

Significant Water Management Issues

Quoile Local Management Area Action Plan and Update

December 2013

Quoile LMA Action Plan Update – December 2013

LMA Wide Actions

Action to be taken	Update
Carry out freshwater fish monitoring with the aim of completing WFD monitoring at programmed surveillance monitoring stations	Fisheries meeting held with Ulster Angling Federation, NIEA, DCAL, Loughs Agency and AFBI to discuss fish monitoring, data and to agree potential sites for improvement work to contribute towards improving water bodies with fish classifications of poor and bad.
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	Desktop study and risk analysis to assess potential pressures from land use completed June 2011. Analysis also produced a list of sites which required further biological monitoring and identified river walks for areas requiring further information.
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.
Ensure that licenses 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.	Compliance assessments have continued to be carried out.
Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland	Initial water resource assessment for Quoile LMA has been completed
DARD Countryside Management and NIEA to develop leaflets and articles to promote effective farm nutrient and waste management	Articles on Nitrates and Phosphorous Regulations published within the 'Helping You To Comply' booklets, circulated to farmers and published on DARD website. 5 press articles published during 2011/2012 which provided guidance on issues relating to Nitrates and Phosphorous Regulations. ' <i>Water quality plans in action</i> ' article published in Farming Life in October 2010 Posters produced and distributed by DARD.
Develop leaflets and articles to promote effective farm nutrient and waste management	'Landowner Awareness – Improving water quality in your local area' leaflet developed jointly with Loughs Agency, UFU and DARD to raise awareness amongst landowners. Presentation to CAFRE students on Water Framework Directive and water quality issues related to agriculture. 'NIEA & Water Pollution – Improving water quality' postcards produced to raise awareness on the role of the NIEA Regional Operations team and who to contact if water pollution is observed. All applicants to DARD agri-environment

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	<p>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. DARD has also developed an agri-environment training course for farmers dealing with farm wastes and nutrient management planning.</p> <p>Pesticide Flyer – developed by the Pesticide Working Group [NIEA, NIW, UFU, DARD, CAFRE, AFBI, Rivers Agency and Loughs Agency]. A Group set up to raise awareness of the problem of pesticide detection in Drinking Water Catchments.</p> <p>NIW also produced a 'Stop and Think about the water you drink' leaflet under the Pesticide Working Group.</p>
<p>Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms</p>	<p>Under the Nitrates Action Programme all farms must carry out crop and soil management to minimise soil erosion and nutrient run-off. This is verified during cross-compliance visits. Farms are now selected for inspections under Cross Compliance using a combination of risk factors; these include soil type, hydrology, and water bodies not meeting their objectives.</p>
<p>Highlight external funding opportunities for water management projects to local partners</p>	<p>NIEA has a dedicated competitive grant scheme which will be used to allocate funds to voluntary 'not for profit' bodies and local councils to support their operational work in the delivery of agreed water focused environmental objectives identified in the DOE and NIEA business plans. In the current financial year the pilot scheme is focused on the WFD objectives as identified in the River Basin Management Plans. The total funding available for this grant aid in 2012/13 and 2013/14 is a maximum of £100k, with individual projects capped at £10K. The Water Quality Improvement Grant has been promoted through NIEA website and mailing lists. Further information available at; http://www.doeni.gov.uk/niea/water-home/wfd/water_quality_improvement_grant.htm</p> <p>NIEA Challenge Fund (2012 & 2013) promoted through CSG meeting, NIEA website and mailing lists. Further information available at http://www.nienvironmentlink.org</p> <p>Water Environment Community Awards promoted through CSG meeting, NIEA website and mailing list.</p>
<p>Observation of nitrate trends and liaison with research partners for further</p>	<p>Nitrates are part of the surveillance and operational monitoring carried out by NIEA. As</p>

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investigation into recovery time	NIEA does not fund any research directly it can only encourage research institutions in certain topics. At present NIEA is not aware of any groundwater nitrates research projects.
Promote the control of invasive alien species on farmland	Promoted through the DARD Northern Ireland Countryside Management Scheme (NICMS).
Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage	Official launch of new signage took place on 18 th April 2011 by NIEA Chief Executive John McMillan. In attendance was Ian Kittle from Inler Anglers and Tracey Connelly the Countryside Access Officer at Castlereagh Borough Council. 6 signs erected in Quoile LMA. Hotline number is promoted frequently on NIEA facebook page and NIEA Twitter website.
Promote and encourage local projects through WATER Environment Community awards	Awards promoted through CSG meeting, NIEA website and e-mail.
Promote public participation by organising two Catchment Stakeholder Group meetings per year to provide an open forum for discussion on water issues. Encourage involvement in developing and implementing the Quoile Action Plan	Presentations and Note of meetings can be found on http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups/strangford_and_lecale.htm
Promote public participation by raising awareness of The Rivers Trust	Six Rivers Trusts have been set up in Northern Ireland – Ballinderry, Six Mile Water, River Roe, Blackwater, Maine and River Lagan. Discussions are on-going with other organisations that have expressed an interest in setting up Trusts. A Partnership Agreement was formed between the Rivers Trust and NIEA in 2010, and NIEA continues to fund a Northern Ireland Development Officer, Mark Horton. Mark can be contacted at The Rivers Trust, c/o Ballinderry River Enhancement Association, 231a Orritor Road, Cookstown, BT80 9ND. Telephone: 028 867 61515. E-mail: mark@theriverstrust.org
Promote public participation by release of relevant press articles and web publications of Strangford and Lecale e-zine. Support local community events.	8 issues of the Strangford LMA E-zine mailed to Strangford & Lecale CSG contacts. E-zines can be accessed at: http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/lma_e-newsletters.htm NIEA staff attended Balmoral Show and demonstrated the use of the River Basin Planning Webmapper ay 2011 & May 2012
Provide advice on protected area designations such as drinking water protected areas, rivers and lakes identified as salmonid and nutrient sensitive areas	NIEA require application in writing of notifiable operations on a designated site e.g. ASSI, SPA or SAC.
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

