam. Through the 'Pesticide Working Group' have published NIW leaflet 'Using pesticides....Stop and think about the water you drink' and an NIEA factsheet. UFU sourced pesticide awareness leaflets from the Voluntary Initiative. NIEA published folders for the dissemination of the pesticide educational materials. Pesticide Working Group established with representation from NIW, DARD, UFU, NIEA, DWI, Road Service, Forest Service, CAFRE and AFBI. 'Focus' catchment in Derg but will extend to other drinking water catchments.
24	Continue to monitor mitigation measures through Drinking Water Inspectorate regulatory processes within this catchment.	There are currently two enforcement processes in place for Caugh Hill WTWs only one requires an action which directly relates to the catchment. Consideration of Provisional Enforcement Order (CPEO/12/01) which in respect of the catchment requires for NI Water to undertake additional survey monitoring of the raw water source from the catchment.
25	Support local measures that will improve water quality, in particular, reduction in the presence of pesticides and the levels of organic matter in raw water which cause implications for water treatment at Caugh Hill WTW.	Meeting on pesticide detections in drinking water catchments planned for November 21 st 2012.
27	Complete the phosphorus nutrient budget work for Northern Ireland to establish nutrient inputs from different sectors.	Nutrient budgets are being analysed alongside SIMCAT (SIMulation of the water quality of CATchments) models developed to represent the behaviour of flow and pollutants in rivers. This will inform actions to address diffuse and point source nutrient inputs to the water environment
28	Ensure that licences for new and existing hydro power developments are compliant with the Water Framework Directive and Habitats Regulations to support good ecological status and carry out risk based compliance visits.	The Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 came into operation on 1 February 2007. The purpose of the Regulations is to control the abstraction and impoundment of water by means of a licensing regime. All licences are assessed through a combination of factors which will determine whether a scheme is environmentally acceptable; however, each scheme is assessed on a site specific basis. The guidance

LMA Action		Progress report
		document is linked below: http://www.doeni.gov.uk/niea/guidance_for_run-of_river_hydropower_schemes_in_northern_ireland_.pdf460kb_.pdf
29	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms.	DARD Countryside Management Branch A measure within the Nitrates Action Programme is that all farms must carry out crop and soil management to minimise soil erosion and nutrient runoff. This is verified during cross-compliance visits.
30	Raise awareness and promote the benefits of effective farm nutrient and waste management.	All applicants to DARD Agri-Environment Schemes receive farm waste management advice as part of their application to the scheme. DARD has produced a 'Code of Good Agricultural Practice' which contains practical management advice on how farm wastes can be collected, stored and spread with minimal risk to the environment. Production of 'Improving Water Quality' leaflet for Landowners. This leaflet has been developed jointly with Loughs Agency, UFU and DARD to raise awareness amongst the agricultural sector. The issues were initially raised through the implementation meetings eg gravel removal, river litter. DARD has developed an agri-environment training course for farmers dealing with farm wastes and nutrient management planning. Water Framework Directive awareness talk given to CAFRE students in April 2011. Farm Nutrient and Waste Management Planning talk given to CAFRE students April 2012. Joint leaflet published. 'Water Quality Plans in Action' article published in Farming Life Oct 2012
31	Highlight external funding opportunities for water management projects to local partners where appropriate e.g. Woodland Trust. Support project with Loughs Agency looking at Riparian Planting at the upper reaches of the Roe in the Glenshane area.	Promote the Launch of NIEA Water Quality Grant Scheme http://www.doeni.gov.uk/niea/water_quality_improvement_grant.htm Minister Mark Durkan announced Challenge Fund on 18 th October 2013. Provides funding for communities and organisations to develop local environmental projects. £1.2 million being funded (NIEA and Forest Service) http://www.nienvironmentlink.org/projects/nieachallengefund.php Glenshane Riparian Planting Scheme - 10,113 riparian broadleaved trees were planted in 7 discreet sites along the lands adjacent to the River Roe and its tributaries. This project was undertaken between 1 st December 2012 and 31 st March 2013 and was a partnership approach to improve the water quality in the Roe catchment. The project partnership was Loughs Agency, Woodland Trust, an independent advisor and NIEA.
32	Develop leaflets and articles to promote effective farm nutrient and waste Management.	Pesticide working Group – consisting of NIW, UFU, DARD, CAFRE, AFBI, Rivers Agency, Loughs Agency and NIEA and they raise awareness of the problem with pesticide detections in Drinking Water Catchments. Through the 'Pesticide Working Group' have developed a Pesticide flyer. NIW published 'stop and think about the water you drink' under the same group. UFU sourced pesticide awareness leaflets from the Voluntary Initiative. 'Landowner's Awareness – Improving Water Quality in your local area' leaflet developed in conjunction with DARD, UFU and Loughs Agency.

