

Significant Water Management Issues

Larne Lough Local Management Area Action Plan and Update

December 2013

Larne Lough LMA Action Plan – Progress Update December 2013

LMA Action	Progress Update
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	Desktop study and risk analysis to assess potential pressures from landuse completed June 2012. 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	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.
Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland	Ongoing
DARD Countryside Management and NIEA to develop leaflets and articles to promote effective farm nutrient and waste management	<p>Articles on Nitrates Action Plan and Phosphorus Regulations published in the 'Helping You To Comply' booklets circulated to farmers and published on DARD website.</p> <p>'Water quality plans in action' article published in the Farming Life October 2010.</p> <p>'It's time now to check your silos' article published in Farmweek May 2013.</p> <p>'Tidy Farms help prevent litter reaching the sea' article published in the Farming Life July 2013.</p>
Develop leaflets and articles to promote effective farm nutrient and waste management	<p>'Landowner Awareness – Improving water quality in your local area' leaflet developed jointly with Loughs Agency, UFU and DARD to raise awareness amongst landowners.</p> <p>Presentation to CAFRE students on Water Framework Directive and water quality issues related to agriculture.</p> <p>'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.</p> <p>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. DARD has also developed an agri-environment training course for farmers dealing with farm wastes and nutrient management planning.</p>
Encourage riparian zone management with an aim to improve	Under the Nitrates Action Programme all farms must carry out crop and soil

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<p>biodiversity and minimise sedimentation through practical management measures on farms</p>	<p>management to minimise soil erosion and nutrient run-off. This is verified during cross-compliance visits.</p>
<p>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.</p>	<p>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 scheme. The controls are necessary to meet the requirements of the Water Framework Directive and the Habitats Directive. Licence conditions are set to ensure flows in the river downstream of the abstraction point during operation, so as to maintain the river and groundwater ecosystems. See 'Guidance for run-of river hydropower schemes in NI' which is available at http://www.doeni.gov.uk/niea/guidance_for_run-of_river_hydropower_schemes_in_northern_ireland.pdf</p>
<p>Highlight external funding opportunities for water management projects to local partners</p>	<ul style="list-style-type: none"> • NIEA has piloted 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 WFD objectives as identified in River Basin Management Plans. The total funding 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 the NIEA website, mailing lists and at CSG meetings. Further information is available at http://www.doeni.gov.uk/niea/water-home/wfd/water_quality_improvement_grant.htm • NIEA Challenge Fund (2012 & 2013) promoted through CSG meeting, NIEA website and mailing lists. Further information available at http://www.nienvironmentlink.org/ • Water Environment Community Awards promoted through CSG meeting, NIEA website and mailing list.
<p>Observation of nitrate trends in groundwater and liaison with research partners for further investigation</p>	<p>Nitrates monitoring is carried out as part of the surveillance and operational monitoring programmes carried out by NIEA. As NIEA does not fund any</p>

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	<p>research directly it can only encourage research institutions in certain topics. At present NIEA is not aware of any groundwater nitrates research projects.</p>
Offer a farm nutrient and waste management advisory visit to farmers following a pollution incident (on referral by NIEA)	<p>Protocols are in place between NIEA and DARD to facilitate this. Ongoing.</p>
Promote public participation by organising two Catchment Stakeholder Group meetings per year to provide an open forum for discussion of water issues. Encourage involvement in developing and implementing the Larne Lough Local Management Area Plan	<p>Meetings held</p> <ul style="list-style-type: none"> - 14th October 2010 - 19th April 2011 - 18th October 2011 - 25th April 2012 - 10th October 2012 - 1st May 2013 - 17th October 2013 <p>Presentations and notes of meetings can be found at http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups/bush_and_glens.htm</p>
Promote public participation by raising awareness of catchment management issues by release of relevant press articles and web publication of Bush & Glens e-zine	<ul style="list-style-type: none"> • 5 issues of the Bush e-zine have been published on the NIEA website and circulated to the Bush & Glens CSG electronic mailing list. E-zines can be viewed at http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/lma_e-newsletters.htm • NIEA staff support a number of local groups, providing advice and guidance as required and attend events to raise awareness of the water environment: <ul style="list-style-type: none"> Stands provided at <ul style="list-style-type: none"> ○ Balmoral Show 2011, 2012, 2013 ○ Greenmount Centenary Show 16- 17 June 2013 ○ Horticulture 2012 at Greenmount 9 September 2012 (focusing on pesticide awareness and water quality issues) • Stand providing information on river basin management plans, local management area action plans and displays of 'good bugs/bad bugs'. <ul style="list-style-type: none"> ○ Bushmills Salmon Station Open Day 8 July 2011 ○ Water Detectives, Portballintrae 24 June 2011 ○ Bushmills Salmon Station Open Day 5 July 2012 ○ Bushmills Salmon and Whiskey Festival 10 September 2013 ○ Armoys Environment Day 23 July 2013 <p>Bushmills Salmon and Whiskey Festival 21 September 2013</p>

