Significant Water Management Issues

Strangford Lough Local Management Area Action Plan and Update

December 2013

An Agency within the Department of the Environment
www.doeni.gov.uk

INVESTORS IN PEOPLE

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

Strangford LMA Action Plan Update – December 2013

LMA Wide Actions

Action to be taken	Update
Highlight external funding opportunities for water management projects to local partners	Water Environment Community Awards, Water Quality Improvement Grant and Northern Ireland Environment Link's Challenge Grant promoted through CSG meeting, NIEA website and e-mail.
Organise two CSG meetings per year to provide an open forum for discussion on water issues and encourage involvement in developing and implementing the Strangford Management Area Plan	Presentations and Note of meetings can be found on http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups/strangford_and_lecale.htm
Promote and encourage local projects through WATER Environment Community awards	Awards promoted through CSG meeting, NIEA website and e-mail. Environment Minister Alex Attwood presented 2 winning entries from Strangford LMA each receiving £1000 for their environmental improvement projects on 26th May 2011. The winners were Cloughey and District Community Association for their Cloughey Bay Beach Project and Dibney River Conservation Trust for Inspire Mayfly Classroom Project Cloughey and District Community Association won the Water Environment Community Award for the 2nd year running in 2012. They organised a Sand Castle and Sculpture Day which aimed to promote local water quality issues to the general public. They also performed microbial sea water quality tests. NIEA staff attended the event to promote water quality and River Basin Plans / Action Plans.
Promote NIEA Water Pollution Hotline through advertising, promotion and signage	Official launch of new signage took place on 18th April 2011 by NIEA Chief Executive John McMillan. In attendance was Ian Kittle from Inler Anglers and Tracey Connelly the Countryside Access Officer at Castlereagh Borough Council. 4 signs erected at Killyleagh Community Centre and along the Comber Greenway. Hotline number is promoted frequently on NIEA facebook page and NIEA Twitter website.
Raise awareness of catchment management issues by release of relevant press articles and web publication of Strangford LMA e-zine. Support local community events.	8 issues of the Strangford LMA E-zine mailed to Strangford & Lecale CSG contacts. E-zines can be accessed at: http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/lma_e-newsletters.htm Attendance at Balmoral Show demonstrating the use of the River Basin Planning Web-mapper. NIEA staff took part in the 'Celebrate Strangford' event on the banks of Strangford Lough which was organised by the Strangford

	and Lecale Partnership. Staff from NIEA Water Management Unit participated in seaweed workshops. The aim of these workshops was to educate and inform the public on the importance of seaweed on our shores Staff from NIEA Marine Conservation Team provided information and a short video of our underwater world. Staff from NIEA helped facilitate the River School at the Dibney International Fly Fair by providing examples of 'good bugs' and 'bad bugs' to allow children to assess the water quality of their river.
Targeted education, advice and regulatory action to prevent pollution and protect the water environment	NIEA incorporates the 'Reduce Reuse Recycle', 'Bag It and Bin It, 'Dirty Dozen', 'Stop and Think (Not Down The Sink)' messages in information leaflets and promotes these philosophies during engagement with the public. 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.
Develop leaflets and articles to promote effective farm nutrient and waste management	'Water Quality Plans in Action' article published in Farming Life October 2010. DARD Countryside Management Branch regularly produces information leaflets for farmers on Agri-Environment issues and the Nitrates Directive.
Collate existing information on location of aquatic (including river bank) invasive alien species	During the course of river walks and undertaken by NIEA any sightings or suspected sightings of invasive alien species are collated and reported to Invasive Species Ireland.
Promote the control of invasive alien species on farmland	Promoted through the DARD Northern Ireland Countryside Management Scheme (NICMS).
Highlight location of *Spartina anglica* to Spartina Control Group and promote education and awareness leaflets dealing with Invasive species	During the course of river walks and field work undertaken by NIEA any sightings or suspected sightings of *Spartina* are reported to the *Spartina* Control Group.
Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management measures on farms	A measure within the Nitrates Action Programme is that all farms must carry out crop and soil management to minimise soil erosion and nutrient runoff. This is verified during cross-compliance visits.
Raise awareness and promote the benefits of effective farm nutrient and waste management	All applicants to DARD agri-environment schemes receive farm waste management advice as part of their application to the scheme. DARD has produced a Code of Good Agricultural Practice which contains practical management advice on how farm wastes such as silage effluent, slurry and manure can be collected, stored and spread with minimum risk

	to the environment. DARD has developed an agri-environment training course for farmers dealing with farm wastes and nutrient management planning. Water Framework Directive awareness talk given to CAFRE students.
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.

