

Northern Ireland
Environment Agency

CARLINGFORD AND NEWRY

Local Management Area Information Leaflet



Information Leaflet - Carlingford and Newry Local Management Area

The River Basin Management Plans will be implemented through Local Management Areas (LMAs) during the 2010 to 2015 planning cycle. This information leaflet is one of a series for each of the 26 LMAs across the Neagh Bann, North Western and North Eastern Districts. The leaflet includes details of the characteristics and quality of the water environment within the area and specific local measures identified to improve the water environment.

The leaflet will inform work with stakeholders, through **Catchment Stakeholder Groups**, to develop focused implementation plans for each LMA in the Neagh Bann District. These LMA Plans will be implemented on a three-year rolling programme within the Neagh Bann District as set out below:

- Ballinderry and Lough Neagh in 2010;
- Blackwater, Lower Bann and Carlingford & Newry in 2011;
- Upper Bann, Moyola, Six Mile Water and Braid & Main in 2012.

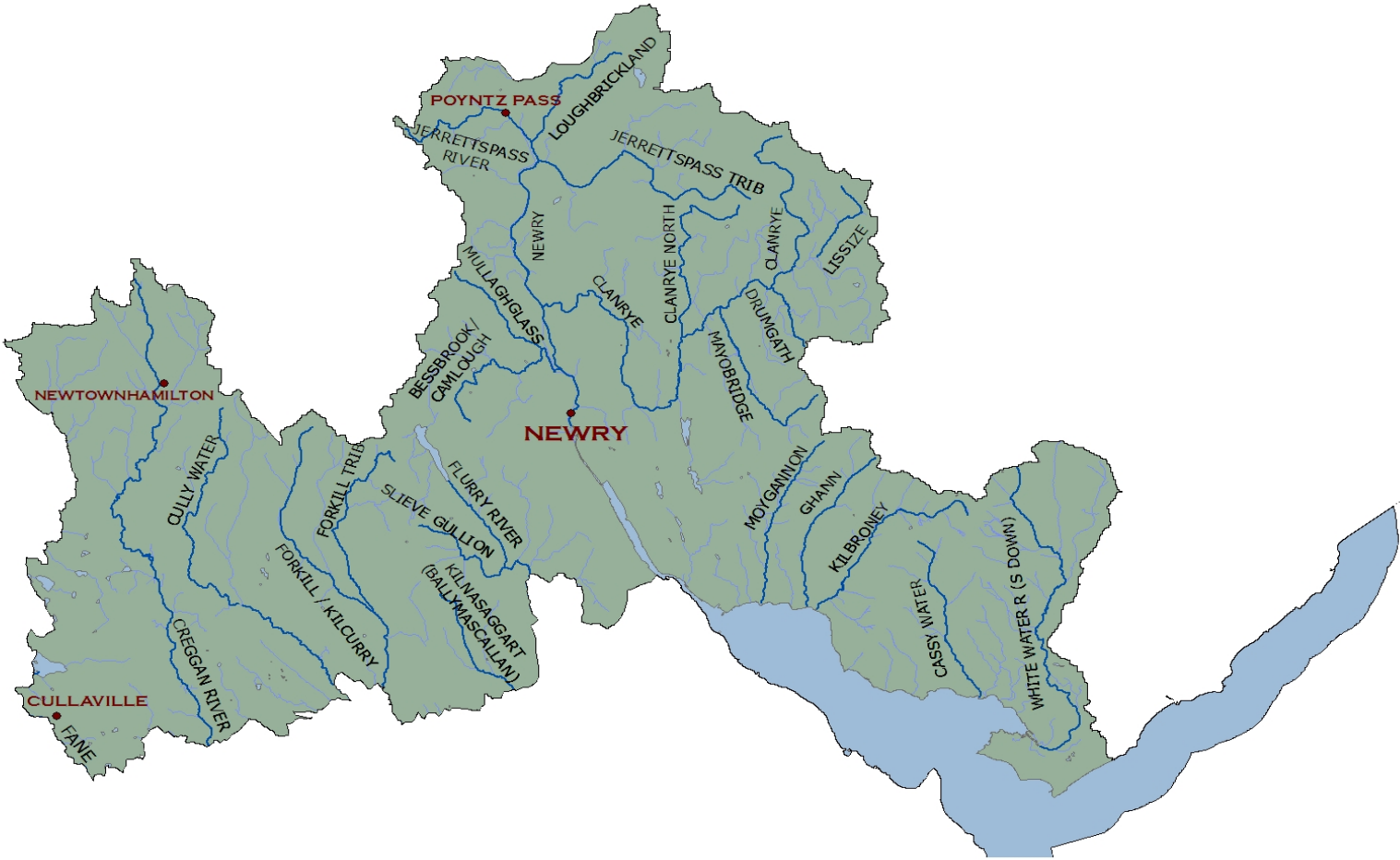
Introduction

Carlingford and Newry LMA, part of the Neagh Bann River Basin District, drains into Carlingford Lough. The area covers approximately 823 km². The main river is the Newry River which rises in Lough Shark and flows to Newry Town and Carlingford Lough. There are also a number of smaller distinct river systems such as the Creggan River, Cully Water, Flurry River that flow south into the Republic of Ireland and others, for example, the White Water River, Kilbroney River and Cassey Water that flow directly into Carlingford Lough.