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	<p>scheme.</p> <p>DARD has produced a Code of Good Agricultural Practice which contains practical management advice on how farm wastes such as silage effluent, slurry and manure can be collected, stored and spread with minimum risk to the environment.</p> <p>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.</p>
<p>Review of groundwater abstraction and relevant planning applications where necessary</p>	<p>The Groundwater Team is a regular consultee on groundwater abstractions and planning applications for all of Northern Ireland.</p>
<p>Support local environmental initiatives by working with local groups in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Quoile Action Plan. Support local community environmental events.</p>	<p>NIEA staff support a number of local groups, providing advice and guidance when required and attended a number of events;</p> <p>NIEA staff attended Balmoral Show and demonstrated the use of the River Basin Planning Webmapper 2011, 2012 & 2013.</p> <p>NIEA WMU staff provided and supported a stand at the Greenmount Centenary event 16th & 17th June 2012 – demonstrated the recording of water invertebrates and the link to water quality & classification.</p> <p>NIEA staff had a strong presence at the Clipper Event, 5th – 8th July 2012 – where we focused mainly on key marine issues.</p> <p>NIEA provided the Horticulture 2012 event at Greenmount on 19th September 2012, where our main focus was pesticide awareness and water quality issues.</p> <p>NIEA actively supports the Strangford Lough and Lecale Partnership by attending meetings and events.</p>
<p>Support pollution prevention campaigns such as 'Reduce Reuse Recycle', 'Bag It & Bin It', 'Stop and Think (Not Down the Sink)'</p>	<p>Promote awareness at fairs and shows.</p> <p>Encourage support through publishing <i>'Householder Awareness - Improving water quality in your local area'</i> and <i>'Landowner Awareness'</i> leaflets.</p> <p>Raise awareness of NIW <i>'Dirty Dozen'</i>.</p> <p>NIEA supports the inclusion of pollution prevention messages in information leaflets and other literature e.g. <i>'Using Pesticides – Stop & think about the water you drink'</i>. NIEA, in conjunction with Northern Ireland Water, have produced an information leaflet to highlight the dangers of pesticides around waterways and the potential impacts on wildlife and drinking water.</p>

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Water Body Actions

<p>Assess sources of organic pollution from:</p> <p>Agriculture</p> <p>Industrial Discharges</p> <p>Northern Ireland Water Limited sewerage services</p>	<p>In Quoile LMA the following assessments of organic pollution are / have taken place</p> <p>NIEA's Agriculture Regulations Team undertake a series of planned and unplanned regulatory cross compliance visits to farms</p> <p>Compliance inspections are carried out at approximately 40 industrial discharge points on an annual basis within Quoile LMA</p> <p>Compliance assessments are carried out at: Annahilt WWTW Ballynahinch WWTW Saintfield WWTW Downpatrick WWTW</p> <p>Visual inspections have been carried out at: Lisowen WWTW Lessans WWTW Glasdrummond WWTW Kilmore WWTW</p>
<p>Conduct biological investigations to assess aquatic invertebrates.</p>	<p>Additional biological monitoring has been completed at 24 sites in the Quoile LMA</p>
<p>Carry out a river walks to determine and address sources of organic pollution affecting aquatic invertebrates and resulting in low biotic scores and/or observed sewage fungus</p>	<p>River walks have been carried out in the following water bodies: Glaswater River Upper Ballynahinch River Poundburn River</p>
<p>Carry out monitoring and assessment to confirm evidence of trophic status</p>	<p>Monitoring and assessment carried out at: McAuley's Lake Quoile Pondage</p>
<p>Carry out fish monitoring and assessment</p>	<p>AFBI monitoring carried out on : Drumaness River Annacloy River</p>
<p>Upgrading of Waste Water Treatment Works</p>	<p>The following waste water treatment works have been upgraded: Drumaness WWTW Saintfield WWTW Downpatrick WWTW</p>
<p>Carry out full RHAT assessment to determine morphological condition (River Hydromorphology Assessment Technique)</p>	<p>Surveys carried out in the following water bodies: Quoile River Drumaness River McAuley's Lake Feeder Stream</p>
<p>Carry out compliance assessment by investigating downstream impacts of discharges from industrial premises where a problem has been identified to establish potential sources of pollution</p>	<p>Compliance assessments have continued to be carried out.</p>
<p>Assess forestry operations. Ascertain felling programme in the catchment and</p>	<p>Met with Forestry personnel to highlight importance of water quality. Forestry Service</p>