Strangford LMA Action Plan Update – December 2013

Water Body Actions

Continue to monitor to confirm evidence of trophic status of coastal waters	The Marine Strategy Framework Directive aims to achieve Good Environmental Status in Europe's Seas by 2020. NIEA and 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' report was published in January 2011 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 .
Investigate Bathing Water Guideline Standards compliance problems at Ballywalter	Investigative microbiological sampling carried out. In addition there have been 7 'Good Beach' Summits convened by the Environment Minister to draw up an action plan to assess progress on attaining beach standards.
Develop Bathing Water profiles for Millisle and Ballywalter	Bathing Water Profiles can be accessed at: http://www.doeni.gov.uk/niea/waterhome/quality/bathingqualityni/bathing_water_profiles.htm
Assess sources of organic pollution from: Agriculture Industrial Discharges Northern Ireland Water Limited sewerage services	 NIEA's Agriculture Regulations Team undertake a series of planned and unplanned regulatory cross compliance visits to farms Compliance inspections are carried out at approximately 140 industrial discharge points on an annual basis within Strangford LMA Compliance assessments are carried out at large WWTWs. 62 visual inspections of small WWTWs have been carried out throughout the LMA
Investigate Dissolved Oxygen suppressions	Investigations have been carried out in : Blackcauseway Strangford, Blackstaff River (Ards), Ganaway Burn
Carry out river walks to assess sources of organic	River walks have been carried out in: Blackcauseway, Enler, Comber, Ballymoran Burn, Cunning Burn, Mill Burn, Cully's Burn, Blackstaff River (Ards)
Investigate ammonia elevations	Investigations have been carried out in Blackstaff River (Ards)
Develop targeted ecological modelling tools for lake management.	An Interreg Project has begun to gather monitoring information for various metrics towards the development of a model which is aiming to guide lake management. When complete this will inform management actions

	for Clea Lakes.
Create an inventory of physical structures within the river channel and bank structures	An inter-agency River Restoration and Continuity Group has been set up to, amongst other things, collate and co-ordinate all aspects of river restoration and continuity issues
Carryout Rapid Hydro morphology Assessment Technique (RHAT) survey to ground truth heavily modified designation	RHAT Surveys carried out in: Enler River, Dibney River, Blackcauseway Strangford and River Blackwater (Ards)
Raise awareness of the impact of misconnections where they have been identified to be causing deterioration in water quality.	Household Awareness Leaflets have been developed to raise awareness among householders of misconnections. 600 have been distributed by the Cloughey and District Community Association.
Work with and support Dibney River Conservation Trust in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford LMA Action Plan.	Staff from NIEA helped facilitate the River School at the Dibney International Fly Fishing Festival by providing examples of 'good bugs' and 'bad bugs' to allow children to assess the water quality of their river. Liaised with Down District Council on behalf of Dibney River Conservation Trust to obtain the council's procedure on litter picks to enable the Trust to organise a river clean up. Working with DCAL Inland Fisheries, Rivers Agency and Dibney River Conservation Trust on a fishery habitat enhancement project.
Investigate the feasibility for in-channel fishery habitat enhancement	Feasibility studies have been or will be carried out in: Blackstaff River (Ards), Enler River, Dibney River, River Blackwater (Ards), Strangford small streams
Monitor fish populations	Monitoring of fish populations took place at: River Blackwater and River Enler
Work with and support Strangford and Lecale Partnership in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford LMA Action Plan.	Working with the Strangford Lough and Lecale Partnership to raise awareness. An article highlighting Water Quality issues around Strangford Lough has been written for inclusion in a Strangford Lough and Lecale Partnership supplement in local newspapers. Contributing to Strangford Lough and Lecale Partnership management plan.
Upgrading of Waste Water Treatment Works	Upgrades have been carried out on the following Waste Water Treatment Works: Ballyrickard Portaferry Ringneil / Lisbarne Strangford
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 for the groundwater body, taking into account abstraction volumes and review of recharge estimation	There is a groundwater study site at Mount Stewart currently being monitored by NIEA and Geological Survey NI (GSNI). NIEA will consider how a strategic research project could analyse the data being collected from this site to gain a better understanding of the quantative interaction between groundwater and surface water. Review of recharge: There was an MSc project at Queen's and some of the work has recently been completed by the GSNI hydrologists working on behalf of NIEA.
Review of groundwater abstraction and relevant planning applications where necessary	The Groundwater Team is a regular consultee on groundwater abstractions and planning applications for all of Northern Ireland.

Northern Ireland
Environment Agency

Action Plan 2010/2011

STRANGFORD
Local Management Area

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

Map 1: Strangford 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 Strangford 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.

Strangford Local Management Area

Strangford LMA (Map 1) is in the North Eastern River Basin District and covers an area of approximately 885km^2. The main rivers are River Blackwater (Ards) and Enler River. Numerous smaller rivers and streams exist throughout the area all entering Strangford Lough at various points. Strangford Lough itself is a large shallow sea lough with an indented shoreline that contains extensive areas of mudflats, sandflats, saltmarshes as well as a rocky coastline. It is one of the most important marine sites within Europe and is the only designated Marine Nature Reserve in Northern Ireland. There are a number of additional designations giving protection to the environmental features of this unique area. The area also includes economically significant shellfish waters. It is an Area of Outstanding Natural Beauty and supports a wide range of recreational activities including walking, sailing, diving and tourism.

The land usage is predominantly improved grassland, along with arable farming. The largest towns include Newtownards, Dundonald, Comber and Downpatrick. There are also numerous smaller towns and villages scattered throughout the area.