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	<p>Water Environment Community Awards promoted through CSG meeting, NIEA website and mailing list.</p> <p>2012 Winner in the Bush & Glens CSG Area – Larne High School was awarded £1000 to create a garden with a pond in the school grounds to attract wildlife and provide an environmental education resource for the pupils and raise awareness of water quality issues in the wider community.</p> <p>In 2011, Environment Minister Alex Attwood presented nine community groups £1,000 each for their environmental improvement projects on 26th May. The winner in the Bush & Glens area was the Causeway Coast and Glens Heritage Trust for their 'Water of Life' project. A primary school from Armoy became 'water detectives' to report on the river from its source at Slieveanorra to the sea at Portballintrae.</p>
<p>Promote public participation by raising awareness of catchment management issues by release of relevant press articles and web publication of Bush & Glens e-zine</p>	<ul style="list-style-type: none"> • 5 issues of the Bush e-zine have been published on the NIEA website and circulated to the Bush & Glens CSG electronic mailing list. E-zines can be viewed at http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/lma_e-newsletters.htm • NIEA staff support a number of local groups, providing advice and guidance as required and attend events to raise awareness of the water environment: <ul style="list-style-type: none"> Stands provided at <ul style="list-style-type: none"> ○ Balmoral Show 2011, 2012, 2013 ○ Greenmount Centenary Show 16- 17 June 2013 ○ Horticulture 2012 at Greenmount 9 September 2012 (focusing on pesticide awareness and water quality issues) • Stand providing information on river basin management plans, local management area action plans and displays of 'good bugs/bad bugs'. <ul style="list-style-type: none"> ○ Bushmills Salmon Station Open Day 8 July 2011 ○ Water Detectives, Portballintrae 24 June 2011 ○ Bushmills Salmon Station Open Day 5 July 2012 ○ Bushmills Salmon and Whiskey Festival 10 September 2013 ○ Armoy Environment Day 23 July 2013 <p>Bushmills Salmon and Whiskey Festival 21 September 2013</p>

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<p>Promote public participation by raising awareness of The Rivers Trust</p>	<p>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</p>
<p>Promote the control of invasive alien species on farmland</p>	<p>Control is promoted through the DARD Northern Ireland Countryside Management Scheme (NICMS). Funding is available to progress around 1000 applications for admission to the scheme in January 2012, with a further 1300 joining in January 2013.</p>
<p>Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage</p>	<ul style="list-style-type: none"> • Official launch of new signage initiative by NIEA Chief Executive, Enler Anglers and Castlereagh Borough Council Countryside Access Officer – 18th April 2012. • ‘NIEA & Water Pollution – Improving Water Quality’ postcards produced to raise awareness on the role of the NIEA Regional Operations team and who to contact in the event of a pollution incident. These have been distributed at a number of events and shows. <p>The pollution hotline number is promoted frequently on NIEA facebook and Twitter website. Stakeholders are requested to forward their suggestions for sign locations to Devina Park.</p>
<p>Provide advice on protected area designations</p>	<p>As required. NIEA require application in writing of notifiable operations on a designated site e.g. ASSI, SPA or SAC.</p>
<p>Raise awareness and promote the benefits of effective farm nutrient and waste management</p>	<p>‘Landowner Awareness – Improving water quality in your local area’ leaflet developed jointly with Loughs Agency, UFU and DARD to raise awareness amongst landowners.</p>
	<p>Annual presentation to CAFRE students on Water Framework Directive and water quality issues related to agriculture.</p>
	<p>‘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.</p>
	<p>All applicants to DARD agri-environment schemes receive farm waste</p>