LMA Action		Progress report
		<p>NIEA attended the Horticultural Show at Greenmount to promote Pesticide issues.</p> <p>SCaMP NI -The Water Catchment Partnership - Representatives from the Water Catchment Partnership have recently attended a number of agricultural shows, farm grassland events, open days at Derg WTW and farm visits have begun in the Derg catchment area to raise awareness and provide best practice guidance on grassland pesticide use. This is a partnership between the Ulster Farmers Union (UFU), Northern Ireland Environment Agency (NIEA), Northern Ireland Water (NIW) and The College of Agriculture, Food & Rural Enterprise (CAFRE). Our aim is to proactively work together to promote and raise awareness of best practice when using pesticides in the garden or on the farm, through a voluntary approach to improve water quality. Our initial focus is in the Derg catchment and if the project is successful the scheme will be rolled out to other drinking water catchments. The response to date has been excellent and CAFRE are reporting an increase in applications for training in the safe use of pesticides which is a good indicator that the message is getting across.</p>
33	Support local environmental initiatives such as the Anglers Monitoring Initiative on the River Roe.	Provided grant to Roe Anglers for uptake of the AMI. On the 9 th June 2012, 6 members of the Roe Angling Ltd were trained by the River Fly Partnership in the identification of river invertebrates and 6 sites were selected for monthly sampling to help inform NIEA of any trigger level breaches so that further investigations can be carried out.
34	Support local environmental initiatives by participating in the Foyle Biodiversity Partnership.	Regular attendance at the Foyle Biodiversity Partnership meetings.
35	Support local environmental initiatives such as river clean-up campaigns.	<p>As a result of the River Walk on the Pound Burn - In partnership with Limavady DC, Dungiven Town Clean Up Committee, Benbradagh Community Group and the Roe Angling Ltd carried out a river clean-up on the Pound Burn on Wednesday 27th June and another follow-up one on Saturday 22nd September. On Wednesday 27th June 2012 – 2 Council lorry loads of rubbish, plastic bags, cans, bottles, shopping trolleys, tyres, wheels etc were removed by around 30 local volunteers. A second date of the 22nd September seen a follow-up clean up with another lorry load of rubbish removed – Well done to all involved!</p> <p>On Saturday 16th March 2013 the third annual river clean up in the River Roe was held and volunteers included canoeists from the local Causeway Coast Kayak Association, members of Roe Angling Limited, Loughs Agency and NIEA. Litter was picked from the river and along the river banks and the canoeists collected bags and debris overhanging from the trees and in areas too deep for the bank collectors.</p>
36	Support pollution prevention campaigns such as 'Reduce Reuse Recycle', 'Bag It & Bin It', 'Stop and Think (Not Down the Sink)', 'Stop and think (about the water you drink)'.	Promote these messages at events and functions.
37	Review Rivers Agency's annual watercourse maintenance program and work closely on the flood bank work on the lower stretches of the Roe to ensure minimal impact on water quality.	On-going – regular discussions and meetings with Rivers Agency on site.
38	Review of groundwater abstraction and planning applications where necessary.	On-going – the groundwater team is a regular consultee on groundwater abstractions and planning applications for all of Northern Ireland.

LMA Action		Progress report
39	Provide advice on protected area designations to work towards improving the condition assessment of the 'River Roe & its tributaries' Special Area of Conservation (SAC).	Working with Natural Heritage and Loughs Agency to share knowledge on the area as much as possible. Carried out joint walks on the Roe SAC with Loughs Agency and Natural Heritage staff to improve and share knowledge of the Roe SAC designation.
40	Promote public participation and encourage local projects through the Water Community Awards.	Enagh Lough Youth Forum was successfully awarded the £1000 Water Community Award to promote water awareness issues and carry out a clean-up campaign on Enagh Lough and the surrounding island.
41	Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage throughout the LMA.	16 Pollution Hotline Signs will shortly be available to be placed within the Roe catchment to raise awareness of the pollution hotline.
42	Promote public participation by supporting local community events, raising awareness through press articles and the web publication of the Roe LMA e-zine.	<ul style="list-style-type: none"> • Greenmount Centenary Show Sat 16th June 2012 – Greenmount • Clipper Event Sat 7th July 2012 – Londonderry City Council <p>All events attended were very successful. Positive feedback from the public re Action Plans, displays, Good/Bad bugs as indicator species of pollution.</p> <ul style="list-style-type: none"> • Staff also attended The Balmoral Show 15th July 2013 • Clogher Valley Show 31/07/2013 – Raising awareness of pesticides in our catchment and drinking water. <p>"Source of Denet to Mouth" – awareness event publicity of Denet angling group, walk and talk on litter.</p> <p>Web-site updated on a regular basis.</p>
43	Promote public participation by organising two Catchment Stakeholder Group meetings per year to provide an open forum for discussion on water issues and encourage involvement in developing and implementing the Local Management Area Plan.	<p>The 2013 meetings were successfully completed and the Autumn meeting was held on 22nd October 2013 in Roe Valley Hospital, Limavady.</p> <p>Presentations and minutes of meetings can be found at http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups/lower_foyle.htm</p>

ROE
Local Management Area



Map 1: Roe Local Management Area



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Introduction

River Basin Management Plans were published in December 2009. The plans describe where the water environment needs to be protected or improved, the timeframe to make these improvements and how that can be achieved. The plans will be implemented through Local Management Areas (LMAs) during the 2009 to 2015 planning cycle. This Roe Local Management Area Action Plan is one of a series of action plans that have been developed for the 26 LMAs across the Neagh Bann, North Western and North Eastern River Basin Districts. The action plan details local measures identified to improve the water environment.

The Roe Local Management Area

The Roe LMA (Map 1), part of the North Western River Basin District, covers an area of approximately 580 km². The Roe River rises about 400m above sea level within the Sperrin Mountains in County Tyrone and flows northwards being joined by other rivers e.g. Owenrigh, Owenbeg and Curly and smaller streams along the way before ultimately draining into Lough Foyle, east of the Roe Railway Bridge. Other smaller rivers flow directly into the Lough from this LMA – Bessbrook, Ballykelly, Faughanvale and Muff. The River Roe is transitional from Roe Bridge on the B69 until it reaches Lough Foyle. Lough Foyle itself falls within Burn Dennet & Foyle LMA and further details on issues and actions in the Lough can be found in the Burn Dennet & Foyle LMA Action Plan which is available to download from the website.

The main towns are Limavady, Eglinton and Dungiven with a number of smaller villages including Greysteel, Ballykelly, Feeny and Castlerock. In all, the area supports over 30,000 people. The dominant land use in the area is improved grassland with acid and neutral grass.