The main towns are Newry and Warrenpoint, with several smaller towns throughout the area such as Rostrevor, Rathfriland and Loughbrickland.

The LMA borders the Mourne Mountains Area of Outstanding Natural Beauty in the north and the Ring of Gullion in the west.

Carlingford and Newry LMA with main rivers identified



The quality of water bodies in Carlingford and Newry LMA

Our understanding of the state of Northern Ireland's water environment and Carlingford and Newry LMA has developed as we have adapted to the requirements of the Water Framework Directive. Now, when assessing water quality, we consider both ecological and chemical quality, as well as the pressures that can affect them.

Some water bodies 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 have been deepened to allow for navigation, others have flood defences or have been dammed to provide a source of drinking water. These are called Heavily Modified or Artificial water bodies and are required to meet Good Ecological Potential (GEP) rather than good status.

Cam Lough Streams and Cam Lough have been classified as heavily modified. A section of Newry River is an artificial water body.

What is the current status of surface waters in Carlingford and Newry LMA?

95% of surface water bodies in Carlingford and Newry LMA have been classified as less than good status. Many of the rivers failed to achieve good status due to suppressed invertebrate populations and morphological alterations.

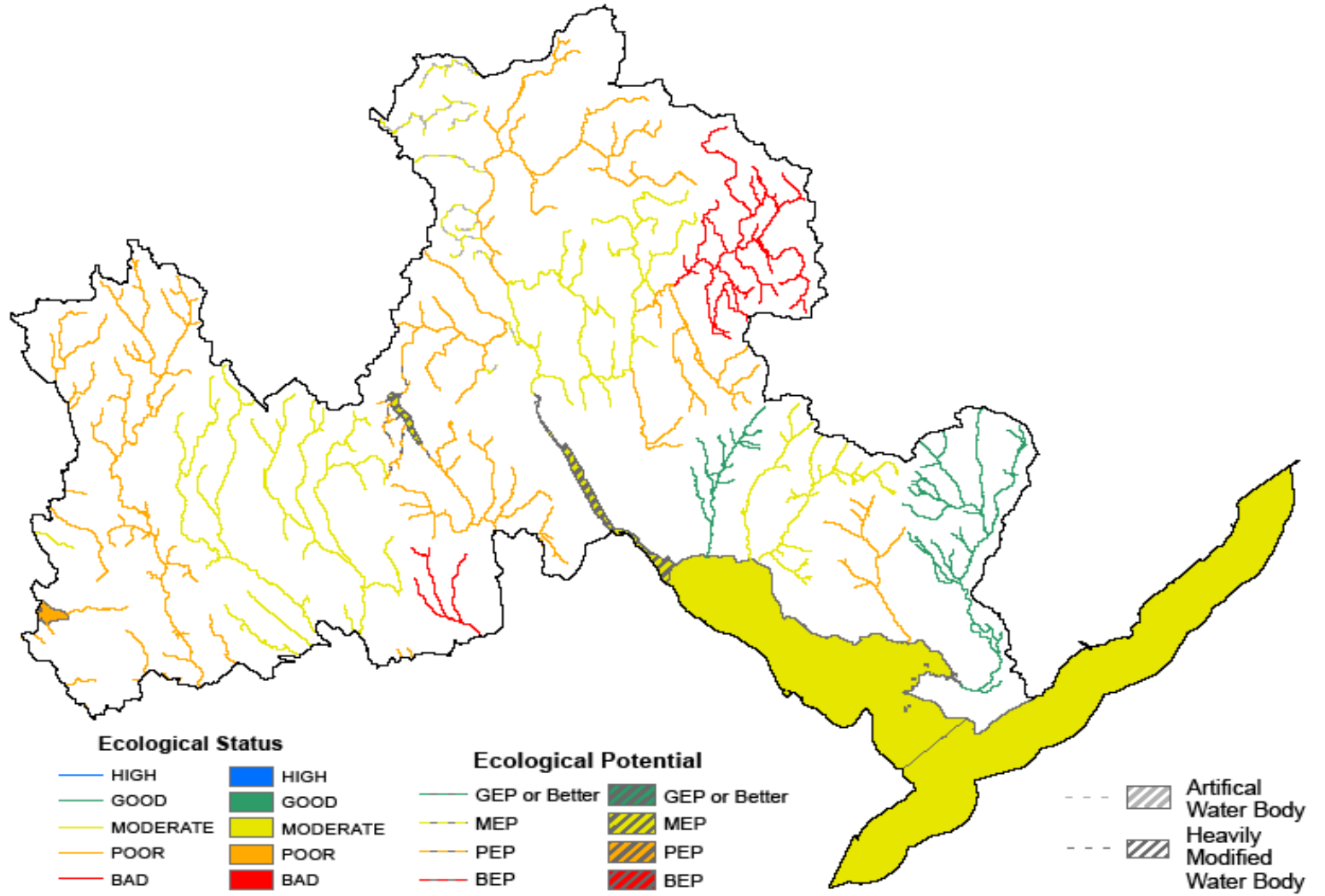
Table 1: Status of surface waters in Carlingford and Newry LMA