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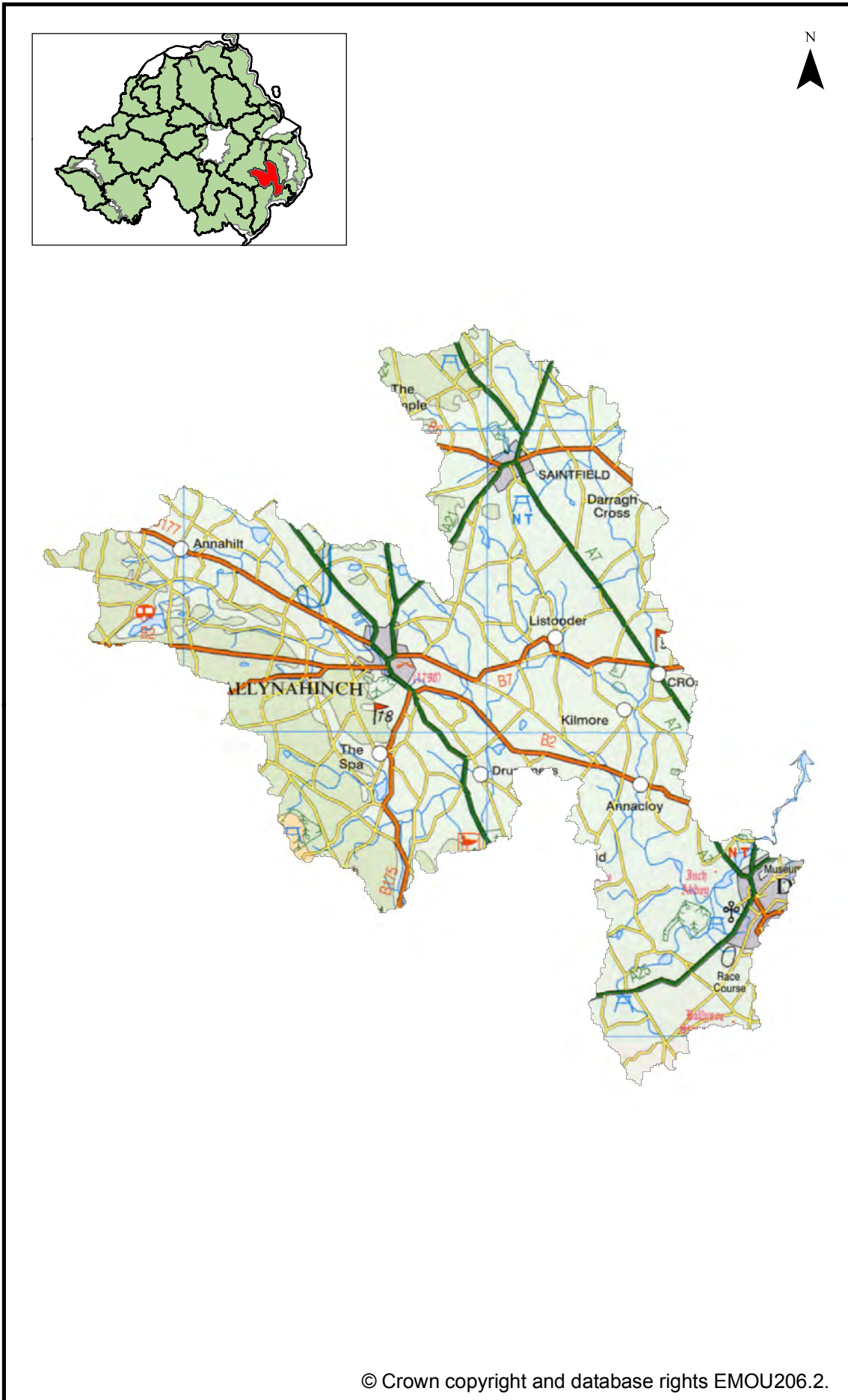
engage with forestry technical field staff to ensure measures are in place to mitigate risks from felling	follows industry guidelines re: water quality.
Investigate identified water quality impacts and evaluate the environmental management options using the Quoile Pondage Water Quality Model.	NIEA, Rivers Agency and Agri-Food and Biosciences Institute (AFBI) are currently working with RPS Consultancy to build a water quality model to look at various environmental options to manage the Quoile Pondage.

QUOILE

Local Management Area



Map 1: Quoile 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 Quoile 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.

Quoile Local Management Area

The Quoile LMA (Map1), covers an area of approximately 245km². The catchment has two different headwaters; Glasswater River rising around Saintfield town in the north and Ballynahinch River, northwest of Ballynahinch. The two headwaters converge to become the Annacloy River at Kilmore. The river then turns east and flows north before Downpatrick where it becomes the Quoile River which flows into the Quoile Pondage. The Quoile Pondage is an impoundment created by the Quoile Barrage. The Barrage was constructed in 1957 to prevent flooding in the Downpatrick area and was refurbished in 2007. It marks the boundary between the fresh and the saline waters although the Pondage is considered transitional.

The major towns within the Quoile LMA include Downpatrick, Saintfield, Ballynahinch and Crossgar. The main land cover is represented by improved grassland with a small amount of arable horticulture and neutral grass. The area has a range of habitats that have protected status and is a National Nature Reserve. It also supports a range of recreational activities such as bird watching, walking, angling, tourism, canoeing and yachting.