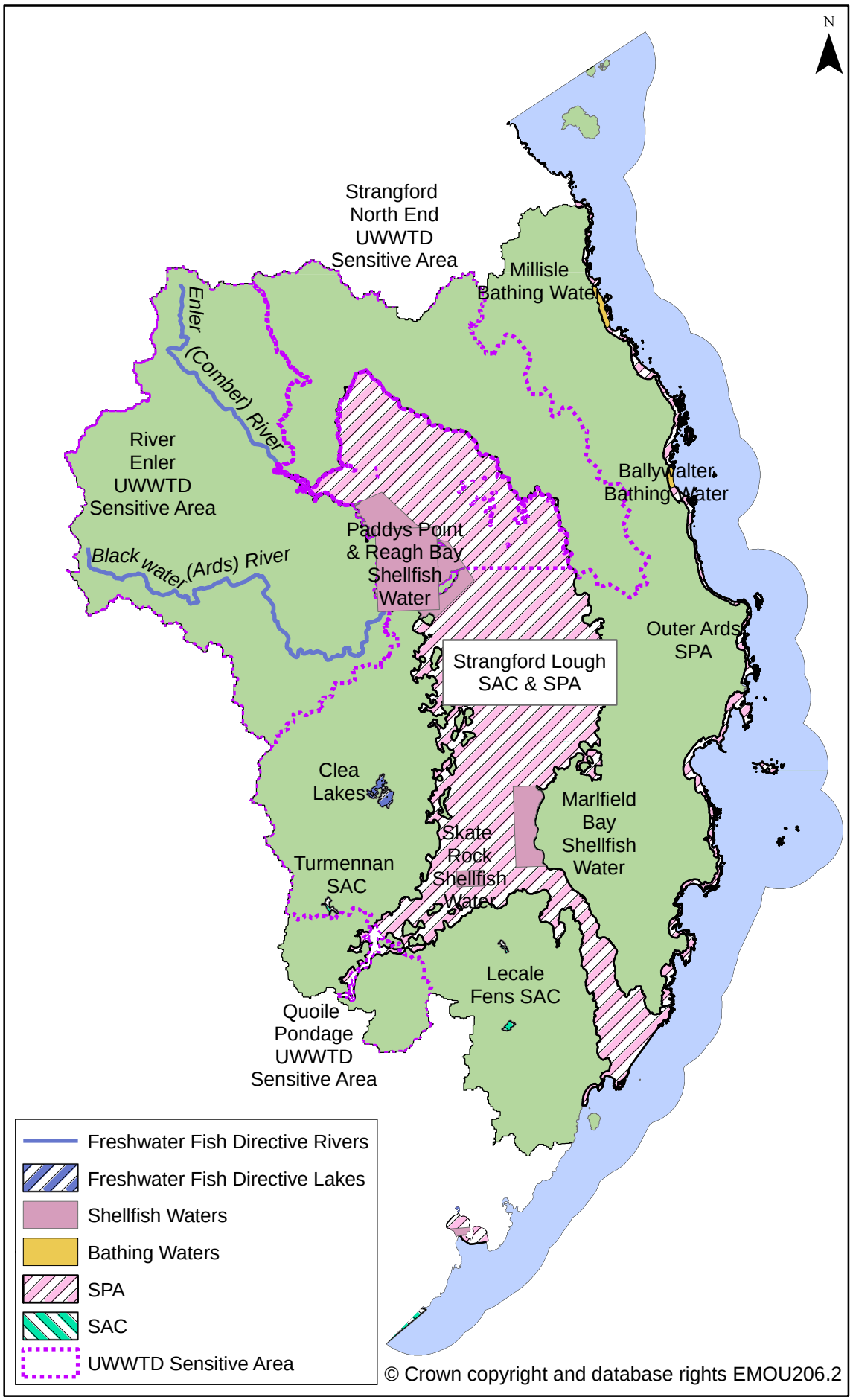
Protected areas in Strangford LMA

The Strangford 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 Strangford LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There are 3 drinking water protected rivers There are 3 drinking water protected groundwaters
Areas designed to protect economically significant aquatic species Freshwater Fish Directive (78/659/EEC)	There are 34 km of river and 0.6 km^2 of lake identified under the Freshwater Fish Directive, all designated Salmonid.
Shellfish Waters Directive (79/923/EEC)	There are 3 designated shellfish waters; Marlfield Bay, Paddy's Point & Reagh Bay and Skate Rock
Bathing Waters These are bathing waters identified under the Bathing Water Directive (76/160/EEC)	There are 2 identified bathing waters; Ballywalter and Millisle
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; Strangford North End, River Enler and Quoile Pondage and the catchments of these waters 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)	There are 3 water dependent Special Areas of Conservation (SAC); Strangford Lough, Turmennan and Lecale Fens.
Birds Directive (79/409/EEC)	There are 2 water dependent Special Protection Areas (SPA); Strangford Lough and Outer Ards