The Roe LMA supports important habitats and wildlife. These areas have been designated under European Directives and require special protection. Details of the protected areas are summarised in a table at the end of this report.

What is the status of the water environment in the Roe LMA?

62% of the surface water bodies have been classified as less than good in the Roe LMA (Map 2). The main reason is due to the impact on invertebrate communities.

All groundwaters in Roe LMA all are achieving good status.

One river water body is being impacted by abstraction and flow regulation, the Owenrigh River which is heavily modified due to the reservoir at Altnaheglish.

A number of biological and chemical water quality elements used in classification can be affected by both diffuse and point source pollution. In this LMA the main impact was seen in invertebrate communities. This element is associated with organic enrichment. The

rivers affected include Roe, Woodburn, Bovevagh, Castle, Burnfoot, Ballykelly and Faughanvale.

Seven water bodies were identified during site visits as being affected by changes to morphology (physical habitat). These include Owenbeg, Woodburn, Roe, Gelvin and Castle River. Types of morphology pressures include channelization, embankments, water regulation, overgrazing and barriers to migration.

The water environment in Northern Ireland has been impacted by the introduction of invasive alien species. Species which have already become established in this area include:

- Japanese Knotweed (*Fallopia japonica*)
- Himalayan Balsam (*Impatiens glandulifera*)
- Giant Hogweed (*Heracleum mantegazzianum*)
- Rhododendron (*Rhododendron ponticum*)
- Salmonberry (*Rubus spectabilis*)
- Common Cord Grass (*Spartina anglica*)

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Map 2: 2009 status of surface water bodies in Roe LMA