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	<p>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>LMA Cross Compliance Inspections and referrals carried out by NIEA Agricultural Regulations Team.</p> <p>'Water Quality in Action' article published in Farming Life October 2012.</p>
Review of groundwater abstraction and planning applications where necessary	NIEA Groundwater Team respond to consultations on groundwater abstractions and planning applications across Northern Ireland.
Support local environmental initiatives by working with and supporting the Friends of Larne Lough in raising awareness of environmental issues.	Provided a presentation on Larne Lough LMA action plan to Friends of Larne Lough Group.
Support pollution prevention campaigns such as 'Reduce Reuse Recycle', 'Bag It & Bin It', 'Stop and Think (Not Down the Sink)'.	<p>NIEA supports the inclusion of pollution prevention messages in information leaflets and other literature e.g. 'Using Pesticides – Stop & think about the water you drink'. NIEA in conjunction with Northern Ireland Water has produced an information leaflet to highlight the dangers of pesticides around waterways and the potential impacts on wildlife and drinking water.</p> <p>Encourage support through publishing 'Householder Awareness – Improving Water Quality in Your Local Area' and 'Landowner Awareness' leaflets.</p> <p>Raise awareness of Northern Ireland Water's 'Dirty Dozen' campaign.</p>
Assess sources of organic pollution including agriculture, WWTW and septic tanks	Water Management Unit water quality planning staff completed a comprehensive desktop study and risk analysis of pressures in the catchment. Data analysis included historical monitoring data (biology/chemistry), occurrence of pollution incidents, land-use, run-off risk, soil type and soil cohesion. Twenty-one additional biological monitoring sites were identified. The results of this additional monitoring were used to inform river walk selections.
Conduct biological investigations to assess aquatic invertebrates	Additional biological monitoring has been completed at 21 sites in the Larne Lough LMA: Inver River – 8 sites Glynn River – 9 sites

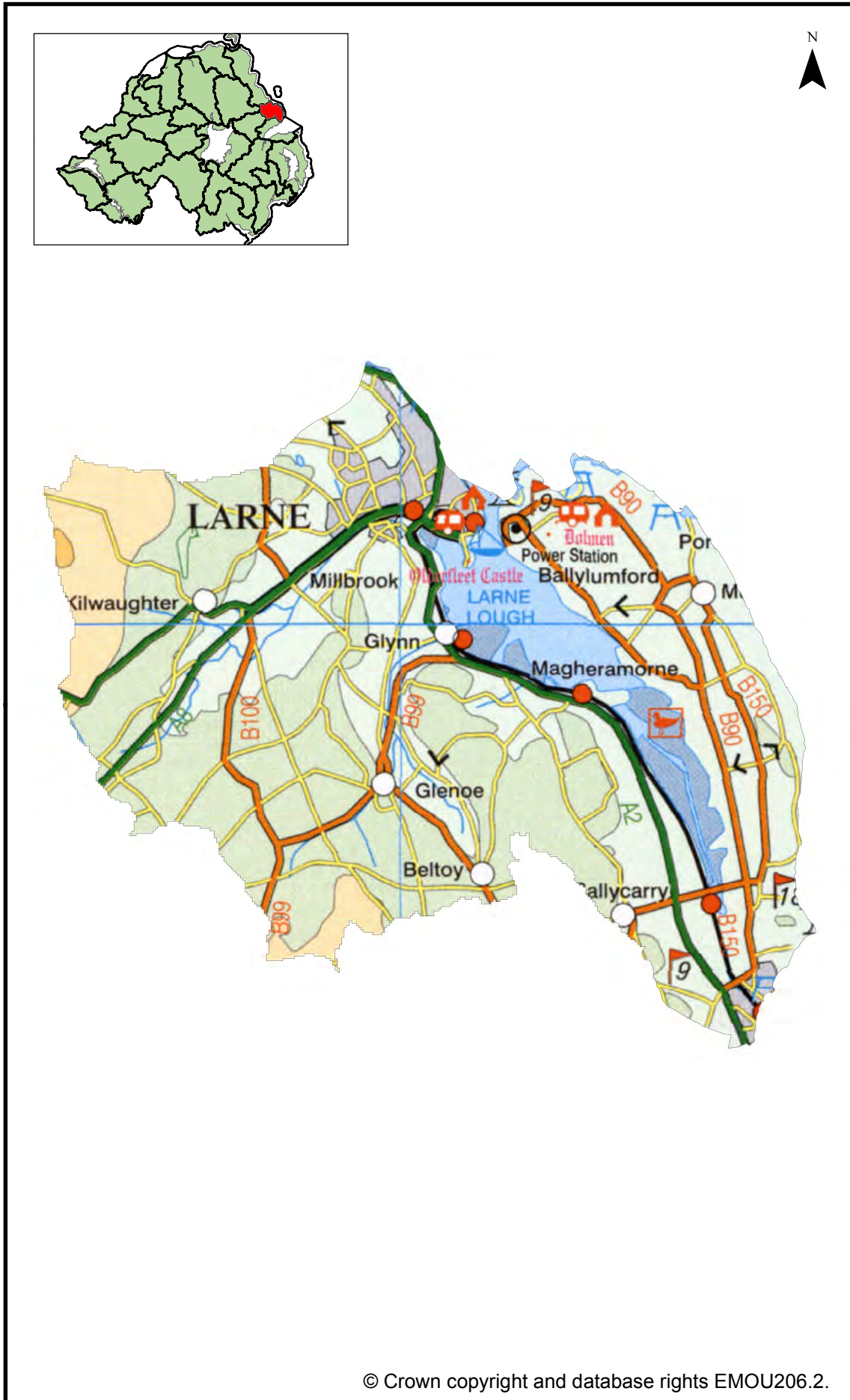
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	Streams flowing to Larne Lough – 4 sites
Carry out a river walk to determine and address sources of organic pollution affecting aquatic invertebrates and resulting in low biotic scores and/or observed sewage fungus	River walks have been carried out in the following water bodies: Inver River Glynn River Brown's Bay Stream