Map 2: Protected Areas in Strangford LMA

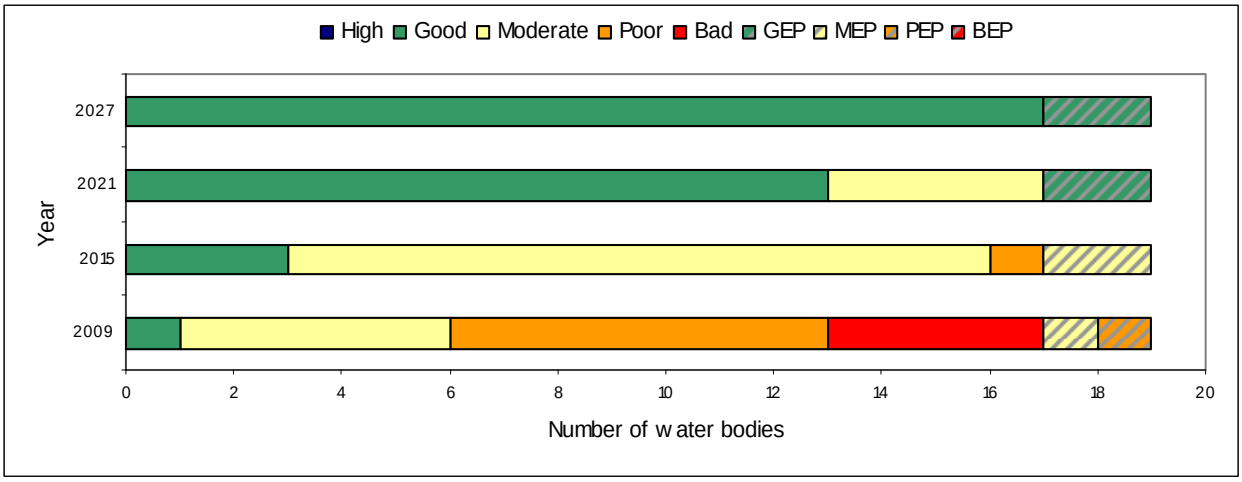


What improvements do we plan to achieve?

Surface Waters

The current status (as published in December 2009) and environmental objectives for surface waters (rivers, lakes and coastal waters) are shown in Figure 1. We aim to achieve good status or better in 15.8% of our surface waters by 2015 and good ecological potential (GEP) (for heavily modified water bodies) in 10.5% 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 Strangford LMA



Groundwaters

There are three groundwater bodies within the Strangford LMA; Belfast, Ards Peninsula and Downpatrick. The Ards Peninsula and Downpatrick groundwater bodies have been classified as good for both quantitative and chemical status. The Belfast groundwater body was classified as poor due to water balance and nitrate levels. We aim to achieve good status in all groundwater bodies by 2027.

Action Plan[1]

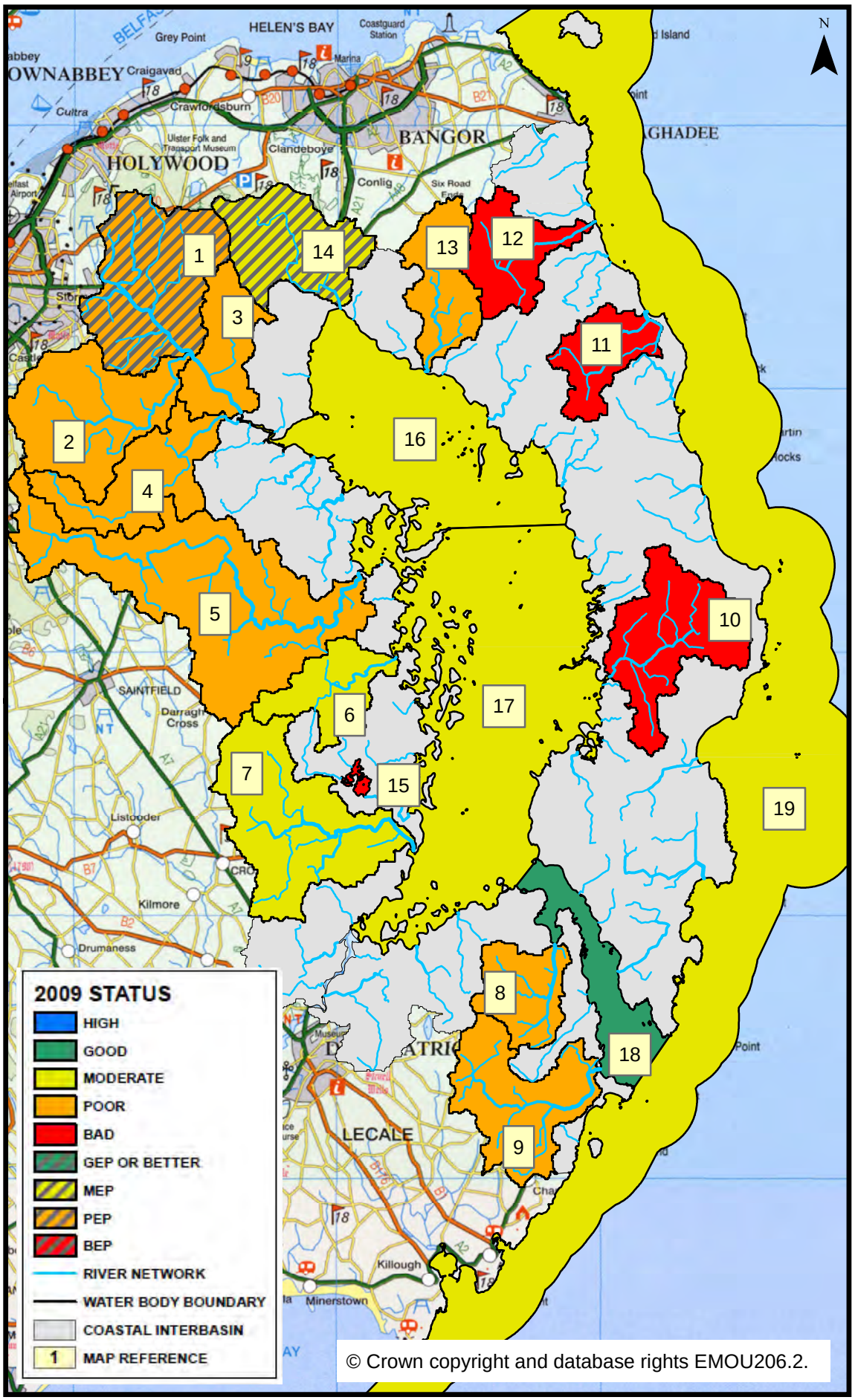
The current status and environmental objectives for each water body within the Strangford LMA are summarised in Table 2. The Map Reference column can be used to identify the water bodies shown in Map 3. The water body map reference numbers are also shown in brackets after the water body names used later in the document. The planned actions for water bodies within the Strangford 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	UKGBNI1NE050504080	Enler River	PEP	MEP	31
2	UKGBNI1NE050504081	Ballystockart River	Poor	Moderate	13
3	UKGBNI1NE050504020	Comber River	Poor	Moderate	21
4	UKGBNI1NE050504023	Comber River	Poor	Moderate	23
5	UKGBNI1NE050504057	River Blackwater	Poor	Moderate	39
6	UKGBNI1NE050504006	Ballymorran Burn	Moderate	Good	11
7	UKGBNI1NE050504009	Dibney River	Moderate	Moderate	29
8	UKGBNI1NE050504010	Black Causeway Strangford	Poor	Moderate	15
9	UKGBNI1NE050504058	Mill Quarter Stream	Poor	Moderate	37
10	UKGBNI1NE050504022	Blackstaff River	Bad	Moderate	17
11	UKGBNI1NE050504031	Ganaway Burn	Bad	Moderate	33
12	UKGBNI1NE050504021	Mill Burn	Bad	Moderate	35
13	UKGBNI1NE050504086	Cunning Burn	Poor	Moderate	27
14	UKGBNI1NE050504085	Cully's Burn	MEP	MEP	25
15	UKGBNI3NE0023	Clea Lakes	Bad	Poor	19
16	UKGBNI6NE140	Strangford Lough North	Moderate	Moderate	43
17	UKGBNI6NE130	Strangford Lough South	Moderate	Moderate	45
18	UKGBNI6NE120	Strangford Lough Narrows	Good	Good	41
19	UKGBNI6NE110	Ards Peninsula	Moderate	Good	9

