Significant Water Management Issues

Lagan Local Management Area Action Plan and Update

December 2013

An Agency within the Department of the Environment
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INVESTORS IN PEOPLE

NIEA Northern Ireland Environment Agency
www.doeni.gov.uk/niea

LMA Action	Progress Update
Highlight external funding opportunities for water management projects to local partners.	• 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 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 • 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.
Organise two Catchment Stakeholder Group (CSG) 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.	CSG Meetings held - 25th November 2010 - 25th May 2011 - 17th November 2011 - 17th May 2012 - 8th November 2012 - 22nd May 2013 - 12th November 2013 Presentations and notes of meetings can be found at http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups/belfast_lough_and_lagan.htm
Promote and encourage local projects through WATER Environment Community awards.	Water Environment Community Awards promoted through CSG meeting, NIEA website and mailing list. Environment Minister Alex Attwood presented nine community groups £1,000 each for their environmental improvement projects on 26th May 2011. The winner in the Belfast Lough &Lagan area was the Cairde Páirc na bhFál (Friends of Falls Park) for their 'Uiscí Reatha' (Running Waters) project. The 2012 winner in the Belfast Lough & Lagan area was Saints Youth Centre for their project to improve water environment awareness among the local community through river clean-ups, picture project, and production of an outdoor art piece.
Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage.	• Official launch of new signage initiative by NIEA Chief Executive, Enler Anglers and Castlereagh Borough Council Countryside Access Officer – Monday 18th April. • 9 signs erected in LMA - locations suggested by Water Quality Inspectors, District Councils, Local Anglers. • '*NIEA & Water Pollution - Improving water quality*' postcards produced to raise awareness on what NIEA Regional Operation team do and who to contact should a pollution incident be found. These have been distributed at a number of events and shows. • Hotline number is promoted frequently on NIEA facebook page and Twitter website. • Discussions with Lagan Valley Regional Park re: addition of NIEA Pollution Hotline number to their park information boards.

LMA Action	Progress Update
	• Discussions with Connswater Community Greenway re: addition of NIEA Pollution Hotline number to the signage planned for the new Greenway. Stakeholders are requested to forward their suggestions for sign locations to Jo Campbell.
Raise awareness of catchment management issues by release of relevant press articles and web publication of Lagan LMA e-zine. Support local community events.	• Three editions of the Lagan e-zine and two editions of the Belfast Lough & Lagan e-zine have been published on the NIEA website and circulated to the Belfast Lough & Lagan 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 attended Balmoral Show and demonstrated the use of the River Basin Planning Webmapper may 2001 & May 2012. • NIEA provided and supported a stand at the Loughs Agency Angling Fair, Newtownstewart, Saturday 21st & Sunday 22nd May 2011 • NIEA provided and supported a stand at the Antrim & Newtownabbey Councils' sponsored South Antrim Fishing Festival at Mossley Mill, Saturday21st & 28th May 2011. • Attended River Bush Salmon Station Open Day on 6th July 2011. • NIEA provided and supported a stand at the Newtownabbey Shoreline Festival at Loughshore Park, Newtownabbey, Sunday 28th August. • WMU & Marine Conservation Society Beach Watch Beach clean at Hazelbank Beach, Newtownabbey, Saturday 17th September 2012 • NIEA provided and supported a stand Spring Fair, Malone House, Belfast, Saturday 21st & Sunday 22nd April 2012. The theme was nature recording. • NIEA WMU staff provided kick sampling demonstrations to the public and assisted with freshwater invertebrate species identification at the Bioblitz event held at Crawfordsburn Country Park, 18th-19th June 2012. • NIEA had a strong presence at the Clipper Event in Derry 5th-8th July 2012 where we focused mainly on key marine issues. • NIEA provided a stand at the Greenmount Centenary event, 16th & 17th June 2012 – focusing on river basin planning and water quality issues.. • NIEA provided the Horticulture 2012 event at Greenmount on 19th September 2012, where our main focus was pesticide awareness and water quality issues.
Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms	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.
DARD Countryside Management(CMB) 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. '*Water quality plans in action'* article published in Farming Life in October 2010 Posters produced and distributed by DARD.

LMA Action	Progress Update
Collate existing information on location of aquatic (including river bank) invasive alien species	During river walks and RHAT surveys undertaken by NIEA, any sightings of invasive alien species are collated and reported to Invasive Species Ireland http://invasivespeciesireland.com.
Promote the control of invasive alien species on farmland	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.
Raise awareness and promote the benefits of effective farm nutrient and waste management	• '*Landowner Awareness - Improving water quality in your local area'* leaflet developed jointly with Loughs Agency, UFU, DARD to raise awareness amongst landowners. The issues included in this were initially raised through implementation meetings e.g. gravel removal, river litter & plastic litter. • Presentation to CAFRE students on Water Framework Directive and water quality issues related to agriculture - April 2011. • '*NIEA & Water Pollution - Improving water quality*' postcards produced to raise awareness on the role of the NIEA Regional Operation team and who to contact if water pollution is observed. • 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 Practise' 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. • LMA Cross Compliance Inspections and referrals carried out by NIEA Agricultural Regulations Team. • Water Quality Plans in Action' article published in Farming Life October 2012.
Investigate the sedimentation problems in the Lagan LMA, determine potential sources and take action to promote better sediment management	To date river walks have been carried out in the following water bodies: River Lagan(3096), River Lagan (3048), River Lagan Tributary (3098), River Lagan (3046), River Lagan (3101), River Lagan (3105) and Connswater (3087). Bank erosion, animal poaching and alien species have been identified as three of the main issues affecting sediment management in the LMA. These issues are being addressed using follow up visits from Agricultural Regulations and Regional Operations teams. Alien species are collated and reported to Invasive Species Ireland (http://invasivespeciesireland.com). Further river walks are planned to obtain more information as required. Consider site restoration and protection methods to reduce sedimentation and improve habitat. Review River's Agency maintenance program.

LMA Action	Progress Update
Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the LMA Action Plan.	• NIEA staff attended Balmoral Show and demonstrated the use of the River Basin Planning Webmapper 2011, 2012 & 2013. • NIEA provided and supported a stand at the Loughs Agency Angling Fair, Newtownstewart, Saturday 21st & Sunday 22nd May 2011 • *'Householder Awareness - Improving water quality in your local area'* leaflet has been developed jointly with Loughs Agency and NIW. Leaflet aims to raise awareness amongst householders on household issues e.g. septic tank maintenance & pesticide use. Leaflets distributed at events attended within the LMA and to local groups. • NIEA provided and supported a stand Spring Fair, Malone House, Belfast, Saturday 21st & Sunday 22nd April 2012. The theme was nature recording • NIEA WMU staff provided kick sampling demonstrations to the public and assisted with freshwater invertebrate species identification at the Bioblitz event held at Crawfordsburn Country Park, 18th-19th June 2012. • NIEA staff had a strong presence at the Clipper Event, 5th – 8th July 2012 – where we focused mainly on key marine issues. • 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. • NIEA provided the Horticulture 2012 event at Greenmount on 19th September 2012, where our main focus was pesticide awareness and water quality issues.
Create inventory of physical structures in the river channel and bank structures within the Lagan LMA	Staff from NIEA Freshwater Group ran a pilot project in 2011. This focused mainly on the Ballinderry for which BREA undertook preliminary studies of the weirs in a NIEA funded project. The other main areas of work were on the Lagan (for which the Iveagh Angling Club have supplied information) and with the NIEA Abstraction & Impoundment Licensing team. The pilot has now been reviewed with the relevant fish specialists, and the procedure is being further tested in 2012, including liaison with Inland Fisheries Ireland.
Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	To date river walks have been carried out in the following water bodies: River Lagan(3096), River Lagan (3048), River Lagan Tributary (3098), River Lagan (3046), River Lagan (3101), River Lagan (3105) and Connswater (3087). The main issues identified include bank erosion, poaching by livestock, agricultural discharges, polluting discharges from septic tanks, cross connections and alien species. These issues are being addressed using follow up visits from NIEA Agricultural Regulations and Regional Operations teams. Alien species are collated and reported to Invasive Species Ireland (http://invasivespeciesireland.com). Further river walks are planned to obtain more information as required. LMA Cross Compliance inspections are carried out by WMU Agricultural Regulations Team. 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.
Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW,	WMU water quality planners completed a comprehensive desktop study and risk analysis. Data analysis included historical monitoring data (biology/chemistry), occurrence of pollution incidents, land use, run-off