The Quoile 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 Table 2 and illustrated on Map 3.

What is the status of the water environment in the Quoile LMA

In 2009 100% of surface water bodies in the Quoile LMA (Map 2), were classified as less than good status. The Quoile Pondage has been identified as being Heavily Modified. Many of the rivers failed to achieve good status due to impacted invertebrates and elevated phosphorus levels. In the case of the Quoile Pondage the downgrading was due to low dissolved oxygen levels. All groundwater bodies in the Quoile LMA are achieving good status.

In the Quoile LMA the main impacts were observed in phosphorus levels. This element is associated with nutrient enrichment. The main rivers affected were: Glasswater River, Carson's Dam River, Annacloy River, Quoile River, Ballynahinch River Tributary, Listoder Stream and Drumaness River.

There was also evidence of organic enrichment within the catchment. Impacts were observed in invertebrate communities and dissolved oxygen levels. The main rivers affected were: Ballynahinch River, Annacloy River, Drumaness River, Listooder Stream and Quoile River.

The water environment in Northern Ireland has already been impacted by the introduction of invasive alien species. Species which have already become established in the Quoile LMA include Japanese Knotweed (*Fallopia japonica*).

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

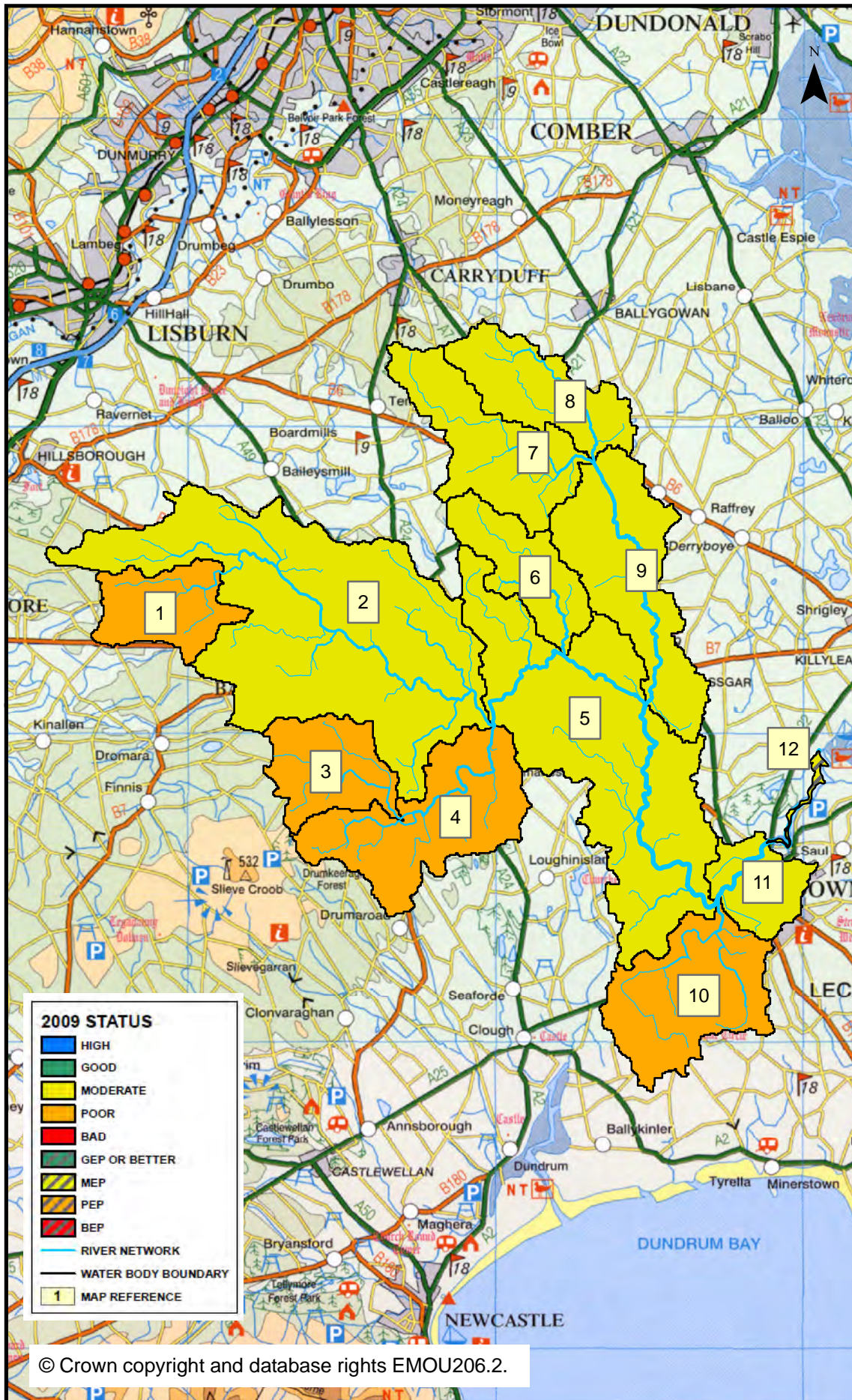


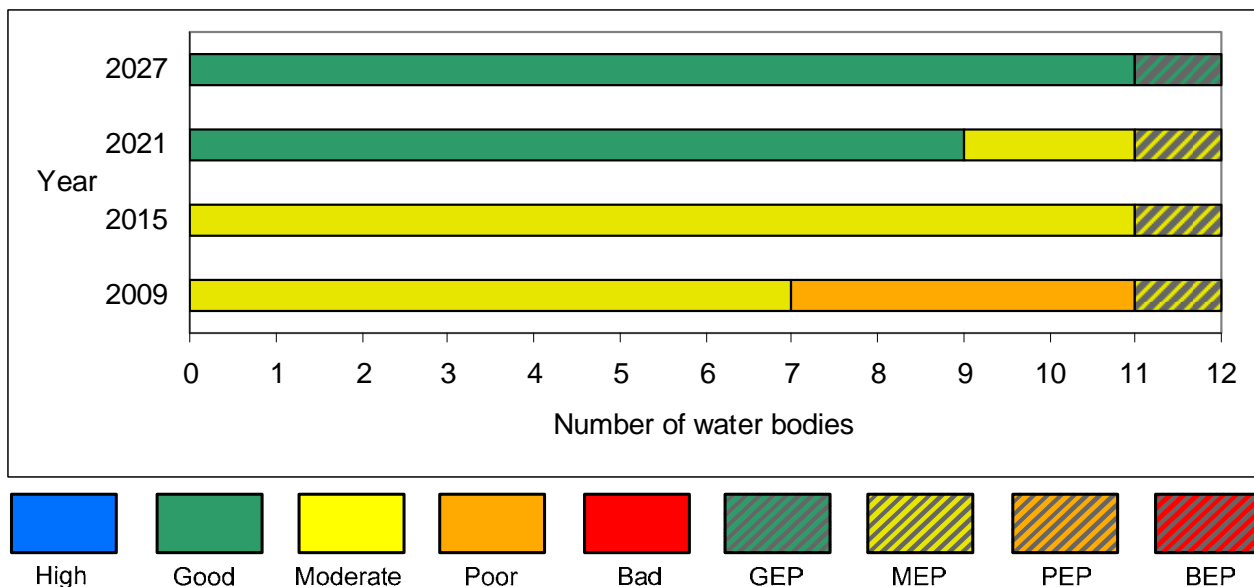
Table 1: 2009 status and proposed objectives

Map Reference	Water Body Code	Water Body Name	2009 Status	2015 Objective	Page Number
1	UKGBNI1NE050504055	Ballynahinch River Tributary	Poor	Moderate	10
2	UKGBNI1NE050504056	Ballynahinch River Tributary	Moderate	Moderate	10
3	UKGBNI1NE050504053	Drumaness River tributary	Poor	Moderate	11
4	UKGBNI1NE050504066	Drumaness River	Poor	Moderate	11
5	UKGBNI1NE050504050	Annacloy River	Moderate	Moderate	12
6	UKGBNI1NE050504065	Listooder Stream	Moderate	Moderate	12
7	UKGBNI1NE050504064	Carsons Dam River	Moderate	Moderate	13
8	UKGBNI1NE050504012	Carsons Dam River	Moderate	Moderate	13
9	UKGBNI1NE050504011	Glasswater River	Moderate	Moderate	14
10	UKGBNI1NE050504074	Ballyduggan River	Poor	Moderate	14
11	UKGBNI1NE050504051	Quoile Rlver	Moderate	Moderate	15
12	UKGBNI5NE130010	Quoile Pondage	MEP	MEP	15

What improvements do we plan to achieve?

We have set environmental objectives to deliver improvements as shown below in Figure 1. We aim to achieve good status or better in 42% of our surface waters and maintain good status in 100% of our groundwaters.