Map 3: Status of surface water bodies in Strangford 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 Catchment Stakeholder Group meetings per year to provide an open forum for discussion on water issues and encourage involvement in developing and implementing the Local Management Area Plan.	DOE NIEA	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	ongoing	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
Phytoplankton, Soluble Reactive Phosphorus, Macrophytes, Dissolved Inorganic Nitrogen, Total Phosphorus, Phytobenthos, Angiosperm, Macroalgae, Benthic Invertebrates	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

Water body name:	Ards Penninsula
Water body identification code:	UKGBNI6NE110
Catchment stakeholder group:	Strangford and Lecale
Local management area:	Strangford
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Euhaline, mesotidal, moderately exposed
2005 risk assessment:	1a - At risk
Current overall status:	Good

Benthic invertebrates:	Good
Macroalgae:	High
Phytoplankton:	Moderate
Hydromorphology:	Good
General conditions:	Good
Dissolved oxygen:	High
Dissolved inorganic nitrogen:	Good
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-coastal.htm

Water body name: Ards Peninsula (19) #
Water body identification code: UKGBNI6NE110
2009 status: Moderate
2015 Objective: Good
Upstream water bodies: Strangford Lough Narrows (UKGBNI6NE120) Ganaway Burn (UKGBNI1NE050504031) Mill Burn (UKGBNI1NE050504021)
Downstream water body:

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Phytoplankton, Bathing Water Guideline Standard	1	Continue to monitor to confirm evidence of trophic status	DOE NIEA	Ongoing
	2	Investigate Bathing Water Guideline Standards compliance problems at Ballywalter	DOE NIEA	2015
	3	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Develop Bathing Water profiles for Millisle and Ballywalter	DOE NIEA	2011
		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:	Ballymorran Burn
Water body identification code:	UKGBNI1NE050504006
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Low)

Benthic invertebrates:	Moderate
Dissolved oxygen:	High
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
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-riverslakes.htm

Water body name: Ballymorran Burn (6) #
Water body identification code: UKGBNI1NE050504006
2009 status: Moderate
2015 Objective: Good
Upstream water bodies:
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates	1	Assess sources of organic pollution including agriculture, septic tanks (domestic and private)	DOE NIEA	2010
	2	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	3	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
	4	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Ballystockart River
Water body identification code:	UKGBNI1NE050504081
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Poor
(Confidence in overall status:	Low)

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

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: Ballystockart River (2) #
Water body identification code: UKGBNI1NE050504081
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Comber River (UKGBNI1NE050504020)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Soluble reactive phosphorus, Morphological conditions	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Investigate downstream impacts of discharges from industrial premises where problems have been identified to establish potential sources of pollution	DOE NIEA, DARD Countryside Management Branch	2011
	3	Assess sources of organic pollution including agriculture, NIW intermittent discharges, WWTW (Moneyreagh, Moneyreagh Rd and Gransha Rd), sewage pumping stations (Lisleen, Limpey, Gransha and Ballystockard) and septic tanks (domestic and private)	DOE NIEA	2010
	4	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2011
	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Black Causeway strangford
Water body identification code:	UKGBNI1NE050504010
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Alkalinity >200 (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:	Moderate
Dissolved oxygen:	Poor
Soluble reactive phosphorus:	Good
pH:	High
Ammonia:	High
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-riverslakes.htm