LMA Action	Progress Update
sewage pumping stations and septic tanks (domestic and private).	risk, soil type and soil cohesion. Areas for additional LMA monitoring were identified. 61 additional monitoring sites were sampled and analysed. The results of this additional monitoring helped to identify river walks. To date river walks have been carried out in the following water bodies: River Lagan(3096), River Lagan (3048), River Lagan Tributary (3098), River Lagan (3046), River Lagan (3101), River Lagan (3105) and Connswater (3087). The main issues identified include bank erosion, poaching by livestock, agricultural discharges, polluting discharges from septic tanks and cross connections and alien species. These issues are being addressed using follow up visits from Agricultural Regulations and Regional Operations teams. Alien species are collated and reported to Invasive Species Ireland (http://invasivespeciesireland.com). Further river walks are planned to obtain more information as required. LMA Cross Compliance inspections continue to be carried out by WMU Agricultural Regulations Team. Upper Falls WWTW(abandoned),Drumboneth(abandoned), Magheralin(abandoned), 2-6 Cross Lane(abandoned), 9-11 Cross Road(upgraded),Drumnaferry(upgraded)
Visual inspection of WWTWs <250PE to inform future upgrades	6 inspections have been carried out at: Drumlough, Legacurry, Craiganasasonagh, Waringsford, McCandless Terrace, Mossvale Terraces and Bresagh WWTWs. Craiganasasonagh – Tipping Tray clogged. NIW staff present during inspection cleaned trays and informed NIEA staff that sludge tanker would be out to clean filter beds. To date in 2012, inspections have been carried out at; Drumlough, Legacurry, Craiganasasonagh, Waringsford, McCandless Terrace, Mossvale Terraces and Bresagh WWTWs.
Compliance assessment of WWTWs >250PE to inform future upgrades	Ravernet, Kinallen and Dromara WWTWs were compliant with their Water Order consents in 2010. Ravernet, Kinallen and Dromara WWTWs were compliant with their Water Order consents in 2011.
Targeted education, advice and regulatory action to prevent pollution and protect the water environment.	• Ongoing input to the Connswater Community Greenway Project. • 2 Farms visited by Regional Operations to highlight importance of storage of silage bales close to a waterway. • Farms visited regarding run-off from yard entering waterway. • Car dealership visited in South Belfast re: oil storage regulations. • All planning applications consulted on are made aware of the relevant pollution prevention guidelines. • *'Householder Awareness - Improving water quality in your local area'* leaflet has been developed jointly with Loughs Agency and NIW. Leaflet aims to raise awareness amongst householders on household issues e.g. septic tank maintenance & pesticide use. Leaflets distributed at events attended within the LMA and to local groups. • '*Landowner Awareness - Improving water quality in your local area'* leaflet developed jointly with Loughs Agency, UFU, DARD to raise awareness amongst landowners. The issues included in this were initially raised through implementation meetings e.g. gravel removal, river litter & plastic litter

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	• '*NIEA & Water Pollution - Improving water quality*' postcards produced to raise awareness on what NIEA Regional Operation team do and who to contact should a pollution incident be found. These have been distributed at a number of events and shows. • Hotline number is promoted frequently on NIEA facebook page and Twitter website. • 'Using Pesticides – Stop & think about the water you drink' – an information leaflet produced by NIEA, in conjunction with Northern Ireland Water to highlight the dangers of pesticides around waterways and the potential impacts on wildlife and drinking water. • Presentation to CAFRE students on Water Framework Directive and water quality issues related to agriculture- April 2011. •
Investigate impact of forestry operations in waterbodies. Ascertain felling programme in the catchment and engage with forestry technical field staff/ private landowners to ensure measures are in place to mitigate risks from felling.	Met with Forestry personnel to highlight importance of water quality. Forestry Service follows industry guidelines re: water quality.
Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	Compliance assessments have continued to be carried out.
Target Pollution Prevention advice to Industrial premises and investigate any unconsented industrial discharge. Where required ensure Water Order consent is obtained.	Planning applications consulted on are made aware of the relevant pollution prevention guidelines. Advice on pollution prevention provided to Industrial premises when required.
Promote pollution prevention campaigns such as the 'Bag It & Bin It' campaign	Promote awareness at fairs and shows. Encourage support through publishing *'Householder Awareness - Improving water quality in your local area' leaflet.* Raise awareness of NIW 'Dirty Dozen'. 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, have produced an information leaflet to highlight the dangers of pesticides around waterways and the potential impacts on wildlife and drinking water.
Investigate Dissolved Oxygen supressions	WMU water quality planners completed a comprehensive desktop study of data. This data analysis helped target further investigation and riverwalks.
Investigate ammonia levels	WMU water quality planners completed a comprehensive desktop study of data. This data analysis helped target further investigation and riverwalks.
Raise awareness of the impact of misconnections where they are identified to be causing deterioration in water quality.	Publication and distribution of *'Householder Awareness - Improving water quality in your local area'* leaflet. Leaflets made available to local councils, community groups and distributed events & fairs attended.
Carry out River Hydro morphology Assessment Technique (RHAT) survey to ground truth heavily modified designation.	Assessments carried out in the following waterbodies; Blackstaff (3003) – 2 sites in October 2010 Blackstaff (3002) – Desktop survey only