Figure 1: 2009 status and proposed objectives for surface waters in the Quoile LMA



How are we going to maintain and improve the water environment in the Quoile LMA?

There are a number of measures which will be implemented in the Quoile LMA in order to maintain and improve the water environment. The list of actions that follows includes actions that apply throughout the LMA and also actions that apply to individual water bodies.

The actions below apply throughout the LMA.

	Action to be taken	Action to be taken by	Target Date
1	Carry out freshwater fish monitoring with the aim of completing WFD monitoring at programmed surveillance monitoring stations.	DOE NIEA	Dec 2014
2	Complete desktop study and risk analysis using available catchment data to identify areas under pressure and allow further objective investigations on the ground to be carried out.	DOE NIEA	Completed
3	Complete the phosphorus nutrient budget work for Northern Ireland to establish nutrient inputs from different sectors.	DOE NIEA	Mar 2013
4	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
5	Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland.	DOE NIEA	Mar 2012
6	DARD Countryside Management and NIEA to develop leaflets and articles to promote effective farm nutrient and waste management.	DARD Countryside Management Branch	Dec 2015
7	Develop leaflets and articles to promote effective farm nutrient and waste management.	DOE NIEA	Completed
8	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms.	DARD Countryside Management Branch	Dec 2015
9	Highlight external funding opportunities for water management projects to local partners.	DOE NIEA	Dec 2015
10	Observation of nitrate trends in groundwater and liaison with research partners for further investigation.	DOE NIEA, Geological Survey NI	Dec 2015
11	Promote the control of invasive alien species on farmland.	DARD Countryside Management Branch	Dec 2015
12	Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage.	DOE NIEA	Dec 2015
13	Promote public participation by encouraging local projects through the WATER Environment Community Awards.	DOE NIEA	Mar 2013
14	Promote public participation by organising two Catchment Stakeholder Group meetings per year to provide an open forum for discussion on water issues. Encourage involvement in developing and implementing the Quoile Action Plan.	DOE NIEA / Catchment Stakeholder Group	Dec 2015
15	Promote public participation by raising awareness of The Rivers Trust.	DOE NIEA	Mar 2013
16	Promote public participation by release of relevant press articles and web publication of Strangford and Lecale e-zine. Support local community events.	DOE NIEA	Dec 2015