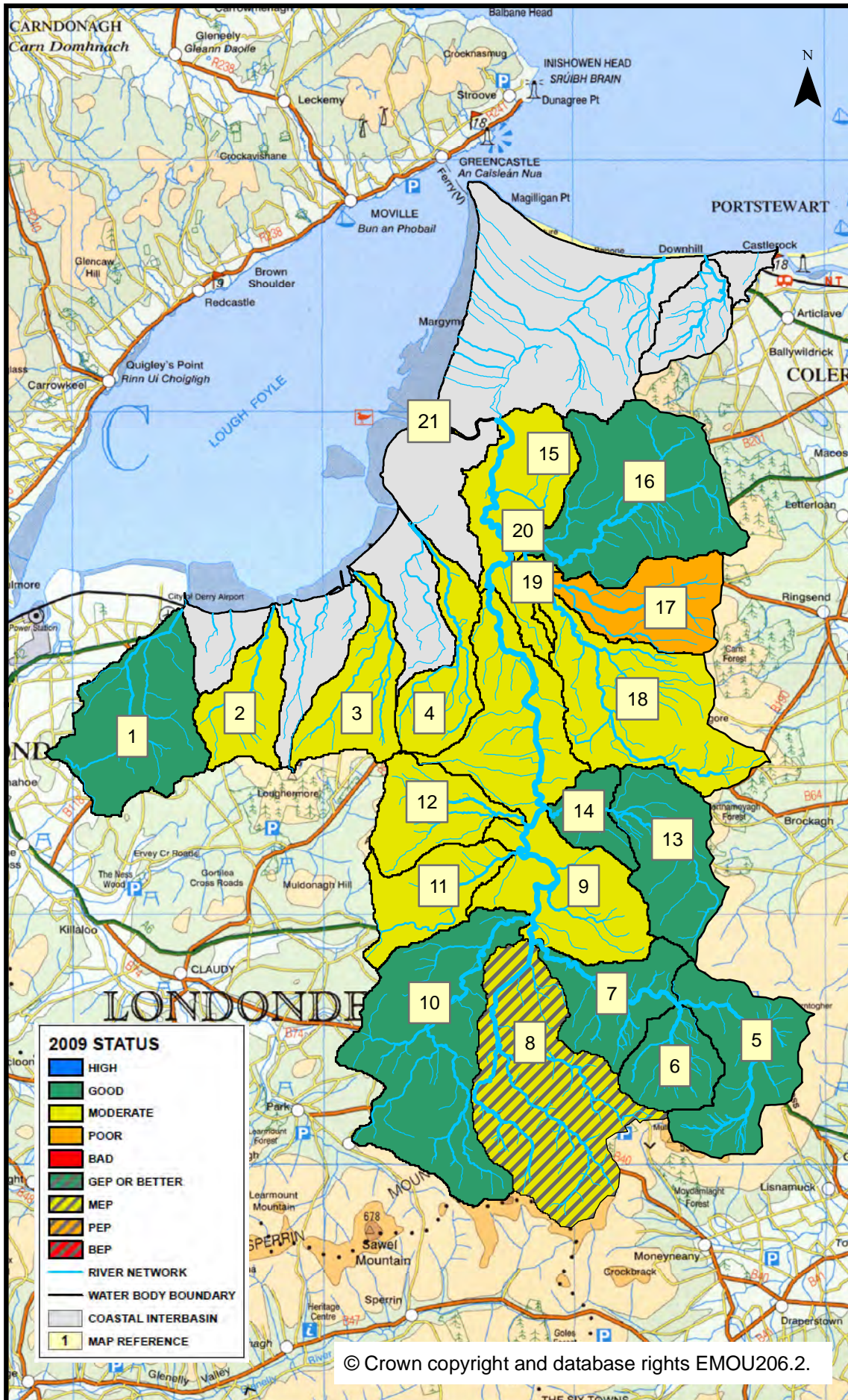


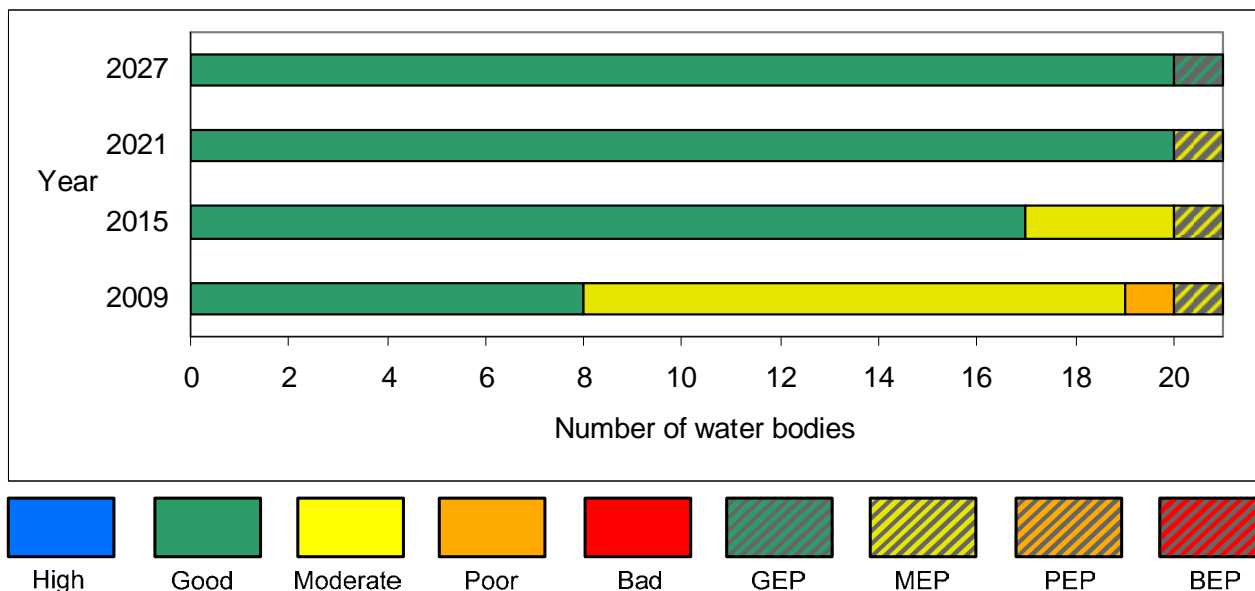
Table 1: 2009 status and proposed objectives

Map Reference	Water Body Code	Water Body Name	2009 Status	2015 Objective	Page Number
1	UKGBNI1NW020203030	Muff River	Good	Good	10
2	UKGBNI1NW020203029	Faughanvale River	Moderate	Good	10
3	UKGBNI1NW020203028	Ballykelly River	Moderate	Good	10
4	UKGBNI1NW020203027	Bessbrook River	Moderate	Good	11
5	UKGBNI1NW020202043	River Roe	Good	Good	11
6	UKGBNI1NW020202005	Owenalena River	Good	Good	12
7	UKGBNI1NW020202015	River Roe	Good	Good	12
8	UKGBNI1NW020202010	Owenrigh River	MEP	MEP	13
9	UKGBNI1NW020202018	River Roe	Moderate	Good	14
10	UKGBNI1NW020202023	Owenbeg River	Good	Good	15
11	UKGBNI1NW020202032	Wood Burn	Moderate	Good	15
12	UKGBNI1NW020202014	Bovevagh River	Moderate	Good	16
13	UKGBNI1NW020202039	Gelvin River	Good	Good	16
14	UKGBNI1NW020202012	Gelvin River	Good	Good	17
15	UKGBNI1NW020202024	River Roe	Moderate	Good	17
16	UKGBNI1NW020202049	Curly River	Good	Good	18
17	UKGBNI1NW020202044	Castle River	Poor	Moderate	18
18	UKGBNI1NW020202045	Castle River	Moderate	Moderate	19
19	UKGBNI1NW020202011	Castle River	Moderate	Moderate	19
20	UKGBNI1NW020202013	Curly River	Moderate	Good	20
21	UKGBNI5NW250020	Roe Estuary	Moderate	Good	20

What improvements do we plan to achieve?

We have set environmental objectives to deliver improvements as shown below. For our surface waters we aim to achieve good quality or better in 81% by 2015. We aim to maintain good status in 100% of our groundwaters.

Figure 1: 2009 Status and proposed objectives for surface waters in Roe LMA



How are we going to improve the water environment in the Roe LMA?

There are a number of actions which will be implemented in the Roe LMA in order to maintain and improve the water environment. The list of actions below sets out details of actions to be applied throughout the Roe LMA. This is followed by specific actions for individual water bodies.

The actions below apply throughout the LMA.

	Action to be taken	Action to be taken by	Target Date
1	Complete desktop study and risk analysis using available catchment data to identify areas under pressure and allow further investigations on the ground to be carried out.	DOE NIEA	Completed
2	Carry out monitoring and assessment to identify and address pressures throughout the Roe LMA.	DOE NIEA	Mar 2013
3	Carry out compliance assessment at industrial consented sites, WWTW and cross-compliance inspections at selected farms within the Roe LMA.	DOE NIEA	Mar 2013
4	Carry out agricultural advisory site visits where identified as an issue through river walks and spot checks or as identified by stakeholders.	DOE NIEA	Mar 2013
5	Carry out fish monitoring and assessment for annual report on catchment status and WFD fish monitoring programme.	Loughs Agency, DOE NIEA	Mar 2013
6	Carry out fish habitat improvement works at identified areas within the LMA.	Loughs Agency, Roe Anglers Association, DOE NIEA	Dec 2015
7	Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland.	DOE NIEA	Completed
8	Create an inventory of physical structures within the river channel and bank structures where identified by stakeholders as an issue.	Loughs Agency, DOE NIEA	Mar 2013
9	Complete the phosphorus nutrient budget work for Northern Ireland to establish nutrient inputs from different sectors.	DOE NIEA, AFBI	Mar 2013
10	Ensure that licences for new and existing hydro power developments are compliant with the Water Framework Directive and Habitats Regulations to support good ecological status and carry out risk based compliance visits.	DOE NIEA	Dec 2015
11	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms.	DARD Countryside Management Branch	Mar 2013
12	Raise awareness and promote the benefits of effective farm nutrient and waste management.	DARD Countryside Management Branch	Mar 2013
13	Develop leaflets and articles to promote effective farm nutrient and waste management.	DOE NIEA, DARD	Mar 2013
14	Highlight external funding opportunities for water management projects to local partners where appropriate e.g. Woodland Trust.	DOE NIEA	Mar 2013
15	Support local environmental initiatives such as the Anglers Monitoring Initiative on the River Roe.	Roe Anglers Association, DOE NIEA	Mar 2013
16	Support local environmental initiatives by participating in the Foyle Biodiversity Partnership.	DOE NIEA	Mar 2013
17	Support local environmental initiatives such as river clean-up campaigns.	DOE NIEA	Mar 2013