Water body name: Black Causeway Strangford (8) #
Water body identification code: UKGBNI1NE050504010
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough Narrows (UKGBNI6NE120)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Macrophytes, Dissolved Oxygen	1	Investigate Dissolved Oxygen suppressions	DOE NIEA	2011
	2	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	3	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	4	Assess sources of organic pollution including agriculture and septic tanks (domestic and private)	DOE NIEA	2010
	5	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Blackstaff River
Water body identification code:	UKGBNI1NE050504022
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Bad
Soluble reactive phosphorus:	Poor
pH:	High
Ammonia:	Poor
Biochemical oxygen demand*:	Moderate

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: Blackstaff River (10) #
Water body identification code: UKGBNI1NE050504022
2009 status: Bad
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Dissolved Oxygen, Soluble Reactive Phosphorus, Ammonia	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Investigate ammonia elevations	DOE NIEA	2011
	3	Investigate Dissolved Oxygen suppressions	DOE NIEA	2011
	4	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	5	Assess sources of organic pollution including agriculture, wastewater treatment works (Ballyeasborough Rd, Lisbane Rd, Ballycranbeg and Blackstaff) Northern Ireland Water Limited intermittent discharges, and septic tanks (domestic and private)	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Clea Lakes
Water body identification code:	UKGBNI3NE0023
Catchment stakeholder group:	Strangford and Lecale
Local management area:	Strangford
2015 Objective:	Poor Status
2021 Objective:	Moderate Status
2027 Objective:	Good Status
The type of this water body is:	<200m, siliceous, non-peat, >50ha
2005 risk assessment:	1a - At risk
Current overall status:	Bad
(Confidence in overall status:	High)

Macrophytes:	Moderate
Phytoplankton:	Moderate
Dissolved oxygen:	Moderate
Total phosphorus:	Bad

Hydrological regime:	Good

Atrazine:	Good
Chlorfenvinphos:	Good
Chlorpyriphos:	Good
Diazinon:	Good
Simazine:	Good

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

Water body name: Clea Lakes (15) #
Water body identification code: UKGBNI3NE0023
2009 status: Bad
2015 Objective: Poor
Upstream water bodies: Ballymorran Burn (UKGBNI1NE050504006)
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Macrophytes, Phytoplankton, Dissolved Oxygen, Total Phosphorus	1	Assess sources of organic pollution including agriculture, and septic tanks (private and domestic)	DOE NIEA	2011
	2	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	3	Develop targeted ecological modeling tools for lake management.	INTERREG IV a	2011
	4	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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:	Comber River
Water body identification code:	UKGBNI1NE050504020
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Poor
(Confidence in overall status:	Low)

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

Hydrological regime:	High

Chloroform (trichloromethane):	Good
Dissolved copper:	Good
Carbon tetrachloride:	Good
1,2-Dichloroethane:	Good
Phenol:	Good
Tetrachloroethylene:	Good
Trichloroethylene:	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: Comber River (3) #
Water body identification code: UKGBNI1NE050504020
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies: Enler River (UKGBNI1NE050504080)
Ballystockart River (UKGBNI1NE050504081)
Downstream water body: Strangford Lough North (UKGBNI6NE140)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Fish, Phytobenthos, Soluble Reactive Phosphorus	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	3	Create an inventory of physical structures within the river channel and bank structures	DOE NIEA	2011
	4	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, sewage pumping stations (Comber, Killinchy St, Hillside Park, Lyndhurst Drive, Glencroft and Glen Park) and septic tanks (domestic and private)	DOE NIEA	2010
	5	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Comber River
Water body identification code:	UKGBNI1NE050504023
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Low)

Benthic invertebrates:	Poor
Macrophytes:	Good

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: Comber River (4) #
Water body identification code: UKGBNI1NE050504023
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough North (UKGBNI6NE140)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Macrophytes	1	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	2	Assess sources of organic pollution including agriculture, Waste waster treatment works (Moneyreagh rd, Tullyhubbert Rd, Ballycreely Rd, Ballygowan Rd and Clattering Ford), Northern Ireland Water Limited intermittent discharges, sewage pumping stations (Old Mill Race and Carnesure Terrace) and septic tanks (domestic and private).	DOE NIEA	2010
	3	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Cully's Burn
Water body identification code:	UKGBNI1NE050504085
	This is a heavily modified water body.
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
2015 Objective:	Moderate ecological potential
2021 Objective:	Good 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:	Moderate
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	Moderate
Biochemical oxygen demand*:	Good

Hydrological regime:	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-heavily-modified.htm

Water body name: Cully's Burn (14) #
Water body identification code: UKGBNI1NE050504085
2009 status: Moderate Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: Strangford Lough North (UKGBNI6NE140)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
DO, Ammonia, Soluble Reactive Phosphorus, Hydrological Regime	1	Investigate ammonia elevations	DOE NIEA	2011
	2	Investigate Dissolved Oxygen suppressions	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	Carryout Rapid Hydro morphology Assessment Technique (RHAT) survey to ground truth heavily modified designation	DOE NIEA	
	5	Raise awareness of the impact of misconnections where they have been identified to be causing a deterioration in water quality.	DOE NIEA	Ongoing
	6	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	7	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	8	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, sewage pumping stations (Braeside, Glenford Way and South Street) and septic tanks (private and domestic)	DOE NIEA	2010
	9	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	10	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
	11	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Cunning Burn
Water body identification code:	UKGBNI1NE050504086
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Poor
(Confidence in overall status:	Low)