	Action to be taken	Action to be taken by	Target Date
17	Provide advice on protected area designations such as drinking water protected areas, rivers which have been identified as Salmonid and in nutrient sensitive areas in the Quoile Local Management Area.	DOE NIEA	Dec 2015
18	Raise awareness and promote the benefits of effective farm nutrient and waste management.	DARD Countryside Management Branch	Dec 2015
19	Review of groundwater abstraction and planning applications where necessary.	DOE NIEA, Geological Survey NI	Dec 2015
20	Support local environmental initiatives through working with the Strangford Lough and Lecale Partnership to raise awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Quoile Action Plan.	DOE NIEA	Dec 2015
21	Support pollution prevention campaigns such as 'Reduce Reuse Recycle', 'Bag It & Bin It', 'Stop and Think (Not Down the Sink)'.	DOE NIEA	Dec 2015

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

UKGBNI1NE050504055		Ballynahinch River Tributary	2009 Status: Poor	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited Sewage Pumping Station (Pound Burn) and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Conduct biological investigations to assess aquatic invertebrates at Drumlough Rd, downstream of Pound Burn Sewage Pumping Station, Cluntyagh Rd and Ballykine Rd.		DOE NIEA	Completed
3	Carry out a river walk upstream of Pound Burn Sewage Pumping Station to investigate low biotic score and elevated level of Ammonia.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NE050504056		Ballynahinch River Tributary	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Annahilt, Ballylane Rd, Ballynahinch), Intermittent Discharges, Sewage Pumping Stations (Orchard, Spa) and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Conduct biological investigations to assess aquatic invertebrates at Ballintagh Bridge.		DOE NIEA	Completed
3	Carry out a river walk upstream of Blacks Lane Ends to investigate source of low biotic score, low dissolved oxygen and elevated Biochemical Oxygen Demand.		DOE NIEA	Mar 2013
A number of catchment wide actions also apply to this water body. These can be found on Page 8.				

UKGBNI1NE050504053		Drumaness River Tributary	2009 Status: Poor	
	Action to be taken		Action to be taken by	Target Date
1	Carry out a river walk upstream of McAuley's Lake to assess sources of organic pollution.		DOE NIEA	Mar 2013
2	Carry out monitoring and assessment of McAuley's Lake to confirm evidence of trophic status.		DOE NIEA	Completed

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

UKGBNI1NE050504066		Drumaness River	2009 Status: Poor	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Drumaness, Newcastle Rd, Drumaroad Draper Hill), Intermittent Discharges, Sewage Pumping Stations (Cumber Rd, Drumaness Village, Magheratimpany) and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Conduct biological investigations to assess aquatic invertebrates at Weir Lane.		DOE NIEA	Completed
3	Carry out a river walk upstream of Drumaness to investigate the cause of low biotic score and low Dissolved Oxygen.		DOE NIEA	Mar 2013
4	Carry out fish monitoring and assessment downstream from Drumaness village.		DOE NIEA	Completed
5	Upgrading of WWTW at Drumaness.		NIWL	Completed
6	Carry out full RHAT assessment in the Drumaness River water body to determine morphological condition.		DOE NIEA	Dec 2014

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

UKGBNI1NE050504050		Annacloy River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Kilmore Crossgar, Annacloy), Annacloy Sewage Pumping Station and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Carry out a river walk upstream of monitoring point - Annacloy River Feeder Stream at Rosconor to investigate the cause of low biotic score.		DOE NIEA	Mar 2013
3	Carry out compliance assessment by investigating downstream impacts of discharges from industrial premises where a problem has been identified to establish potential sources of pollution.		DOE NIEA	Mar 2013
4	Assess forestry operations in Hollymount Estate. Ascertain felling programme in the catchment and engage with forestry technical field staff to ensure measures are in place to mitigate risks from felling.		DOE NIEA, DARD Forest Service	Mar 2013

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

UKGBNI1NE050504065		Listooder Stream	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Carry out a river walk upstream of Monitoring Point - Ballynahinch Feeder at Listooder to determine pressures causing low biotic scores.		DOE NIEA	Mar 2013

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

UKGBNI1NE050504064		Carsons Dam River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Saintfield, The Demesne), Saintfield Sewage Pumping Station and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Conduct biological investigations to assess aquatic invertebrates downstream of Saintfield WWTW.		DOE NIEA	Completed
3	Carry out a river walk upstream of Saintfield (off the Old Belfast Road and off the Crossgar Road) to investigate elevated Biochemical Oxygen Demand levels.		DOE NIEA	Mar 2013
4	Upgrading of WWTW at Saintfield.		NIWL	Completed