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	River Lagan Tributary (3104) – 3 sites in 2010 River Lagan (3108) – 6 sites in 2010 Clowney Water (3119) – 3 sites in November 2010 The entire Lagan catchment was RHAT surveyed in 2012 to try and tie in with the Fish Passability surveys carried out in 2012.
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.
Managed removal of alien plants and trees along river corridor to reduce shading and promote a more natural macrophyte assemblage	This is ongoing - Belfast City Council continues to manage alien species along the Connswater Community Greenway route.
Carry out full RHAT assessments on water body, pre and post-restoration to assess success of Connswater Community Greenway(CCG) project in terms of hydromorphology	Connswater (3087) – 4 sites in October 2010 Assessment carried out on upper reaches in April 2011. Nothing further carried out due to delay in project.
Deploy passive samplers as part of investigative monitoring programme	Spot checks carried out at three sites and passive samplers deployed on Lagan River at Banogue and Newforge Lane. Raise awareness of the issue of pesticide use and disposal. www.dardni.gov.uk/ruralni/cogap
Continue monitoring to confirm evidence of trophic status.	The new Marine Strategy Framework Directive (MSFD) aims to achieve Good Environmental Status in Europe's seas by 2020 and NIEA's & AFBI's joint 'State of the Seas' report is largely structured around the new requirements of this directive. Chapter 6 of the 'State of the Seas' contains the latest information on the trophic status of coastal waters around Northern Ireland. Trophic status is assessed by measuring the elements linked to enrichment by nutrients accompanied by an undesirable disturbance to plant or animal life. The report can be accessed at: http://www.doeni.gov.uk/niea/water-home/state_of_the_seas_ni_report.htm
Observation of nitrate trends and liaison with research partners for further investigation into recovery time.	Nitrates are part of the surveillance and operational monitoring carried out by NIEA. As 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.
Further investigation of water balance to the groundwater body, taking into account abstraction volumes and review of recharge information.	Review of recharge: There was an MSc project in 2010 at Queens and some of the work has just been finished off by the GSNI hydrogeologists working on behalf of NIEA. For accurate abstraction volumes we depend on the NIEA Abstraction and Impoundment Licensing Team, but it is difficult to obtain up-to-date number – hence any investigation into water balance is restricted.
Review of groundwater abstraction and planning applications where necessary.	The NIEA Groundwater Team is a regular consultee on groundwater abstractions and planning applications for all of Northern Ireland. However, our statistics are not broken down by groundwater bodies.

Abbreviations (Term_Explanation)
AFBI - Agri-Food and Biosciences Institute
ASSI - Areas of Special Scientific Interest
CCG - Connswater Community Greenway
CAFRE – College of Agriculture, Food & Rural Enterprise
DARD - Department of Agriculture and Rural Development
DOE - Department of the Environment

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 4 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
MSFD - Marine Strategy Framework Directive
NICMS - Northern Ireland Countryside Management Scheme
NIEA - Northern Ireland Environment Agency
PE – Population Equivalent
RHAT – River Hydro morphology Assessment Technique
SAC - Special Areas of Conservation
SPA - Special Protection Areas
WWTW - Waste Water Treatment Works

- Further details of the actions above can be obtained by contacting Jo Campbell, Catchment Management Officer, Belfast Lough & Lagan by emailing Jo.Campbell@doeni.gov.uk or by telephoning 028 9262 3006

- If you, as an individual or organisation, are running a project or carrying out work that will assist in protecting or restoring the water environment please let us know using the above contact details.

- If you become aware of a water pollution incident you can call the Water Pollution Hotline (0800 80 70 60) in confidence, and provide the location and a description of the nature of the pollution incident.

The Lagan Local Management Area (LMA) Action plan published to NIEA website
http://www.doeni.gov.uk/niea/lagan_lma_actionplan.pdf

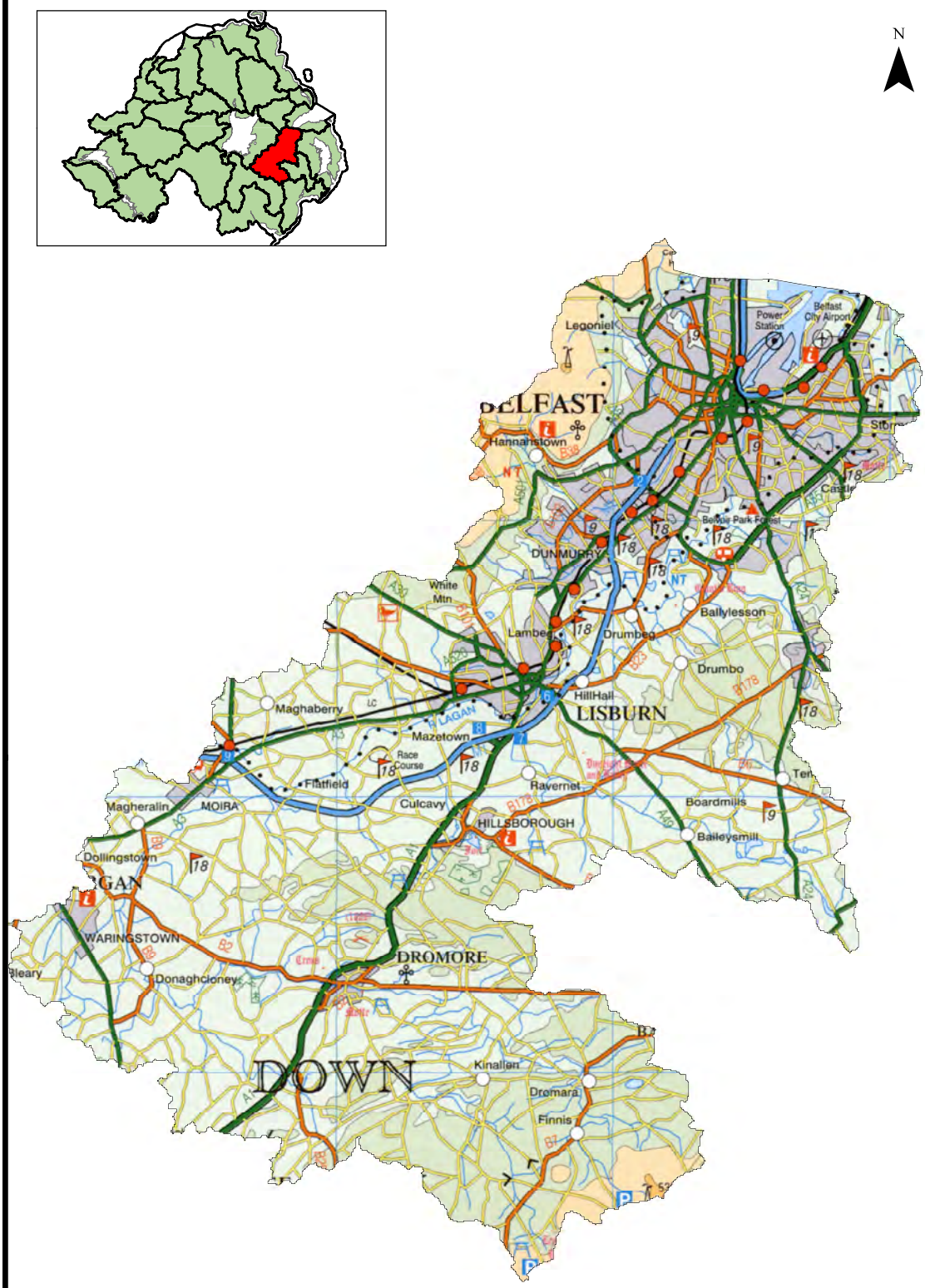
Northern Ireland
Environment Agency

Action Plan 2010/2011

LAGAN
Local Management Area

Northern Ireland Environment Agency
www.ni-environment.gov.uk

Map 1: Lagan 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 2010 to 2015 planning cycle. This Lagan LMA Action Plan is one of a series of action plans that are being 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.

River Basin Planning

NIEA, in partnership with other Departments and Agencies, have developed a Programme of Measures to improve the water environment and to protect it from deterioration. There are also a number of existing plans and programmes that contribute to the management of our waters. Further details on the Programme of Measures, and the policy, legal and financial tools used to implement it, can be found on the North Eastern River Basin District Programme of Measures section on the NIEA website at http://www.doeni.gov.uk/niea/water-home/wfd/north_eastern_rbp/ne-pom.htm.