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

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: Cunning Burn (13) #
Water body identification code: UKGBNI1NE050504086
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough North (UKGBNI6NE140)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Soluble Reactive Phosphorus	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	3	Assess sources of organic pollution including agriculture and septic tanks (domestic and private)	DOE NIEA	2010
	4	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Dibney River
Water body identification code:	UKGBNI1NE050504009
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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
Dissolved oxygen:	High
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	Good
Biochemical oxygen demand*:	High

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: Dibney River (7) #
Water body identification code: UKGBNI1NE050504009
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Soluble Reactive Phosphorus, Morphological Conditions	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Assess sources of organic pollution including agriculture, wastewater treatment works (Ballytrim), Northern Ireland Water Limited intermittent discharges, sewage pumping station (Annsfield) and septic tanks (domestic and private)	DOE NIEA	2010
	3	Work with and support Dibney River Trust in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford LMA Action Plan.	DOE NIEA	2010
	4	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Enler River
Water body identification code:	UKGBNI1NE050504080
	This is a heavily modified water body.
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
2015 Objective:	Moderate ecological potential
2021 Objective:	Good 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:	Good
Phytobenthos:	Moderate
Dissolved oxygen:	Good
Soluble reactive phosphorus:	Moderate
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	Good
Temperature*:	High

Hydrological regime:	High

Dissolved copper:	Good
Phenol:	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: Enler River (1) #
Water body identification code: UKGBNI1NE050504080
2009 status: Poor Ecological Potential
2015 Objective: Moderate Ecological Potential
Upstream water bodies:
Downstream water body: Comber River (UKGBNI1NE050504020)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Phytobenthos, Soluble Reactive Phosphorus	1	Investigate the feasibility for in-channel fishery habitat enhancement	DCAL	2011
	2	Carryout Rapid Hydro morphology Assessment Technique (RHAT) survey to ground truth heavily modified designation	DOE NIEA	2010
	3	Raise awareness of the impact of misconnections where they have been identified to be causing a deterioration in water quality.	DOE NIEA	Ongoing
	4	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	5	Investigate downstream impacts of discharges from industrial premises where problems have been identified to establish potential sources of pollution	DOE NIEA	2011
	6	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, sewage pumping stations (Ballyhanwood, Bradshaws Brae and Craiganlet South) and septic tanks (domestic and private)	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	8	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
	9	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Ganaway Burn
Water body identification code:	UKGBNI1NE050504031
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Moderate
Dissolved oxygen:	Poor
Soluble reactive phosphorus:	Poor
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-riverslakes.htm

Water body name: Ganaway Burn (11) #
Water body identification code: UKGBNI1NE050504031
2009 status: Bad
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Ards Penninsula (UKGBNI6NE110)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Macrophytes, Dissolved Oxygen, Soluble Reactive Phosphorus	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Investigate Dissolved Oxygen suppressions	DOE NIEA	2011
	3	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	4	Assess sources of organic pollution including agriculture, and septic tanks (domestic and private)	DOE NIEA	2010
	5	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Mill Burn
Water body identification code:	UKGBNI1NE050504021
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
2015 Objective:	Moderate Status
2021 Objective:	Moderate 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:	Bad
(Confidence in overall status:	Low)

Benthic invertebrates:	Bad
Macrophytes:	Good

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: Mill Burn (12) #
Water body identification code: UKGBNI1NE050504021
2009 status: Bad
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Ards Penninsula (UKGBNI6NE110)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates	1	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	2	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent Discharges and septic tanks (domestic and private)	DOE NIEA	2010
	3	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Mill Quarter Stream
Water body identification code:	UKGBNI1NE050504058
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Alkalinity >200 (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:	Moderate
Dissolved oxygen:	High
Soluble reactive phosphorus:	High
pH:	High
Ammonia:	High
Biochemical oxygen demand*:	High

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: Mill Quarter Stream (9) #
Water body identification code: UKGBNI1NE050504058
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough Narrows (UKGBNI6NE120)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Macrophytes, Morphological Conditions	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, sewage pumping station (Bisphops Court) and septic tanks (domestic and private)	DOE NIEA	2010
	3	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	River Blackwater
Water body identification code:	UKGBNI1NE050504057
Catchment stakeholder group:	Strangford & Lecale
Local management area:	Strangford
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:	Poor
(Confidence in overall status:	Low)

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

Hydrological regime:	High

Chloroform (trichloromethane):	Good
Dissolved copper:	Good
Carbon tetrachloride:	Good
1,2-Dichloroethane:	Good
Phenol:	Good
Tetrachloroethylene:	Good
Trichloroethylene:	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 Blackwater (5) #
Water body identification code: UKGBNI1NE050504057
2009 status: Poor
2015 Objective: Moderate
Upstream water bodies:
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Benthic Invertebrates, Fish, Phytobenthos Soluble Reactive Phosphorus	1	Complete the phosphorus nutrient budget work for Northern Ireland	Agri-Food and Biosciences Institute	2011
	2	Monitor fish population at Ballymartin Road Bridge	DCAL	2010
	3	Investigate downstream impacts of discharges from industrial premises where problems have been identified to establish potential sources of pollution	DOE NIEA	2011
	4	Carry out a river walk to determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus	DOE NIEA	2011
	5	Create an inventory of physical structures within the river channel and bank structures	DOE NIEA	2011
	6	Assess sources of organic pollution including agriculture, wastewater treatment works (Ballygowan, Thorney Glen, Kilmood and Killinchy) Northern Ireland Water Limited intermittent discharges, sewage pumping stations (Kerries Glen, Balloo, Darragh Cross, Oaklands, Mossvale, Carsons Rd and Oakdale) and septic tanks (domestic and private)	DOE NIEA	2010
	7	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	8	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
	9	Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through proctical management measures on farms	DARD Countryside Management Branch	Ongoing
		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:	Strangford Lough Narrows
Water body identification code:	UKGBNI6NE120
Catchment stakeholder group:	Strangford and Lecale
Local management area:	Strangford
2015 Objective:	Good Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Euhaline, mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current overall status:	Good