	Action to be taken	Action to be taken by	Target Date
18	Support pollution prevention campaigns such as 'Reduce Reuse Recycle', 'Bag It & Bin It', 'Stop and Think (Not Down the Sink)', 'Stop and think (about the water you drink)'.	DOE NIEA, NIWL	Mar 2013
19	Review Rivers Agency's annual watercourse maintenance program and work closely on the flood bank work on the lower stretches of the Roe to ensure minimal impact on water quality.	DOE NIEA, DARD Rivers Agency	Mar 2013
20	Review of groundwater abstraction and planning applications where necessary.	DOE NIEA, Geological Survey NI	Dec 2015
21	Provide advice on protected area designations to work towards improving the condition assessment of the 'River Roe & its tributaries' Special Area of Conservation (SAC).	DOE NIEA	Mar 2013
22	Promote public participation and encourage local projects through the Water Community Awards.	DOE NIEA	Mar 2013
23	Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage throughout the LMA.	DOE NIEA	Mar 2013
24	Promote public participation by supporting local community events, raising awareness through press articles and the web publication of the Roe LMA e-zine.	DOE NIEA	Mar 2013
25	Promote public participation by organising two Catchment Stakeholder Group meetings per year to provide an open forum for discussion on water issues and encourage involvement in developing and implementing the Local Management Area Plan.	DOE NIEA and CSG	Mar 2013

The actions below apply to individual water bodies in the LMA. The 2009 status or ecological potential is shown for each water body.

UKGBNI1NW020203030 Muff River 2009 Status: Good

	Action to be taken	Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.	DOE NIEA	Dec 2015
A number of catchment wide actions also apply to this water body. These can be found on Page 8.			

UKGBNI1NW020203029 Faughanvale River 2009 Status: Moderate

	Action to be taken	Action to be taken by	Target Date
1	Assess forestry operations at Loughermore forest. Ascertain felling programme in the catchment and engage with technical field staff to ensure measures are in place to mitigate risks from felling.	DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.			

UKGBNI1NW020203028 Ballykelly River 2009 Status: Moderate

	Action to be taken	Action to be taken by	Target Date
1	Carry out a river walk to spot check areas of concern in the Ballykelly River catchment, to determine and address sources of organic pollution affecting aquatic invertebrates.	DOE NIEA	Mar 2013
2	Carry out agricultural advisory site visits where necessary, as identified on river walk.	DOE NIEA	Mar 2013
3	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.	DOE NIEA	Mar 2013
4	Carry out monitoring and assessment of herbicides in this water body.	DOE NIEA	Mar 2013
5	Upgrading of WWTW at Glack.	NIWL	Mar 2013
6	Upgrading of WWTW at Ballykelly.	NIWL	Mar 2015
A number of catchment wide actions also apply to this water body. These can be found on Page 8.			

UKGBNI1NW020203027		Bessbrook River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Carry out a river walk to spot check areas of concern in the Bessbrook River catchment, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
2	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
3	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
4	Carry out monitoring and assessment of herbicides in this water body.		DOE NIEA	Mar 2013
5	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.		DOE NIEA	Mar 2013
6	Upgrading of WWTW at Drumraighland.		NIWL	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW020202043		River Roe	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
2	Investigate sources of sediment in the upper reaches of the River Roe catchment.		Loughs Agency, DOE NIEA	Mar 2013
3	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.		DOE NIEA	Mar 2013
4	Provide advice on protected area designations for the Carn/Glen Shane Pass Special Area of Conservation (SAC).		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW0202005		Owenalena River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
2	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW0202015		River Roe	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW020202010		Owenrigh River	2009 Status: MEP	
	Action to be taken	Action to be taken by	Target Date	
1	Carry out a river walk downstream of Banagher Forest to determine and address sources of organic pollution affecting aquatic invertebrates.	DOE NIEA	Mar 2013	
2	Carry out agricultural advisory site visits where necessary, as identified on river walk.	DOE NIEA	Mar 2013	
3	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.	DOE NIEA	Mar 2013	
4	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.	DOE NIEA	Mar 2013	
5	Assess forestry operations by investigating the impact of forestry operations at Banagher Forest. Ascertain felling programme in the catchment and engage with technical field staff to ensure measures are in place to mitigate risks from felling.	DOE NIEA	Mar 2013	
6	Carry out full RHAT assessment (River Hydromorphology Assessment Technique) to assess the hydromorphological classification and produce recommendations at a water body scale.	DOE NIEA	Completed	
7	Investigate feasibility and practicality of implementing morphological mitigation measures as recommended.	DOE NIEA	Mar 2013	
8	Obtain data on reservoir / lake levels, catchment flows and transfers of water from other water body sources to inform the review of the current abstraction / impoundment licence at Altnaheglish reservoir. Agree monitoring plans and include details on augmented flows returned to the waterway below.	DOE NIEA	Dec 2019	
9	Review the current abstraction licence to finalise maximum abstraction volumes, take account of seasonal variations and ensure the ecological need for compensation flows are fully considered at Altnaheglish reservoir.	DOE NIEA	Dec 2019	
10	Identification of contamination risks from 'source to tap' through the development of drinking water safety plans at Caugh Hill WTW.	NIWL	Mar 2015	
11	Continue to monitor mitigation measures through Drinking Water Inspectorate regulatory processes within this catchment.	DOE DWI	Mar 2015	
12	Support local measures that will improve water quality, in particular, reduction in the presence of pesticides and the levels of organic matter in raw water which cause implications for water treatment at Caugh Hill WTW.	NIWL, DOE DWI, DOE NIEA	Mar 2015	
13	Investigate identified water quality impacts e.g. Dissolved Copper.	DOE NIEA	Mar 2013	