LARNE LOUGH
Local Management Area



Map 1: Larne Lough Local Management Area



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 Larne Lough 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.

Larne Lough Local Management Area

The Larne Lough LMA (Map 1) is part of the North Eastern River Basin District and covers an area of approximately 141 km². The Inver River (Larne) rises around Thorny Hill, while the Glynn/Glenoe rises around Drummond's Hill. These rivers, along with smaller streams in the area, flow into Larne Lough. Larne Lough is a sea lough, enclosed on the east side by Islandmagee. It is quite shallow, with mud flats to the south exposed at low tide while the north end is wider and deeper. The main town is Larne and smaller villages include Ballycarry, Glynn and Glenoe. The main land use is improved grassland, arable farming and rural/suburban development.

The Lough supports designated shellfish waters and important breeding and feeding grounds for a range of birds. The Shellfish Waters Directive currently offers protection to designated shellfish waters by ensuring action plans to meet relevant environmental standards are put in place. However, the Shellfish Waters Directive is being repealed in December 2013 and will be subsumed by the Water Framework Directive (WFD). Existing shellfish waters will become WFD protected areas, for the protection of economically significant aquatic species.

The area also includes the Port of Larne, which handles substantial passenger and freight traffic. Brown's Bay Bathing Water, is influenced by the activities within Larne Lough LMA. Further information on Brown's Bay is included in the [Glens & Rathlin LMA Action Plan](#).

Larne Lough 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 in Map 3.

What is the status of the water environment in the Larne Lough LMA?

In 2009, 60% of surface water bodies (3 water bodies) in the Larne Lough LMA (Map 2) were classified as less than good status. The remainder were classified as being at good (Inver River (Larne) and good ecological potential (Larne Lough North). The Larne Lough North water body includes the Port of Larne and is heavily modified due to its use as a functioning port and harbour. The management and mitigation measures already undertaken within the harbour, in addition to the classification results obtained, result in the overall classification of good ecological potential. Groundwaters (underground water) interact with the surface waters around them, thus the quality and quantity of an area's groundwater can affect the surface waters. The two groundwater bodies in this LMA (Glenariff and Belfast Hills-Islandmagee) are classified as good for quantitative and chemical status.

The main reason for rivers failing to achieve good status was due to impacts on phytobenthos associated with nutrient enrichment and other pressures. The river affected was the Glynn River.

The main reason for coastal waters failing to achieve good status was due to a classification of moderate for benthic invertebrate communities. This is related to limitations of the methodology employed to assess benthic invertebrates. The UK Water Framework Directive marine benthic assessment tool has been recalibrated in recent years to take account of the various seabed substrates. The site previously assessed in Larne Lough Mid was found to lie in a channel which accumulated dead plant material and organic detritus. Subsequently the site was moved to a more appropriate adjacent location and recent analyses of sediment have shown good status for benthic invertebrates. In 2011, a specific pollutant classification of 'fail' was reported for Larne Lough Mid due to ammonia levels. The classification results were based on monitoring carried out with a bias to winter sampling. More recently, the DOE Marine Division has instigated a programme of summer and winter monitoring to achieve a more balanced dataset. Reassessment of data collected since 2011 has indicated ammonia levels would now achieve a classification of 'pass' for specific pollutants.

The water environment in Northern Ireland has been impacted by the introduction of invasive alien species. Leathery sea squirt (*Styela clava*) has been reported in Larne Lough, while Giant Hogweed (*Heracleum mantegazzianum*), Japanese Knotweed (*Fallopia japonica*) and Himalayan Balsam (*Impatiens glandulifera*) have also been observed.