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

UKGBNI1NE050504012		Carsons Dam River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Lessans, Glassdrummond, Jackson's Crescent) and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Carry out a river walk in the lower sections of the river water body to investigate elevated Biochemical Oxygen Demand levels.		DOE NIEA	Mar 2013
3	Conduct biological investigations to assess aquatic invertebrates at Liberty Hill and Priest's Bridge.		DOE NIEA	Completed
4	Provide advice on protected area designations to work towards maintaining the favourable condition assessment of Aughnadarragh Special Area of Conservation.		DOE NIEA	Dec 2015

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

UKGBNI1NE050504011		Glasswater River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited WWTW (Lisowen), Intermittent Discharges, Sewage Pumping Stations and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Carry out a river walk upstream of Crossgar to Carson's Dam Bridge and the upstream tributary of the Glasswater River to investigate elevated Biochemical Oxygen Demand levels.		DOE NIEA	Mar 2013
3	Conduct biological investigations to assess aquatic invertebrates at Killybawn Road, Killyleagh Street and Kilmore.		DOE NIEA	Completed
4	Carry out compliance assessment by investigating downstream impacts of discharges from industrial premises where a problem has been identified to establish potential sources of pollution.		DOE NIEA	Mar 2013
5	Provide advice on protected area designations to work towards maintaining the favourable condition assessment of Aughnadarragh Special Area of Conservation.		DOE NIEA	Dec 2015

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

UKGBNI1NE050504074		Ballyduggan River	2009 Status: Poor	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited Sewage Pumping Stations and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Conduct biological investigations to assess aquatic invertebrates at Ballydonety Bridge, Cargagh House and Ringreagh.		DOE NIEA	Completed
3	Carry out a river walk upstream of the racecourse and upstream of Ballyduggan Lake to investigate the low biotic score during May 2011 survey.		DOE NIEA	Mar 2013
4	Carry out compliance assessment by investigating downstream impacts of discharges from industrial premises where a problem has been identified to establish potential sources of pollution.		DOE NIEA	Mar 2013
5	Provide advice on protected area designations to work towards maintaining the favourable condition assessments of Hollymount, Ballykilbeg and Lecale Fens Special Areas of Conservation.		DOE NIEA	Dec 2015
6	Assess forestry operations in Hollymount Estate. Ascertain felling programme in the catchment and engage with forestry technical field staff to ensure measures are in place to mitigate risks from felling.		DOE NIEA, DARD Forest Service	Mar 2013

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

UKGBNI1NE050504051		Quoile River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited Intermittent Discharges, WWTW (Downpatrick) and septic tanks (private and domestic).		DOE NIEA	Mar 2013
2	Investigate identified water quality impacts and evaluate the environmental management options using the Quoile Water Quality Pondage Model.		DOE NIEA	Apr 2012
3	Upgrading of WWTW at Downpatrick.		NIWL	Completed
4	Carry out full RHAT assessment to determine morphological condition.		DOE NIEA	Dec 2014

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

UKGBNI5NE130010		Quoile Pondage	2009 Status: MEP or Worse	
	Action to be taken		Action to be taken by	Target Date
1	Investigate identified water quality impacts and evaluate the environmental management options using the Quoile Pondage Water Quality Model.		DOE NIEA	Apr 2012
2	Carry out monitoring and assessment to confirm evidence of trophic status of Quoile Pondage.		DOE NIEA	Dec 2015
3	Provide advice on protected area designations to work towards improving the unfavourable condition assessment of Strangford Lough Special Area of Conservation.		DOE NIEA	Dec 2015
4	Provide advice on protected area designations to maintain the favourable condition assessment of Strangford Lough Special Protection Area.		DOE NIEA	Dec 2015

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

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

The programme of measures described in the North Eastern River Basin Management Plan 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 Birds Directive (79/409/EEC);
- The Drinking Water Directive (80/778/EEC) as amended by Directive (98/83/EC);
- The Environmental Impact Assessment Directive (85/337/EEC);
- The Urban Waste-water Treatment Directive (91/271/EEC);
- The Plant Protection Products Directive (91/414/EEC);
- The Nitrates Directive (91/676/EEC);
- The Habitats Directive (92/43/EEC); and
- The Integrated Pollution Prevention Control Directive.

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; and
- Controls on other activities impacting on water status.

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 Limited and published as part of the River Basin Management Plans. 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.