Lagan Local Management Area

The Lagan LMA (Map 1) is in the North Eastern River Basin District and covers an area of approximately 606km^2. The River Lagan rises around Slieve Croob and flows approximately 70km to Stranmillis Weir at Belfast from which point it is transitional (estuarine). There are also sections of the river that feed the Lagan Canal which is currently being assessed for restoration. The Lagan Weir, further downstream from Stranmillis, is the lower limit of the River Lagan. It was completed in 1993 to improve aesthetics and assist the environmental management of the estuarine section. From here the Lagan flows into the fully tidal Belfast Lough. This area also contains Belfast Harbour Estate (approximately 2000 acres), the busiest passenger port in Northern Ireland and handles 60% of Northern Ireland's sea borne trade. George Best Belfast City Airport is also situated on the Estate.

The main populated areas include the cities of Belfast and Lisburn. Other significant towns are Moira, Dromore, Lurgan, Hillsborough and Carryduff, with a number of smaller villages scattered throughout.

The main land use in Lagan LMA is improved grassland, with arable farming and suburban/rural development. The River Lagan also supports a number of outdoor activities such as canoeing, angling, bird watching and walking.

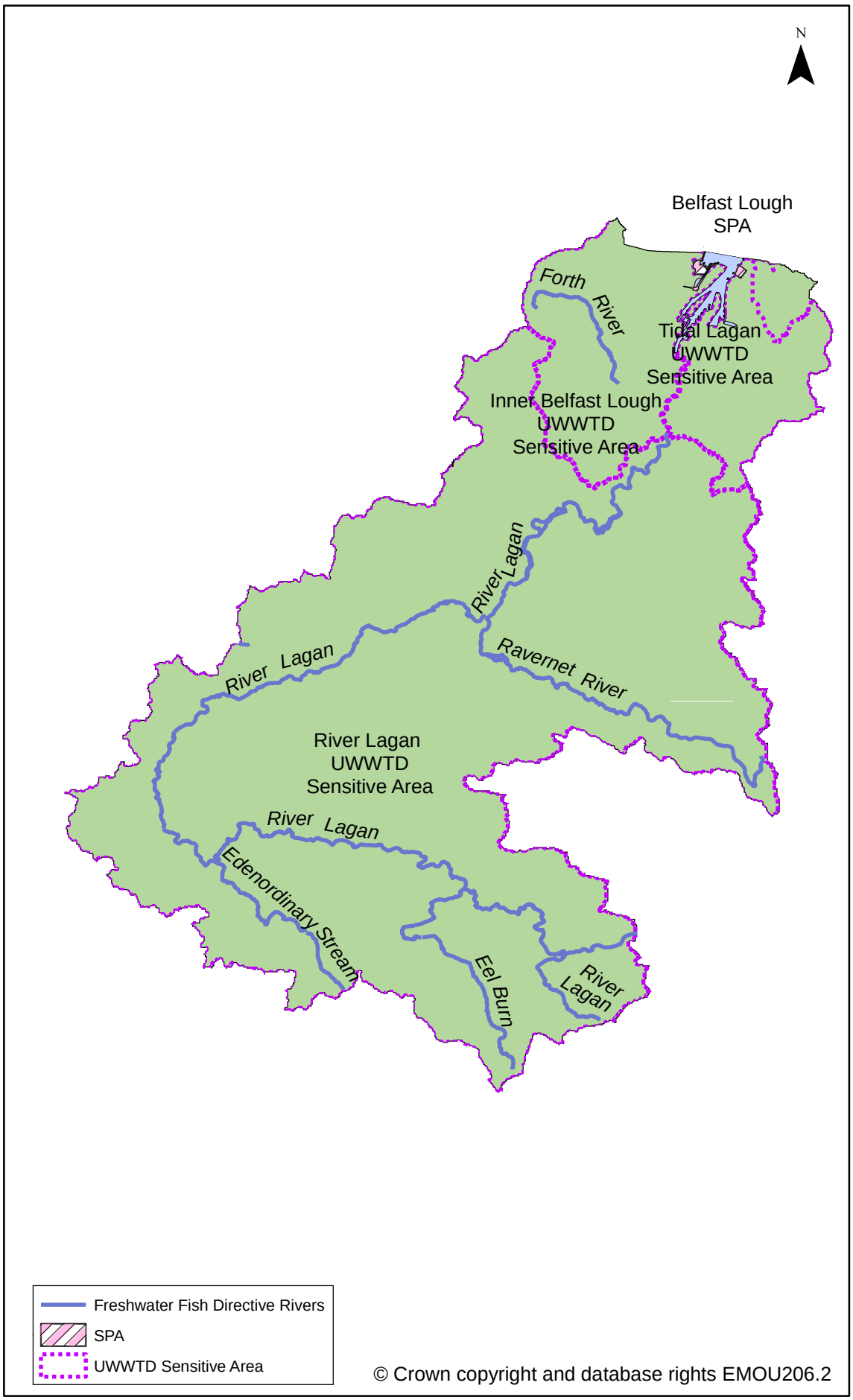
Protected areas in Lagan LMA

The Lagan 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 1 and shown in Map 2.

Table 1: Protected Areas in Lagan LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There is 1 drinking water protected river There are 4 drinking water protected groundwaters
Areas designed to protect economically significant aquatic species Freshwater Fish Directive (78/659/EEC) Shellfish Waters Directive (79/923/EEC)	 There are 134 km of rivers (37.5km designated as cyprinid, 96.5km designated as salmonid) and 5.7km of canal (all designated as cyprinid) identified under the Freshwater Fish Directive There are no designated shellfish waters
Bathing Waters These are bathing waters identified under the Bathing Water Directive (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 are 3 Urban Waste Water Treatment Directive sensitive areas; River Lagan, Tidal Lagan and Inner Belfast Lough 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 no water dependent Special Areas of Conservation (SAC) There is 1 water dependent Special Protection Area (SPA); Belfast Lough

Map 2: Protected Areas in Lagan LMA

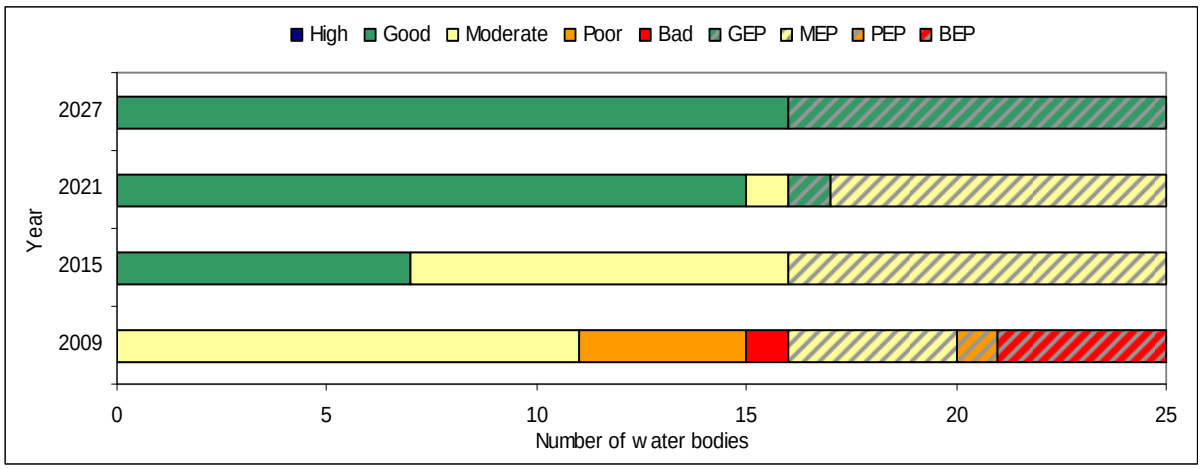


What improvements do we plan to achieve?