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202018		River Roe	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates at areas identified as being under significant pressure within the main stretches of the Roe to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk downstream of where the Bovevagh tributary enters the Roe to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out a river walk on the Pound Burn to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
4	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
5	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
6	Assess significance of sheep dip usage and review groundwater authorisations where appropriate in identified area between Killibleught Bridge and Lower Gelvin Bridge.		DOE NIEA	Mar 2013
7	Promote environmental best practice in the use and disposal of sheep dip at identified areas.		DOE NIEA	Mar 2013
8	Assess road schemes on the A6 Londonderry to Dungiven dualling scheme.		DOE NIEA	Mar 2013
9	Upgrading of WWTW at Dungiven and Ballyquin.		NIWL	Completed
10	Upgrading of WWTW at Largy.		NIWL	Mar 2013
11	Carry out full RHAT assessment (River Hydromorphology Assessment Technique) to assess the hydromorphological classification and produce recommendations at a water body scale.		DOE NIEA	Completed
12	Investigate feasibility and practicality of implementing morphological mitigation measures as recommended.		DOE NIEA	Mar 2013

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW0202023		Owenbeg River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
2	Carry out a river walk through spot checks throughout this water body to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
5	Investigate identified water quality impacts by assessing sources of organic pollution in the water body.		DOE NIEA	Mar 2013
6	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.		DOE NIEA	Mar 2013
7	Upgrading of WWTW at Feeny.		NIWL	Completed
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW02020232		Wood Burn	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in the Woodburn catchment to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk on the Woodburn river to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
5	Upgrading of WWTW at Ballymonie (which is now called Foreglen).		DOE NIEA	Completed
6	Upgrading of WWTW at Gortnahey.		NIWL	Dec 2020
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW020202014		Bovevagh River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in the Bovevagh catchment to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk on the Bovevagh river to determine and address sources of organic pollution affecting aquatic invertebrates and review the river walk data from 2007.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
5	Upgrading of WWTW at Bonnanaboigh as part of PC15. Operational maintenance on-going.		NIWL	Mar 2013

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202039		Gelvin River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Mar 2015
2	Carry out a river walk to spot check areas of concern in the Gelvin River catchment to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202012		Gelvin River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
2	Carry out a river walk to spot check areas of concern in the Gelvin River catchment, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202024		River Roe	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in this water body to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk along the Freehall Burn, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
5	Upgrading of WWTW at Myroe.		NIWL	Completed

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202049		Curly River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is Good or better.		DOE NIEA	Dec 2015
2	Investigate identified water quality impacts by assessing sources of organic pollution in the water body.		DOE NIEA	Mar 2013
3	Carry out pollution prevention and enforcement measures if necessary at active quarries in this water body.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW020202044		Castle River	2009 Status: Poor	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in the Castle River to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk on the lower reaches of the Castle River, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
5	Assess forestry operations by investigating the impact of forestry operations at the top of the Castle River Catchment. Ascertain felling programme in the catchment and engage with technical field staff to ensure measures are in place to mitigate risks from felling.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NW0202045		Castle River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in the Castle River to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk on the lower reaches of the Castle River, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out pollution prevention and enforcement measures if necessary, at active quarries in this water body.		DOE NIEA	Mar 2013
4	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
5	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013
6	Investigate identified water quality impacts by assessing sources of organic pollution in the water body.		DOE NIEA	Mar 2013
7	Upgrading of WWTW at Drumsumn.		NIWL	Dec 2020

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202011		Castle River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Conduct biological investigations to assess aquatic invertebrates in the Castle River to help identify sources of organic pollution.		DOE NIEA	Completed
2	Carry out a river walk in the lower reaches of the Castle River, to determine and address sources of organic pollution affecting aquatic invertebrates.		DOE NIEA	Mar 2013
3	Carry out agricultural advisory site visits where necessary, as identified on river walk.		DOE NIEA	Mar 2013
4	Conduct invasive alien species recording during river walks and raise awareness on how to prevent the spread of invasive alien species.		DOE NIEA	Mar 2013

[A number of catchment wide actions also apply to this water body. These can be found on Page 8.](#)

UKGBNI1NW020202013		Curly River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Pressures within this small water body are from upstream water bodies and the actions for these will be the main means of improving this water body, see upstream water bodies UKGBNI1NW020202011, UKGBNI1NW020202044 and UKGBNI1NW020202045 on the Castle River.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI5NW250020		Roe Estuary	2009 Status: MEP or Worse	
	Action to be taken		Action to be taken by	Target Date
1	Upgrading of WWTW to include Benone, Aughil, Drumavally, MOD sites and Magilligan Prison to go to the new works at Magilligan.		NIWL	Mar 2014
2	Implement invasive alien species eradication and management of Spartina Anglica within the Roe Estuary Nature Reserve.		DOE NIEA	Dec 2015
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

What other measures are being implemented in the Roe LMA in order to maintain and improve the water environment?