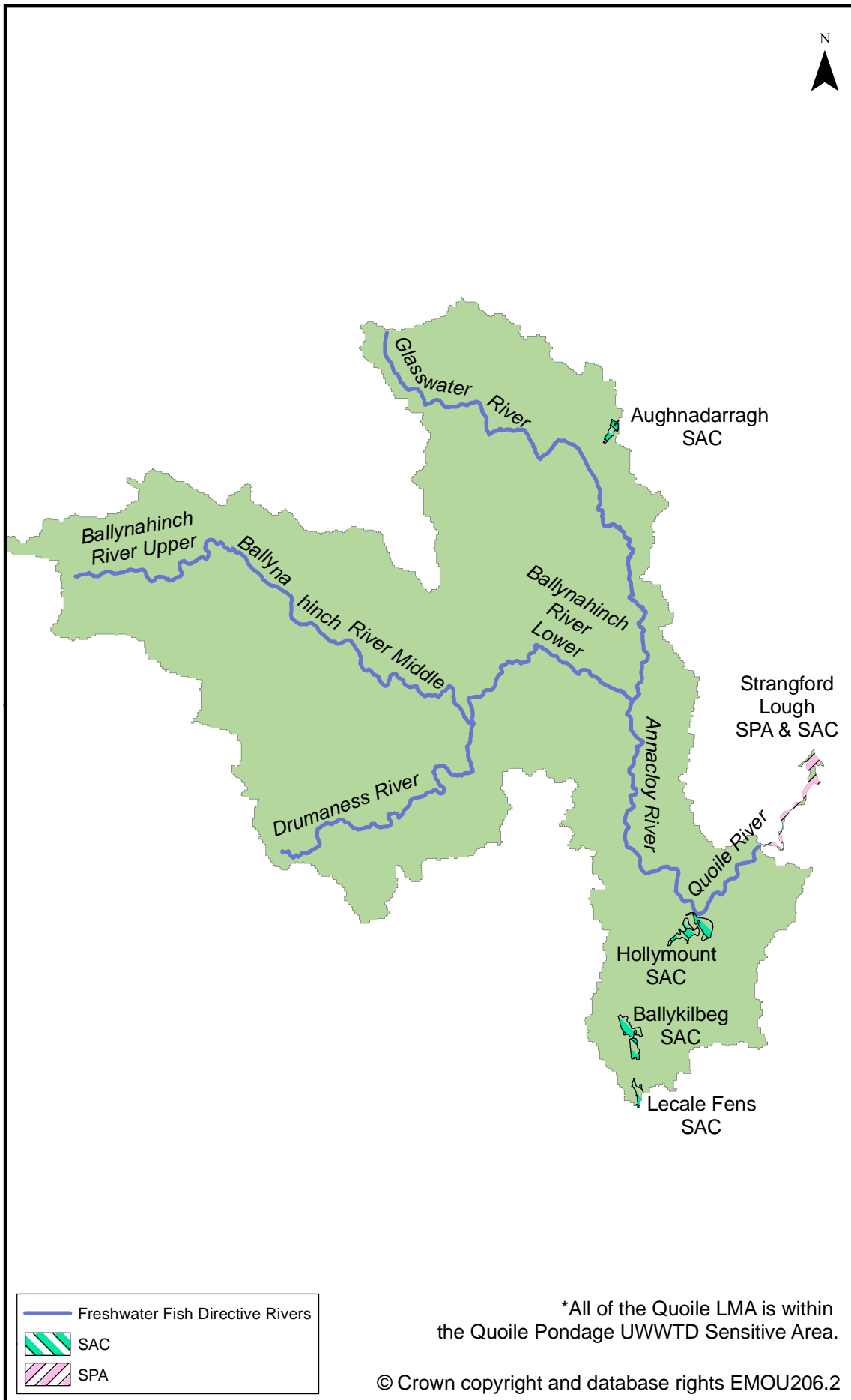
Progress on the implementation of these supplementary measures listed in the River Basin Management Plans will be reported to the European Commission in December 2012. This LMA action plan forms one of the supplementary measures for the North Eastern River Basin District and includes a number of others 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.

Aughnadarragh and Ballykilbeg Special Areas of Conservation are in favourable condition. There are no specific measures for the Hollymount and Lecale Fens Special Areas of Conservation as there are no water related adverse activities causing an unfavourable condition assessment of the water dependent features. Strangford Lough Special Area of Conservation is in unfavourable condition. Strangford Lough Special Protection Area is in favourable condition. Further details on Special Areas of Conservation and Special Protection Areas in the Quoile LMA are available in the protected areas section of the website.

Map 3: Protected Areas in Quoile LMA



Protected areas in Quoile 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 2 and illustrated in Map 3.

Table 2: Protected areas in the Quoile LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There is 1 drinking water protected groundwater.
Areas designed to protect economically significant aquatic species Freshwater Fish Directive (78/659/EEC) Shellfish Waters Directive (79/923/EC)	There are 71 km of rivers identified under the Freshwater Fish 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 no identified bathing waters.
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: Quoile Pondage. 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 5 water dependent Special Areas of Conservation; Aughnadarragh, Ballykilbeg, Hollymount, Lecale Fens and Strangford Lough. There is 1 water dependent Special Protection Area; Strangford Lough.

Abbreviations

Term	Explanation
DARD	Department of Agriculture and Rural Development
DCAL	Department of Culture, Arts and Leisure
DOE	Department of the Environment
DRD	Department for 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 (GEP) or better, moderate ecological potential (MEP), poor ecological potential (PEP) and bad ecological potential (BEP).
NIEA	Northern Ireland Environment Agency
NIWL	Northern Ireland Water Limited
RHAT	River Hydromorphological Assessment Technique
WWTW	Waste Water Treatment Works

Working together to implement the Local Management Area 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 Quoile Catchment Stakeholder Group meetings or by contacting the Catchment Management Officer, Aideen Kelly.

Email: aideen.kelly@doeni.gov.uk

Telephone: 028 92 633438

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