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Map 2: 2009 status of surface water bodies in Larne Lough LMA

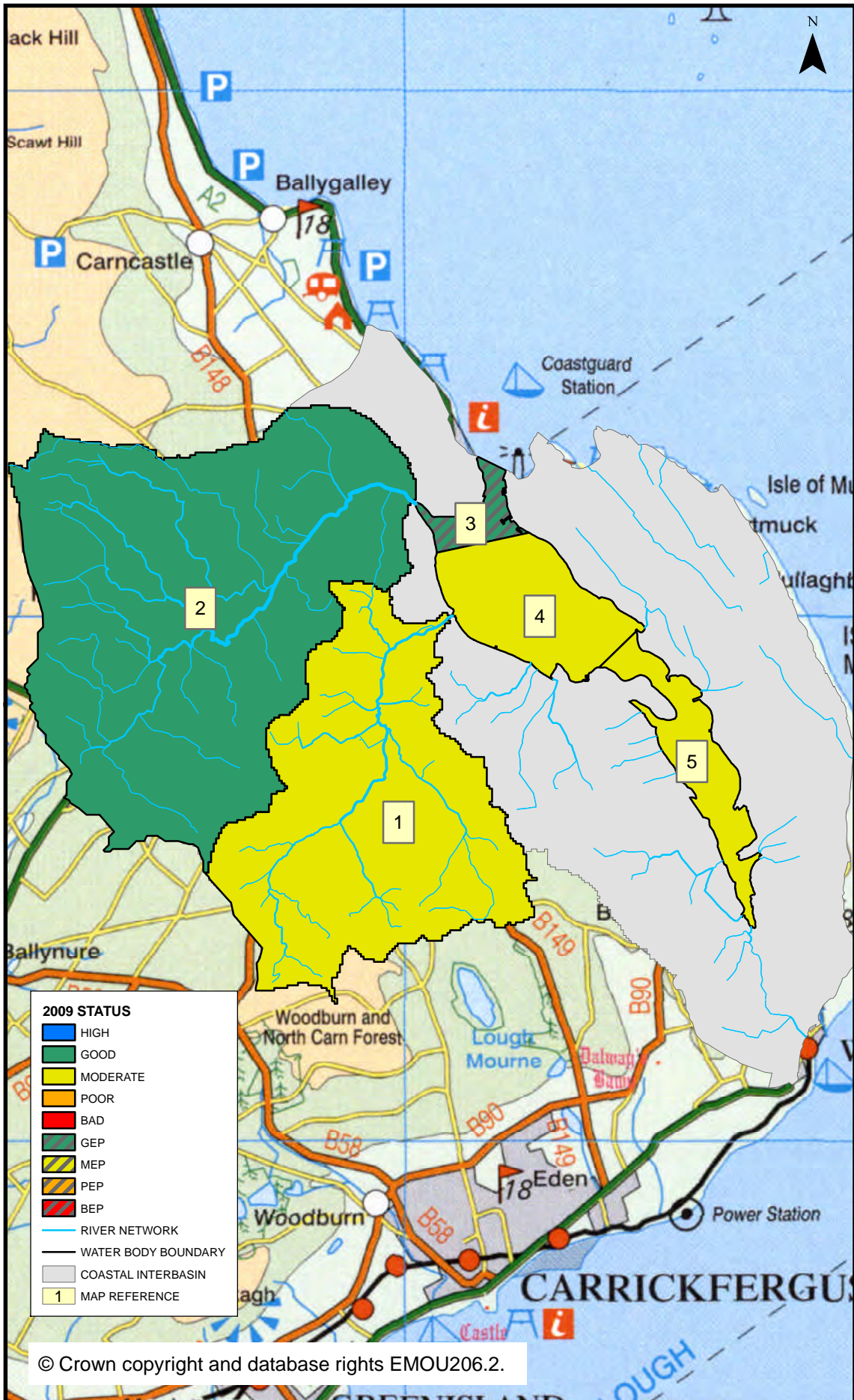


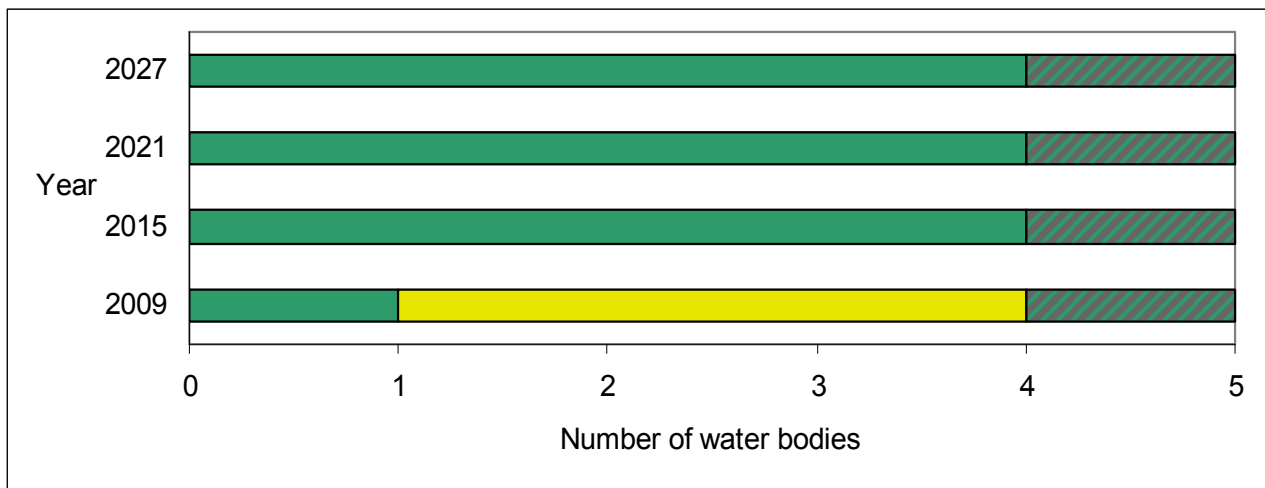
Table 1: 2009 status and proposed objectives

Map Reference	Water Body Code	Water Body Name	2009 Status	2015 Objective	Page Number
1	UKGBNI1NE040405046	Glynn River	Moderate	Good	10
2	UKGBNI1NE040405047	Inver River (Larne)	Good	Good	10
3	UKGBNI6NE050	Larne Lough North	GEP	GEP	11
4	UKGBNI6NE060	Larne Lough Mid	Moderate	Good	11
5	UKGBNI6NE070	Larne Lough South	Moderate	Good	11

What improvements do we plan to achieve?

We have set environmental objectives to deliver improvements as shown in Figure 1. We aim to achieve good status or better in 80% and good ecological potential in 20% of our surface waters by 2015. We aim to maintain good status in 100% of our groundwaters.

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



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

There are a number of actions which will be implemented in the Larne Lough 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	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	Complete the phosphorus nutrient budget work for Northern Ireland to establish nutrient inputs from different sectors.	DOE NIEA	Mar 2013
3	Conduct a water resource assessment to inform an ongoing review of abstraction licences within Northern Ireland.	DOE NIEA	Dec 2013
4	DARD Countryside Management and NIEA to develop leaflets and articles to promote effective farm nutrient and waste management.	DARD Countryside Management Branch	Dec 2015
5	Develop leaflets and articles to promote effective farm nutrient and waste management.	DOE NIEA	Dec 2015
6	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