The Programme of Measures described in the Roe River Basin Management Plan (RBMP) have been categorised into two types of measures: existing and planned and supplementary. Existing and planned measures aim to ensure that existing water uses are appropriately managed and that the water environment remains at good status.

Existing and planned measures include those which have been put in place to meet legal requirements. Those which apply in this LMA include:

- The Drinking Water Directive (80/778/EEC) as amended by Directive (98/83/EC);
- The Sewage Sludge Directive (86/278/EEC);
- The Urban Waste Water Treatment Directive (91/271/EEC);
- The Environmental Impact Assessment Directive (85/337/EEC);
- The Plant Protection Products Directive (91/414/EEC);
- The Nitrates Directive (91/676/EEC);
- The Habitats Directive (92/43/EEC);
- The Integrated Pollution Prevention Control Directive (96/61/EC);
- The current Bathing Water Directive (76/106/EEC) and revised Bathing Water Directive (2006/7/EEC); and
- The Birds Directive (79/409/EEC).

A number of other existing and planned measures apply in this LMA:

- Cost recovery for water use and promotion of efficient and sustainable water use;
- Protection of drinking water sources;
- Abstraction and Impoundment Control;
- Point source and diffuse source discharge control;
- Controls on physical modifications to surface waters;
- Prevention or reduction of the impact of accidental pollution incidents;
- Authorisation of discharges to groundwater;
- Priority substances control;
- Controls on other activities impacting on water status; and
- Controls to avoid increase in pollution of marine waters.

Further information on existing and planned measures for each sector is available on the programme of measures section of the website.

Supplementary Measures are a number of Northern Ireland wide measures which were agreed by all relevant Departments and Agencies in Northern Ireland including DCAL, DARD, DOE, DRD, NIEA, Loughs Agency and NI Water and published as part of the RBMPs. Supplementary measures have been identified for the following sectors:

- Abstraction and flow regulation;

- Diffuse and point source (Agriculture, Collection & treatment of sewage, Urban Development, Forestry, Industry and other business, Waste);
- Freshwater Morphology and Marine Morphology;
- Invasive Alien Species and
- Other.

Progress on the implementation of these supplementary measures listed in the RBMPs will be reported to the European Commission in December 2012. This LMA action plan forms one of the supplementary measures for the North West RBD and includes a number of others where relevant.

What measures are agreed for water dependent Natura 2000 sites in unfavourable condition?

Special Areas of Conservation (Habitats Directive) and Special Protection Areas (Birds Directive) are assessed as being in favourable or unfavourable condition. These areas have been examined to determine if water dependent features are present. The condition of all the features of the River Roe and Tributaries Special Area of Conservation has not been assessed. The Carn-Glenshane Pass and Magilligan Special Areas of Conservation in this LMA, have water dependent features which are in unfavourable condition (Table 2).

Table 2: Measures for water dependent features of Special Areas of Conservation

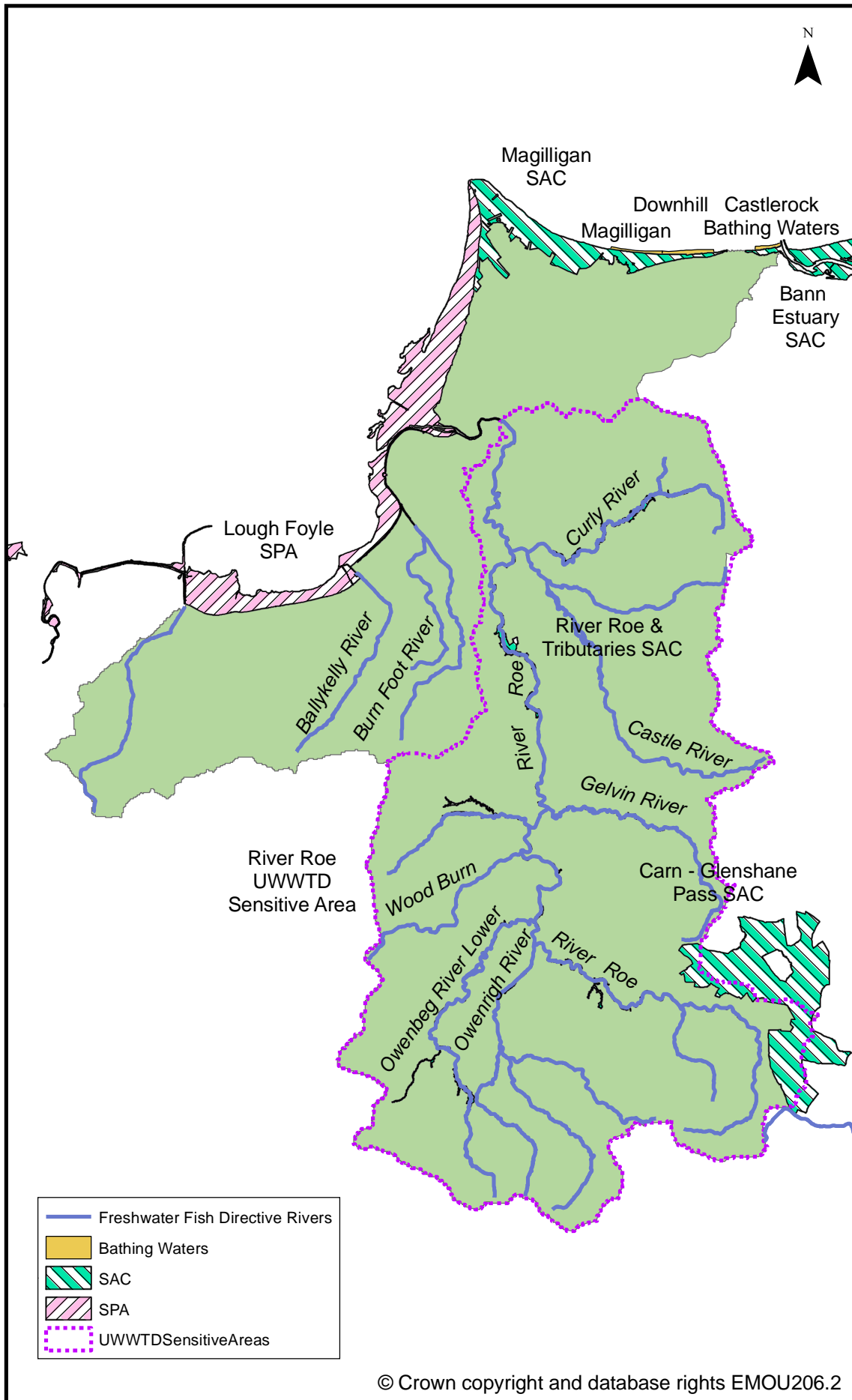
Name	Current condition assessment of water dependent features	Measures in place
Magilligan	Fixed dunes with herbaceous vegetation ("grey dunes") unfavourable due to under-grazing.	No water related adverse activity identified
	Humid dune slacks unfavourable due to under-grazing.	No water related adverse activity identified
	Euphydrias (Eurodryas, Hypodryas) aurinia unfavourable due to undergrazing.	No water related adverse activity identified
	Petalophyllum ralfsii unfavourable due to water management (including drainage, dredging or alterations to the water table).	Investigation ongoing - Hydrological monitoring
Carn-Glenshane Pass	Blanket bogs unfavourable due to water management (including drainage, dredging or alterations to the water table) and also over-grazing (including deer browsing).	There are currently 2 MOSS agreements for the Site. There are also 9 NICMS referrals from DARD.