Surface Waters

The current status (as published in December 2009) and environmental objectives for surface waters (rivers, transitional and coastal waters) are shown in Figure 1. We aim to achieve good status or better in 28% of our surface waters by 2015 and good ecological potential (GEP) (for heavily modified water bodies) in 4% of our surface waters by 2021. Heavily modified water bodies are defined as water bodies that have been changed to such a degree that they can no longer be restored to their original condition without compromising their current use. For example, some waters have been deepened to allow for navigation; others have flood defences or have been dammed to provide a source of drinking water.

Figure 1: Current status and proposed objectives for surface waters in Lagan LMA



Groundwaters

There are four groundwater bodies within the Lagan LMA; Belfast Hills-Islandmagee, Belfast, Downpatrick and Ards Peninsula. Three groundwater bodies have been classified as good for both quantitative and chemical status. The Belfast groundwater body has been classified as poor for quantitative and chemical status. We aim to achieve good quantitative status in 100% of groundwater bodies by 2021, and good chemical status in 100% of groundwater bodies by 2027.

Action Plan[1]

The current status and environmental objectives for each water body within the Lagan LMA are summarised in Table 2. The Map Reference column can be used to identify the water bodies shown in Map 3. The water body map reference numbers are also shown in brackets after the water body names used later in the document. The planned actions for water bodies within the Lagan LMA are set out in the next section of this document.

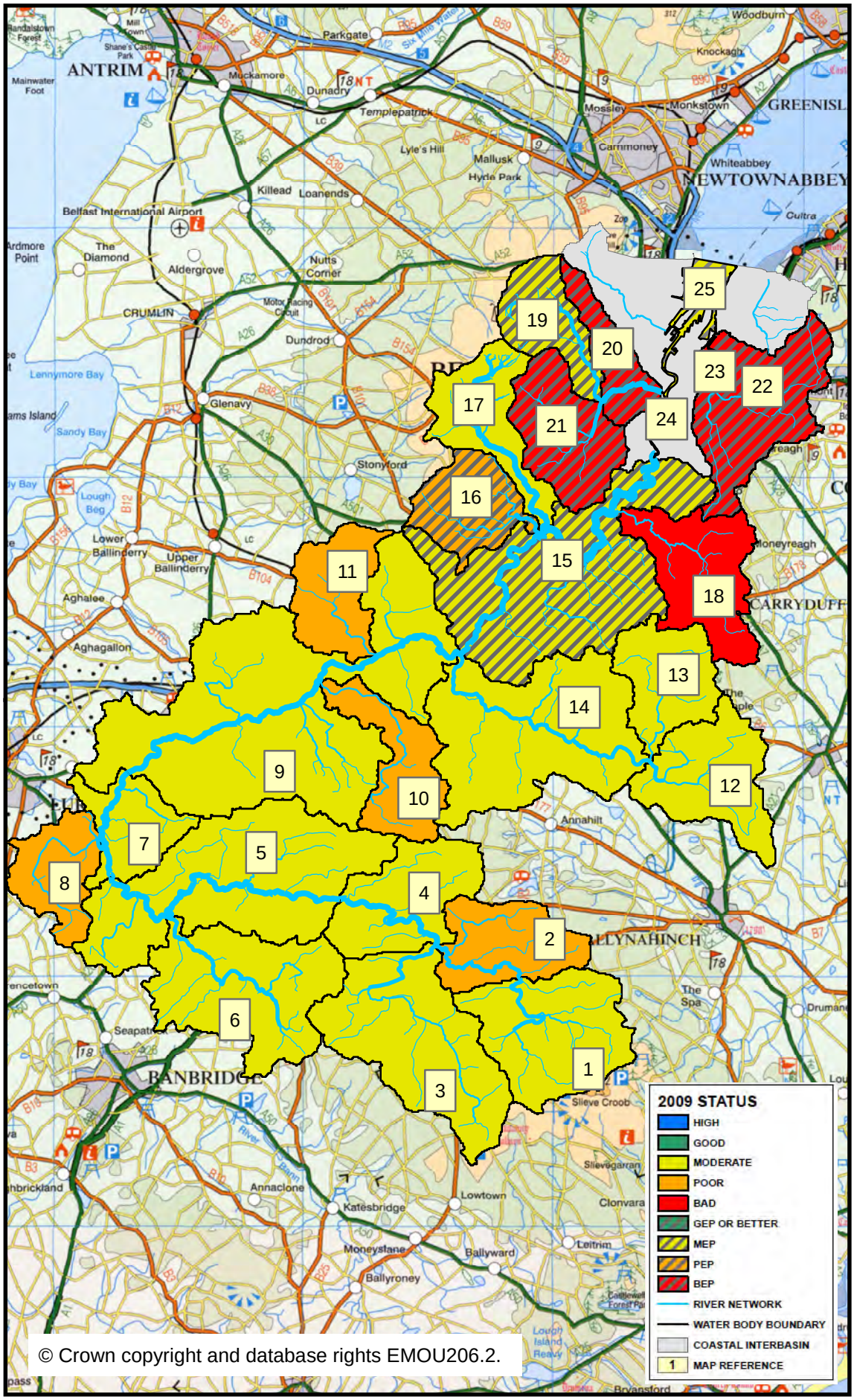
[1] A table of abbreviations is available at the end of this document

Table 2: Summary of current status and environmental objectives

Map Reference	Water Body Code	Water Body Name	2009 Status	2015 Objective	Page Number
1	UKGBNI1NE050503096	River Lagan	Moderate	Good	31
2	UKGBNI1NE050503048	River Lagan	Poor	Moderate	21
3	UKGBNI1NE050503098	River Lagan Tributary	Moderate	Good	33
4	UKGBNI1NE050503046	River Lagan	Moderate	Good	17
5	UKGBNI1NE050503101	River Lagan	Moderate	Moderate	35
6	UKGBNI1NE050503105	River Lagan Tributary	Moderate	Moderate	43
7	UKGBNI1NE050503102	River Lagan	Moderate	Moderate	37
8	UKGBNI1NE050503107	Waringstown Stream	Poor	Moderate	47
9	UKGBNI1NE050503103	River Lagan	Moderate	Moderate	39
10	UKGBNI1NE050503001	Hillsborough Burn	Poor	Moderate	11
11	UKGBNI1NE050503106	River Lagan Tributary	Poor	Moderate	45
12	UKGBNI1NE050503070	Ravernet River Upper	Moderate	Good	23
13	UKGBNI1NE050503071	Ravernet River Upper	Moderate	Good	25
14	UKGBNI1NE050503047	Ravernet River	Moderate	Good	19
15	UKGBNI1NE050503108	River Lagan	MEP	MEP	49
16	UKGBNI1NE050503104	River Lagan Tributary	PEP	MEP	41
17	UKGBNI1NE050503117	Collin Glen River	Moderate	Good	53
18	UKGBNI1NE050503088	Purdys Burn	Bad	Moderate	29
19	UKGBNI1NE050503119	Clowney Water	MEP	MEP	55
20	UKGBNI1NE050503002	Blackstaff River	BEP	MEP	13
21	UKGBNI1NE050503003	Blackstaff River	BEP	MEP	15
22	UKGBNI1NE050503087	Connswater	BEP	MEP	27
23	UKGBNI5NE100020	Connswater Estuary	MEP	MEP	59

Map Reference	Water Body Code	Water Body Name	2009 Status	2015 Objective	Page Number
24	UKGBNI5NE100010	Lagan Estuary	MEP	MEP	57
25	UKGBNI6NE100	Belfast Harbour	MEP	MEP	61

Map 3: Current status of surface water bodies in Lagan LMA



Generic Actions applied throughout the Local Management Area.