7	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
8	Highlight external funding opportunities for water management projects to local partners.	DOE NIEA	Dec 2015
9	Observation of nitrate trends in groundwater and liaison with research partners for further investigation.	DOE NIEA	Dec 2015
10	Offer a farm nutrient and waste management advisory visit to farmers following a pollution incident (on referral by NIEA).	DARD Countryside Management Branch	Dec 2015
11	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 Larne Lough Action Plan.	DOE NIEA, Bush & Glens Catchment Stakeholder Group	Dec 2015
12	Promote public participation by raising awareness of catchment management issues by release of relevant press articles and web publication of the Bush & Glens CSG e-zine.	DOE NIEA	Dec 2015
13	Promote public participation by raising awareness of The Rivers Trust.	DOE NIEA	Mar 2013
14	Promote the control of invasive alien species on farmland.	DOE NIEA	Dec 2015
15	Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage.	DOE NIEA	Dec 2015
16	Provide advice on protected area designations including drinking water protected areas, rivers identified as salmonid, shellfish waters and nutrient sensitive areas.	DOE NIEA	Dec 2015

	Action to be taken	Action to be taken by	Target Date
17	Raise awareness and promote the benefits of effective pollution control and farm nutrient and waste management.	DARD Countryside Management Branch	Dec 2015
18	Review of groundwater abstraction and planning applications where necessary.	DOE NIEA	Dec 2015
19	Support local environmental initiatives by working with and supporting the Friends of Larne Lough in raising awareness of environmental issues.	DOE NIEA	Dec 2015
20	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.