Macroalgae:	High
Phytoplankton:	High
Hydromorphology:	High
General conditions:	High
Dissolved oxygen:	High
Dissolved inorganic nitrogen:	High
Alien species:	Good

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

Water body name: Strangford Lough Narrows (18) #
Water body identification code: UKGBNI6NE120
2009 status: Good
2015 Objective: Good
Upstream water bodies: Strangford Lough South (UKGBNI6NE130)
Black Causeway strangford
(UKGBNI1NE050504010) Mill Quarter Stream
(UKGBNI1NE050504058)
Downstream water body: Ards Penninsula (UKGBNI6NE110)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
	1	Highlight location of Spartina anglica to Spartina Control Group and promote education and awareness leaflets dealing with Invasive species	DOE NIEA	2015
	2	Maintain current regulatory controls, monitoring existing measures in order to maintain the good status of this water body	All	Ongoing
	3	Work with and support Strangford and Lecale Partnership in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford 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:	Strangford Lough North
Water body identification code:	UKGBNI6NE140
Catchment stakeholder group:	Strangford and Lecale
Local management area:	Strangford
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Euhaline, mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current overall status:	Moderate

Benthic invertebrates:	Good
Macroalgae:	Moderate
Phytoplankton:	High
Angiosperms:	Moderate
Hydromorphology:	Good
General conditions:	Moderate
Dissolved oxygen:	High
Dissolved inorganic nitrogen:	Moderate
Alien species:	Good
Specific pollutants:	Fail
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-coastal.htm

Water body name: Strangford Lough North (16) #
Water body identification code: UKGBNI6NE140
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies: Cully's Burn (UKGBNI1NE050504085)
Cunning Burn (UKGBNI1NE050504086)
Comber River (UKGBNI1NE050504020)
Comber River (UKGBNI1NE050504023)
Downstream water body: Strangford Lough South (UKGBNI6NE130)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Angiosperm, Macroalgae, Dissolved Inorganic Nitrogen, Ammonia	1	Highlight location of Spartina anglica to Spartina Control Group and promote education and awareness leaflets dealing with Invasive species	DOE NIEA	2015
	2	Continue to monitor to confirm evidence of trophic status	DOE NIEA	Ongoing
	3	Work with and support Strangford and Lecale Partnership in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford LMA Action Plan.	DOE NIEA	2010
	4	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, wastewater treatment works, sewage pumping stations and septic tanks (private and domestic)	DOE NIEA	2010
	5	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	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
		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:	Strangford Lough South
Water body identification code:	UKGBNI6NE130
Catchment stakeholder group:	Strangford and Lecale
Local management area:	Strangford
2015 Objective:	Moderate Status
2021 Objective:	Good Status
2027 Objective:	Good Status
The type of this water body is:	Euhaline, mesotidal, sheltered
2005 risk assessment:	1a - At risk
Current overall status:	Moderate

Benthic invertebrates:	Good
Macroalgae:	High
Phytoplankton:	High
Hydromorphology:	Good
General conditions:	Moderate
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-coastal.htm

Water body name: Strangford Lough South (17) #
Water body identification code: UKGBNI6NE130
2009 status: Moderate
2015 Objective: Moderate
Upstream water bodies: Strangford Lough North (UKGBNI6NE140)
River Blackwater (UKGBNI1NE050504057)
Dibney River (UKGBNI1NE050504009)
Ballymorran Burn (UKGBNI1NE050504006)
Clea Lakes (UKGBNI3NE0023) Blackstaff River (UKGBNI1NE050504022)
Downstream water body: Strangford Lough Narrows (UKGBNI6NE120)

Problem	Solution			
Failing Element		Action to be taken	Action to be taken by	Make operational by
Dissolved Inorganic Nitrogen	1	Highlight location of Spartina anglica to Spartina Control Group and promote education and awareness leaflets dealing with Invasive species	DOE NIEA	2015
	2	Continue to monitor to confirm evidence of trophic status	DOE NIEA	Ongoing
	3	Carry out compliance assessment of Kirkubbin WWTW to form future upgrades	DOE NIEA	2011
	4	Work with and support Strangford and Lecale Partnership in raising awareness of environmental issues and projects. Seek to identify solutions to water management problems and develop and promote the Strangford LMA Action Plan.	DOE NIEA	2010
	5	Assess sources of organic pollution including agriculture, Northern Ireland Water Limited intermittent discharges, wastewater treatment works, sewage pumping stations and septic tanks (private and domestic)	DOE NIEA	2010
	6	Targeted education, advice and regulatory action to prevent pollution and protect the water environment	DOE NIEA	2010
	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
		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.

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
DARD	Department of Agriculture and Rural Development
DCAL	Department of Culture, Arts and Leisure
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).
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.

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

An Agency within the Department of the Environment
www.doeni.gov.uk

INVESTORS IN PEOPLE