Action to be taken	Action to be taken by	Make operational by	Water body types
Highlight external funding opportunities for water management projects to local partners.	DOE NIEA	Ongoing	All
Organise two CSG 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	Ongoing	All
Promote and encourage local projects through WATER Environment Community awards.	DOE NIEA	2010	All
Promote the NIEA Water Pollution Hotline through increased advertising, promotion and waterside signage.	DOE NIEA	2010	Rivers, Lakes
Raise awareness of catchment management issues by release of relevant press articles and web publication of LMA e-zine. Support local community events.	DOE NIEA	2010	All

Specific Actions applied throughout the Local Management Area where status or ecological potential is less than good.

Problem	Solution			
Failing Element	Action to be taken	Action to be taken by	Make operational by	Water body types
Pressure and Impact assessment, Benthic invertebrates, Dissolved Oxygen, Soluble Reactive Phosphorous, Macrophytes, Phytoplankton, Nitrates	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms	DARD Countryside Management Branch	Ongoing	Rivers
	Develop leaflets and articles to promote effective farm nutrient and waste management	DOE NIEA, DARD Countryside Management Branch	2010	All
	Collate existing information on location of aquatic invasive alien species.	DOE NIEA	2011	All
	Promote the control of invasive alien species on farmland	DARD Countryside Management Branch	Ongoing	Rivers, Lakes
	Raise awareness and promote the benefits of effective farm nutrient and waste management	DARD Countryside Management Branch	2010	All
	Investigate the sedimentation problems in the Lagan LMA, determine potential sources and take action to promote better sediment management.	DOE NIEA	2011	All

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Water body name:	Hillsborough Burn
Water body identification code:	UKGBNI1NE050503001
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	No type has been assigned
2005 risk assessment:	1a - At risk
Current overall status:	Poor
(Confidence in overall status:	Not measured)

Hydrological regime:	High
Morphological conditions:	Moderate

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Hillsborough Burn (10) #
Water body identification code: UKGBNI1NE050503001
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: River Lagan (9) (UKGBNI1NE050503103)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Pressure and Impact assessment	1	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
	2	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	3	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Hillsborough & Hooks Corner Gravel Hill), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	4	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	5	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	6	Investigate impacts of forestry operations in the Hillsborough Burn waterbody. Ascertain felling programme in the catchment and engage with forestry technical field staff / private landowners to ensure measures are in place to mitigate risks from felling.	NIEA & DARD Forest Service	2011
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Blackstaff River
Water body identification code:	UKGBNI1NE050503002
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Bad
(Confidence in ecological potential:	Low)

Benthic invertebrates:	Bad
Dissolved oxygen:	Poor
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	Bad
Biochemical oxygen demand*:	Bad
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: Blackstaff River (20) #
Water body identification code: UKGBNI1NE050503002
2009 status: Bad Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies: Clowney Water (19) (UKGBNI1NE050503119)
Blackstaff River (21)
(UKGBNI1NE050503003)
Downstream water body:

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Dissolved Oxygen, Ammonia, Soluble Reactive Phosphorous	1	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
	2	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	3	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	4	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	5	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	6	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Promote pollution prevention campaigns such as the "Bag it and Bin it" campaign.	DOE NIEA	Ongoing
	9	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	10	Investigate ammonia elevations	DOE NIEA	2011
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Blackstaff River
Water body identification code:	UKGBNI1NE050503003
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Bad
(Confidence in ecological potential:	Low)

Benthic invertebrates:	Bad
Dissolved oxygen:	Moderate
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	Moderate
Biochemical oxygen demand*:	Poor

Hydrological regime:	High

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: Blackstaff River (21) #
Water body identification code: UKGBNI1NE050503003
2009 status: Bad Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: Blackstaff River (20)
(UKGBNI1NE050503002)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Dissolved Oxygen, Ammonia, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW(Upper Falls), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Raise awareness of the impact of misconnections where they are identified to be causing a deterioration in water quality.	DOE NIEA	Ongoing
	8	Promote pollution prevention campaigns such as the "Bag it and Bin it" campaign.	DOE NIEA	Ongoing
	9	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	10	Investigate ammonia elevations	DOE NIEA	2011
	11	Carry out Rapid Hydromorphology Assessment Technique(RHAT) survey to ground truth heavily modified designation.	DOE NIEA	2011
	12	Work with and support Ulster Wildlife Trust, Friends of Falls Park, Belfast City Council and other local local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems. Develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503046
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude >80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Moderate
Dissolved oxygen:	Moderate
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	Good
Biochemical oxygen demand*:	Good
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (4) #
Water body identification code: UKGBNI1NE050503046
2009 status: Moderate
2015 Objective: Good
Upstream water bodies: River Lagan (2) (UKGBNI1NE050503048)
River Lagan Tributary (3)
(UKGBNI1NE050503098)
Downstream water body: River Lagan (5) (UKGBNI1NE050503101)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes, Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Visual inspection of WWTWs <250 PE to inform future upgrades (Drumlough)	DOE NIEA	2011
	6	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	9	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	10	Work with and support Iveagh Angling Club and other local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Ravernet River
Water body identification code:	UKGBNI1NE050503047
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Moderate
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Ravernet River (14) #
Water body identification code: UKGBNI1NE050503047
2009 status: Moderate
2015 Objective: Good
Upstream water bodies: Ravernet River Upper (12) (UKGBNI1NE050503070) Ravernet River Upper (13) (UKGBNI1NE050503071)
Downstream water body: River Lagan (15) (UKGBNI1NE050503108)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Visual inspection of WWTWs <250 PE to inform future upgrades (Legacurry)	DOE NIEA	2011
	6	Compliance assessment of WWTWs >250 PE to inform future upgrades (Ravernet)	DOE NIEA	2011
	7	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	8	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	9	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	10	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503048
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude >80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Poor
(Confidence in overall status:	Low)

Benthic invertebrates:	Poor
Macrophytes:	High
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Good
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (2) #
Water body identification code: UKGBNI1NE050503048
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies: River Lagan (1) (UKGBNI1NE050503096)
Downstream water body: River Lagan (4) (UKGBNI1NE050503046)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support Iveagh Angling Club and local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Ravernet River upper
Water body identification code:	UKGBNI1NE050503070
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Moderate
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Ravernet River Upper (12) #
Water body identification code: UKGBNI1NE050503070
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: Ravernet River (14)
(UKGBNI1NE050503047)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Compliance assessment of WWTWs >250 PE to inform future upgrades (Craignasasonagh)	DOE NIEA	2011
	6	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	9	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Ravernet River upper
Water body identification code:	UKGBNI1NE050503071
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Moderate
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Ravernet River Upper (13) #
Water body identification code: UKGBNI1NE050503071
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: Ravernet River (14)
(UKGBNI1NE050503047)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Bresagh), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Connswater
Water body identification code:	UKGBNI1NE050503087
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Bad
(Confidence in ecological potential:	Low)