UKGBNI1NE040405046		Glynn River	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, WWTW (Glencoe, Mounthill), and septic tanks (Northern Ireland Water, private and domestic).		DOE NIEA	Mar 2014
2	Carry out a river walk on the main channel upstream of Glynn and on the Carneal Water, Raloo Water and Dunisland Water to determine source of impacts on phytobenthos.		DOE NIEA	Mar 2014
3	Conduct biological investigations to assess aquatic invertebrates at Glynn, Glenford Bridge and Rectory Road on the main Glynn River channel and at the tributaries at Glenford and Rectory Road, Glencoe Water, Dunisland Water, Raloo Water and Carneal Water.		DOE NIEA	Completed

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

UKGBNI1NE040405047		Larne River	2009 Status: Good	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, WWTW (Belfast Road), 15 intermittent discharges and septic tanks (private and domestic).		DOE NIEA	Mar 2014
2	Carry out a river walk on the main channel upstream of Inver and on the Glen Burn Stream to determine and address sources of organic pollution.		DOE NIEA	Mar 2014
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 2014
4	Conduct biological investigations to assess aquatic invertebrates between the Rock and the Ballyrickard Bridge on the main channel, the Millbrook Stream, the Ballyedward Stream, the Lowtown Stream, the Hightown Stream, and the Craiginorne Stream (8 sites).		DOE NIEA	Completed

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

UKGBNI6NE050		Larne Lough North	2009 Status: GEP	
	Action to be taken		Action to be taken by	Target Date
1	Maintain current regulatory controls as water body status is at Good Ecological Potential.		DOE NIEA	Dec 2015
2	Provide advice on protected area designations to maintain the condition assessment of Larne 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.](#)

UKGBNI6NE060		Larne Lough Mid	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, WWTW (Ferris Bay, Ballylumford Cottages), 7 intermittent discharges and septic tanks (private and domestic).		DOE NIEA	Mar 2014
2	Carry out a river walk on the Brown's Bay stream to determine and address sources of organic pollution.		DOE NIEA	Mar 2014
3	Conduct biological investigations to assess aquatic invertebrates at the Ballylesson Stream (at A2 road bridge), Ballypollard Stream (at Ballypollard Road Bridge) and Brown's Bay stream (at Portmuck Bridge).		DOE NIEA	Completed
4	Provide advice on protected area designations to maintain the condition assessment of Larne 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.](#)

UKGBNI6NE070		Larne Lough South	2009 Status: Moderate	
	Action to be taken		Action to be taken by	Target Date
1	Assess sources of organic pollution including agriculture, 2 intermittent discharges and septic tanks (private and domestic).		DOE NIEA	Mar 2014
2	Conduct biological investigations to assess aquatic invertebrates on the Redhill Stream (near the Larne Road).		DOE NIEA	Completed
3	Provide advice on protected area designations to maintain the condition assessment of Larne 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.](#)

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

The Programme of Measures described in the North Eastern River Basin Management Plan has 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 current Bathing Water Directive (76/106/EEC) and revised Bathing Water Directive (2006/7/EEC);
- The Shellfish Waters Directive (2006/113/EC);
- 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 (96/61/EC).

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 Northern Ireland Water Ltd 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 was 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?