Lough Foyle Special Protection Area is in unfavourable condition. Unfavourable Special Protection Areas require investigation to identify external and internal factors. The issues are unclear, may be changes in migratory patterns, disturbance to high tide roost sites,

water quality and/or ecological factors. Further details on Special Areas of Conservation and Special Protection Areas in Roe LMA are available in the protected areas section of the website.

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Map 3: Protected Areas in Roe LMA



Protected Areas in Roe LMA

The LMA supports important habitats and wildlife. These areas have been designated under European Directives and require special protection. The protected areas are summarised in Table 3 and illustrated in Map 3.

Table 3: Protected areas in Roe LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There are 6 drinking water protected areas.
Areas designed to protect economically significant aquatic species Freshwater Fish Directive (78/659/EEC) Shellfish Waters Directive (79/923/EC)	There are approximately 224 km of rivers identified under this directive all designated salmonid. There are no designated shellfish waters.
Bathing Waters These are bathing waters identified under the Bathing Waters Directives (76/160/EEC)	There are 3 identified bathing waters; Castlerock and Magilligan (Benone & Downhill).
Nutrient Sensitive Areas Areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC) and the Nitrates Directive (91/676/EEC)	There is 1 Urban Waste Water Treatment Directive sensitive area: RiverRoe. A total territory approach has been adopted in Northern Ireland for the Nitrates Directive.
Areas designated for the protection of habitats or species (Natura 2000 sites) These are areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection. Habitats Directive (92/43/EEC) Birds Directive (79/409/EEC)	There are 3 water dependent Special Areas of Conservation; Magilligan, River Roe and Tributaries and Carn-Glenshane pass. There is 1 water dependent Special Protection Area; Lough Foyle which includes the Roe and Faughan Transitional Waters.

Abbreviations

Term	Explanation
AFBI	Agri-Food and Biosciences Institute
DARD	Department of Agriculture and Rural Development
DCAL	Department of Culture, Arts and Leisure
DOE	Department of the Environment
DWI	Drinking Water Inspectorate
DRD	Department of Regional Development
EP	Ecological Potential – the status of a heavily modified water body measured against the maximum ecological quality it could achieve given the constraints imposed upon it by those heavily modified characteristics necessary for its use. There are four classes for the status of heavily modified water bodies: good ecological potential or better (GEP), moderate ecological potential (MEP), poor ecological potential (PEP) and bad ecological potential (BEP).
GSNI	Geological Survey of Northern Ireland
LMA	Local Management Area
MOSS	Management of Sensitive Sites
NICMS	Northern Ireland Countryside Management Scheme
NIEA	Northern Ireland Environment Agency
NIWL	Northern Ireland Water Limited
RHAT	River Hydromorphology Assessment Technique
RBMP	River Basin Management Plan
WTW	Water Treatment Works
WWTW	Waste Water Treatment Works

Working together to implement the Local Management Action Plan.

If you would like to get involved, find out more about the plans, or are carrying out work that will assist in protecting the water environment let us know at the Lower Foyle Catchment Stakeholder Group meetings or by contacting the Catchment Management Officer, Joanne Livingstone.

Email: joanne.livingstone@doeni.gov.uk

Telephone: 028 8262 3248.

Further details are available at www.doeni.gov.uk/niea/nw-workingtogether

Water Pollution Hotline:

***Freephone 0800 80 70 60**

This line is manned 24 hours a day, 7 days a week.

*Mobile calls are charged at standard network rates.

If you become aware of a water pollution incident please call the Water Pollution Hotline in confidence giving the location and nature of the pollution.



Our aim is to protect, conserve and promote the natural environment and built heritage for the benefit of present and future generations.

Northern Ireland Environment Agency
Water Management Unit
17 Antrim Road
Lisburn
BT28 3AL
T. (028) 9262 3004
www.doeni.gov.uk/niea