Benthic invertebrates:	Bad
Macrophytes:	Poor
Fish:	Bad
Dissolved oxygen:	High
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	Good
Biochemical oxygen demand*:	High

Hydrological regime:	High

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: Connswater (22) #
Water body identification code: UKGBNI1NE050503087
2009 status: Bad Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: Connswater Estuary (23) (UKGBNI5NE100020)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes, Fish, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	7	Managed removal of alien plants and trees along river corridor to reduce shading and promote a more natural macrophyte assemblage	CCG Project	2011
	8	Carry out full RHAT assessments on water body, pre and post-restoration to assess success of Connswater Community Greenway project in terms of hydromorphology.	DOE NIEA	2011
	9	Work with and support the Connswater Community Greenway Project and other local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 8.		

number in brackets refers to Map 3.

Water body name:	Purdys Burn
Water body identification code:	UKGBNI1NE050503088
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Moderate Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Bad
(Confidence in overall status:	Low)

Benthic invertebrates:	Bad
Macrophytes:	Good
Dissolved oxygen:	High
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Good

Hydrological regime:	High
Morphological conditions:	Moderate

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Purdys Burn (18) #
Water body identification code: UKGBNI1NE050503088
2009 status: Bad
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: River Lagan (15) (UKGBNI1NE050503108)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
	8	Promote pollution prevention campaigns such as the "Bag it and Bin it" campaign.	DOE NIEA	Ongoing
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503096
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude >80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Moderate
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	High
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (1) #
Water body identification code: UKGBNI1NE050503096
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: River Lagan (2) (UKGBNI1NE050503048)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Compliance assessment of WWTWs >250 PE to inform future upgrades (Dromara)	DOE NIEA	2011
	6	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Investigate impacts of forestry operations iin Drumkeeragh. Ascertain felling programme in the catchment and engage with forestry technical field staff / private landowners to ensure measures are in place to mitigate risks from felling.	NIEA	2011
	9	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	10	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan tributary
Water body identification code:	UKGBNI1NE050503098
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude >80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	High
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Good
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan Tributary (3) #
Water body identification code: UKGBNI1NE050503098
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: River Lagan (4) (UKGBNI1NE050503046)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Kinallen, Waringsford, McCandless and Mossvale Terraces), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Visual inspection of WWTWs <250 PE to inform future upgrades (Waringsford, McCandless, Mossvale Terraces))	DOE NIEA	2011
	6	Compliance assessment of WWTWs >250 PE to inform future upgrades (Kinallen)	DOE NIEA	2011
	7	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	8	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	9	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503101
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (5) #
Water body identification code: UKGBNI1NE050503101
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies: River Lagan (4) (UKGBNI1NE050503046)
Downstream water body: River Lagan (7) (UKGBNI1NE050503102)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Blackskull, Dromore (Banbridge), Drumboneth, Ballykelly (Blackskull) and Drumnaferry), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Deploy passive samplers as part of investigative monitoring programme.	DOE NIEA	2010
	8	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503102
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 50-100 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	Good

Hydrological regime:	High
Morphological conditions:	Moderate

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (7) #
Water body identification code: UKGBNI1NE050503102
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies: River Lagan (5) (UKGBNI1NE050503101)
Waringstown Stream (8)
(UKGBNI1NE050503107)
Downstream water body: River Lagan (9) (UKGBNI1NE050503103)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503103
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Low)

Benthic invertebrates:	Moderate
Macrophytes:	Moderate
Dissolved oxygen:	Poor
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	Good

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (9) #
Water body identification code: UKGBNI1NE050503103
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies: River Lagan (7) (UKGBNI1NE050503102)
Hillsborough Burn (10)
(UKGBNI1NE050503001) River Lagan
Tributary(11) (UKGBNI1NE050503106)
Downstream water body: River Lagan (15) (UKGBNI1NE050503108)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes, Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Magheralin, Moira (Old & New), Clarehill Road, Lurganville, Maghaberry, St James), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	9	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan tributary
Water body identification code:	UKGBNI1NE050503104
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Poor
(Confidence in ecological potential:	Low)

Benthic invertebrates:	Poor
Macrophytes:	Poor
Dissolved oxygen:	High
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	Good
Biochemical oxygen demand*:	High

Hydrological regime:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: River Lagan Tributary (16) #
Water body identification code: UKGBNI1NE050503104
2009 status: Poor Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: River Lagan (15) (UKGBNI1NE050503108)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Mullaghglass (Lisburn)), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	8	Carry out Rapid Hydromorphology Assessment Technique(RHAT) survey to ground truth heavily modified designation.	DOE NIEA	2011
	9	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan tributary
Water body identification code:	UKGBNI1NE050503105
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Good
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Good
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan (6) #
Water body identification code: UKGBNI1NE050503105
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: River Lagan (5) (UKGBNI1NE050503101)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Edentiroory, Ashfield (Dromore), Diamond Rd and Mount Ida Rd), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan tributary
Water body identification code:	UKGBNI1NE050503106
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	No type has been assigned
2005 risk assessment:	1a - At risk
Current overall status:	Poor
(Confidence in overall status:	Not measured)

Hydrological regime:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: River Lagan Tributary (11) #
Water body identification code: UKGBNI1NE050503106
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: River Lagan (9) (UKGBNI1NE050503103)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Pressure and Impact assessment	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Jenny Lane, Ballinderry Road, Horse Park, Glenavy Road (Lisburn), Knocknarea Road and 2 at Cross Lane), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Waringstown Stream
Water body identification code:	UKGBNI1NE050503107
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	No type has been assigned
2005 risk assessment:	1a - At risk
Current overall status:	Poor
(Confidence in overall status:	Not measured)

Hydrological regime:	High

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Waringstown Stream (8) #
Water body identification code: UKGBNI1NE050503107
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: River Lagan (7) (UKGBNI1NE050503102)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Pressure and Impact assessment	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Waringstown), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	River Lagan
Water body identification code:	UKGBNI1NE050503108
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Moderate
(Confidence in ecological potential:	Low)

Benthic invertebrates:	Moderate
Macrophytes:	High
Dissolved oxygen:	High
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Moderate
Temperature*:	High

Hydrological regime:	High
Morphological conditions:	Moderate

Atrazine:	Good
Benzene:	Good
Chlorfenvinphos:	Good
Chloroform (trichloromethane):	Good
Chlorpyriphos:	Good
Dissolved copper:	Good
Carbon tetrachloride:	Good
Total DDT:	Good
Diazinon:	Good
1,2-Dichloroethane:	Good
Endosulphan:	Good
Fenitrothion:	Good
g-HCH (Lindane):	Good
Hexachlorobenzene:	Good
Hexachlorobutadiene:	Good
Malathion:	Good
Napthalene:	Good

Pentachlorophenol:	Good	
Phenol:	Good	
Simazine:	Good	
Tetrachloroethylene:	Good	
Trichloroethylene:	Good	
Trifluralin:	Good	
Triazaphos:	Good	
Total zinc:	Good	