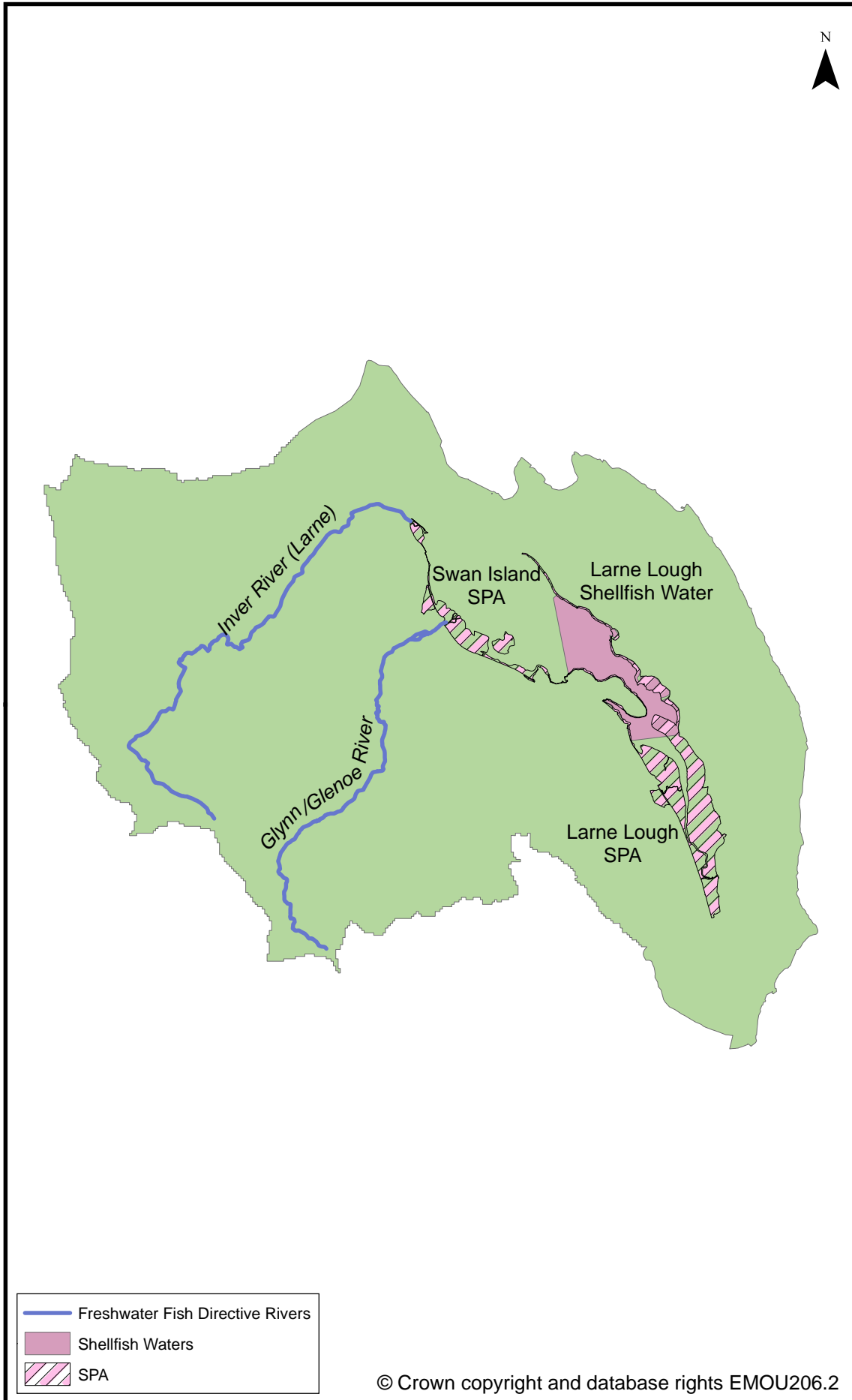
Special Areas of Conservation (Habitats Directive) and Special Protection Areas (Birds Directive) are assessed as being in favourable or unfavourable condition. These areas have been examined to determine if water dependent features are present.

Larne Lough Special Protection Area is in favourable condition.

Further details on Special Protection Areas in the Larne Lough LMA are available in the protected areas section of the website.

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Map 3: Protected Areas in Larne Lough LMA



Protected Areas in the Larne Lough 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 Larne Lough LMA

Protected Area Type	Location
<p>Waters used for the abstraction of drinking water (drinking water protected areas)</p>	<p>There is 1 surface water protected area for drinking water. There are 2 groundwater protected areas for drinking water.</p>
<p>Areas designed to protect economically significant aquatic Species</p> <p>Freshwater Fish Directive (78/659/EEC)</p> <p>Shellfish Waters Directive (79/923/EC)</p>	<p>There are 23 km of rivers identified under the Freshwater Fish Directive, all designated Salmonid.</p> <p>There is 1 designated shellfish water.</p>
<p>Bathing Waters</p> <p>These are bathing waters identified under the Bathing Waters Directives (76/160/EEC)</p>	<p>There are no identified bathing waters.</p>
<p>Nutrient Sensitive Areas</p> <p>Areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC)</p> <p>Nitrates Directive (91/676/EEC)</p>	<p>There are no Urban Waste Water Treatment Directive sensitive areas.</p> <p>A total territory approach has been adopted in Northern Ireland for the Nitrates Directive.</p>
<p>Areas designated for the protection of habitats or species (Natura 2000 sites)</p> <p>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.</p> <p>Habitats Directive (92/43/EEC)</p> <p>Birds Directive (79/409/EEC)</p>	<p>There are no water dependent Special Areas of Conservation.</p> <p>There is 1 Special Protection Area; Larne Lough (incorporating Swan Island).</p>

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 or better (GEP), moderate ecological potential (MEP), poor ecological potential (PEP) and bad ecological potential (BEP).
NIEA	Northern Ireland Environment Agency
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 Bush & Glens Catchment Stakeholder Group meetings or by contacting the Catchment Management Officer, Devina Park.

Email: Devina.Park@doeni.gov.uk

Telephone: 028 92 623229

Further details are available at <http://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.

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