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: River Lagan (15) #
Water body identification code: UKGBNI1NE050503108
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies: River Lagan (9) (UKGBNI1NE050503103) Ravernet River (14) (UKGBNI1NE050503047) River Lagan Tributary (16) (UKGBNI1NE050503104) Collin Glen River (17) (UKGBNI1NE050503117) Purdys Burn (18) (UKGBNI1NE050503088)
Downstream water body: Lagan Estuary (24) (UKGBNI5NE100010)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Dunmurry, New Holland, Upper Malone Road, Edenderry, Drumbeg, Pinehill Road, Ballycairn, Newtownbreda), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Deploy passive samplers as part of investigative monitoring programme.	DOE NIEA	2010
	8	Work with and support Lagan Valley Regional Park and other local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

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Water body name:	Collin Glen River
Water body identification code:	UKGBNI1NE050503117
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current overall status:	Moderate
(Confidence in overall status:	Medium)

Benthic invertebrates:	Moderate
Macrophytes:	Moderate
Dissolved oxygen:	High
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	High

Hydrological regime:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-riverslakes.htm

Water body name: Collin Glen River (17) #
Water body identification code: UKGBNI1NE050503117
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: River Lagan (15) (UKGBNI1NE050503108)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic invertebrates, Macrophytes	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Dunmurry), sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	5	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	7	Complete the phosphorous nutrient budget work for Northern Ireland	AFBI	2011
	8	Work with and support Dunmurry Community Association and other local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Clowney water
Water body identification code:	UKGBNI1NE050503119
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough & Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Altitude <80m, alkalinity 100-200 (as mg/l of $CaCO_3$)
2005 risk assessment:	1a - At risk
Current ecological potential:	Moderate
(Confidence in ecological potential:	Low)

Dissolved oxygen:	Poor
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	Bad
Biochemical oxygen demand*:	Bad
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Total zinc:	Good

* This element does not contribute to overall classification.

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/north_western_rbp/nw-heavily-modified.htm

Water body name: Clowney Water (19) #
Water body identification code: UKGBNI1NE050503119
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: Blackstaff River (20)
(UKGBNI1NE050503002)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Dissolved Oxygen, Soluble Reactive Phosphorous	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	3	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	4	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	5	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	6	Investigate agricultural practices in the catchment through river walks and analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Carry out Rapid Hydromorphology Assessment Technique(RHAT) survey to ground truth heavily modified designation.	DOE NIEA	2011
	9	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Lagan Estuary
Water body identification code:	UKGBNI5NE100010 *This is a heavily modified water body.*
Catchment stakeholder group:	Belfast Lough and Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Meso or polyhaline, strongly mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current ecological potential:	Bad 

Benthic invertebrates:	Bad	
Fish:	Moderate	
General conditions:	Moderate	
Dissolved oxygen:	Moderate	
Dissolved inorganic nitrogen:	Moderate	

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/neagh_bann_rbp/neagh-heavily-modified.htm

Water body name: Lagan Estuary (24) #
Water body identification code: UKGBNI5NE100010
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies: River Lagan (15) (UKGBNI1NE050503108)
Downstream water body: Belfast Harbour (25) (UKGBNI6NE100)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Fish, Disolved Oxygen, Dissolved Inorganic Nitrogen	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Investigate Dissolved Oxygen supressions	DOE NIEA	2011
	3	Investigate downstream impacts of discharges from industrial premises where problem has been identified to establish potential sources of pollution.	DOE NIEA	2011
	4	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	5	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW, sewage pumping stations and septic tanks (domestic and private).	DOE NIEA	2010
	6	Investigate agricultural practices in the catchment through analysis of agricultural pollution incidents and cross compliance data and carry out site visits where necessary	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	8	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Conns Water Estuary
Water body identification code:	UKGBNI5NE100020 *This is a heavily modified water body.*
Catchment stakeholder group:	Belfast Lough and Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Moderate ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Meso or polyhaline, strongly mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current ecological potential:	Moderate

Fish:	Moderate
General conditions:	Moderate
Dissolved oxygen:	Good
Dissolved inorganic nitrogen:	Moderate
Specific pollutants:	Pass
Priority hazardous substances:	Pass

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/neagh_bann_rbp/neagh-heavily-modified.htm

Water body name: Connswater Estuary (23) #
Water body identification code: UKGBNI5NE100020
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies: Connswater (22) (UKGBNI1NE050503087)
Downstream water body:

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Fish, Dissolved Inorganic Nitrogen	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Continue monitoring to confirm evidence of trophic status	DOE NIEA	Ongoing
	3	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
	4	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Water body name:	Belfast Harbour
Water body identification code:	UKGBNI6NE100
	This is a heavily modified water body.
Catchment stakeholder group:	Belfast Lough and Lagan
Local management area:	Lagan
2015 Objective:	Moderate ecological potential
2021 Objective:	Good ecological potential
2027 Objective:	Good ecological potential
The type of this water body is:	Euhaline, mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current ecological potential:	Bad

Benthic invertebrates:	Moderate
Phytoplankton:	Poor
General conditions:	Bad
Dissolved oxygen:	High
Dissolved inorganic nitrogen:	Moderate
Alien species:	Good
Specific pollutants:	Pass
Priority hazardous substances:	Pass

For more information on the classification process see: http://www.ni-environment.gov.uk/water-home/wfd/neagh_bann_rbp/neagh-heavily-modified.htm

Water body name: Belfast Harbour (25) #
Water body identification code: UKGBNI6NE100
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies: Lagan Estuary (24) (UKGBNI5NE100010)
Downstream water body:

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Phytoplankton, General Conditions, Benthic invertebrates	1	Create an inventory of river channel and bank physical structures within the Lagan LMA.	DOE NIEA, Angling Clubs	2011
	2	Continue monitoring to confirm evidence of trophic status	DOE NIEA	Ongoing
	3	Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	DOE NIEA	Ongoing
	4	Work with and support Belfast Harbour Commissioners and other local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010
		A number of catchment wide actions also apply to this water body. These can be found on Page 9.		

number in brackets refers to Map 3.

Groundwaterbody name:	Belfast
Groundwaterbody identification code:	UKGBNI4NE005
2015 Objective:	Poor Status
2021 Objective:	Poor Status
2027 Objective:	Good Status
Current overall status:	Poor

Chemical:	Poor
Quantitative:	Poor

Groundwaterbody name: Belfast
Groundwaterbody identification code: UKGBNI4NE005
2009 status: Poor
2015 Objective: Poor

	Action to be taken	Action to be taken by	Make operational by
1	Observation of nitrate trends and liaison with research partners for further investigation into recovery time	DOE NIEA, GSNI	2010
2	Further investigation of water balance for the groundwater body, taking into account abstraction volumes and review of recharge estimation	DOE NIEA, GSNI	2010
3	Review of groundwater abstraction and planning applications where necessary.	DOE NIEA, GSNI	Ongoing
4	Work with and support local Stakeholders in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Lagan LMA Action Plan.	DOE NIEA	2010

Abbreviations

Term	Explanation
AFBI	Agri-Food and Biosciences Institute
CCG	Connswater Community Greenway
DARD	Department of Agriculture and Rural Development
DOE	Department of the Environment
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 4 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
NIEA	Northern Ireland Environment Agency
WWTW	Waste Water Treatment Works

NIEA Northern Ireland Environment Agency
www.ni-environment.gov.uk

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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