Water body type	High	Good	Moderate	Poor	Bad	GEP	MEP	PEP	BEP
River	0	2	13	14	2	0	1	1	0
%	0	6	39	43	6	0	3	3	0
Lake	0	0	0	1	0	0	1	0	0
%	0	0	0	50	0	0	50	0	0
Transitional & Coastal	0	0	2	0	0	0	1	0	0
%	0	0	67	0	0	0	33	0	0
Total Surface Water	0	2	15	15	2	0	3	1	0
%	0	5	39.5	39.5	5	0	8	3	0

Groundwaters (underground water) interact with the surface waters around them, thus the quality and quantity of an area's groundwater can affect the surface waters.

There are 2 groundwater bodies in Carlingford and Newry LMA. They are Newry and Louth, both of which are achieving good status.

Overall status of water bodies in Carlingford and Newry LMA



Protected areas in Carlingford and Newry LMA

The LMA supports important habitats and wildlife. These areas have been designated under European Directives and require special protection. The protected areas are summarised in the following table.

Table 2: Protected areas in Carlingford and Newry LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There are 5 drinking water protected areas.
<p>Areas designed to protect economically significant aquatic species</p> <p>Freshwater Fish Directive (78/659/EEC)</p> <p>Shellfish Waters Directive (79/923/EC)</p>	<p>There are 244 km of rivers (designated Salmonid), 18 km of canal (designated Cyprinid) and 1.5 km² of lakes (designated Salmonid) identified under the Freshwater Fish Directive.</p> <p>There are 2 designated shellfish waters; Ballyedmond and Cassey Water.</p>
<p>Bathing Waters</p> <p>These are bathing waters identified under the Bathing Waters Directives (76/160/EEC)</p>	There are 2 identified bathing waters; Cranfield and Cranfield (Nicholson's Strand).
<p>Nutrient Sensitive Areas</p> <p>Areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC) and the Nitrates Directive (91/676/EEC)</p>	<p>There is 1 Urban Waste Water Treatment Directive sensitive areas; River Newry.</p> <p>A total territory approach has been adopted in Northern Ireland for the Nitrates Directive.</p>
<p>Areas designated for the protection of habitats or species (Natura 2000 sites)</p> <p>These are areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection.</p> <p>Habitats Directive (92/43/EEC)</p> <p>Birds Directive (79/409/EEC)</p>	<p>There are 4 water dependent Special Areas of Conservation; Rostrevor Wood, Slieve Gullion, Derryleckagh and Eastern Mournes.</p> <p>There is 1 water dependent Special Protection Area; Carlingford Lough.</p>

Why are some waters not reaching good status?

There are a number of pressures that may prevent some waters reaching good quality. The main ones are considered to be:

- **Abstraction and flow regulation**
- **Diffuse and point source pollution**
- **Changes to morphology (physical habitat)**
- **Invasive alien species**

3 river water bodies in the area were identified as being impacted by **abstraction and flow regulation**. These were: Bessbrook, Camlough Streams and Fane River.

A number of the biological and chemical water quality elements used in classification can be affected by both **diffuse and point source pollution**.

Table 3: Water bodies not reaching good status due to diffuse and point source pollution

Classification element affected*	Number of water bodies showing impacts			
	River	Lake	Transitional	Coastal
Macrophytes	5	1	N/A	N/A
Diatoms	1	0	N/A	N/A
Phytoplankton	N/A	2	N/A	0
Macroalgae	N/A	N/A	N/A	0
Angiosperms	N/A	N/A	N/A	0
Invertebrates	15	N/A	0	0
Fish	5	0	0	N/A
DIN	N/A	N/A	1	2
Phosphorous	7	1	N/A	N/A
Dissolved Oxygen	10	0	0	0
Specific Pollutants / Priority Substances	1	0	0	0

*More than one element may be affected in each individual water body.

In this LMA the main impact was seen in invertebrate populations. The rivers affected were: Clanrye, Newry, Bessbrook, Camlough, Creggan, Flurry and County Water.

13 water bodies were identified as being affected by **changes to morphology (physical habitat)**. The main rivers affected were: Clanrye River, Dorsy River, Forkhill River, Ummeracam, Kilcurry, Ghann, Kilbroney, Creggan and Newry River.

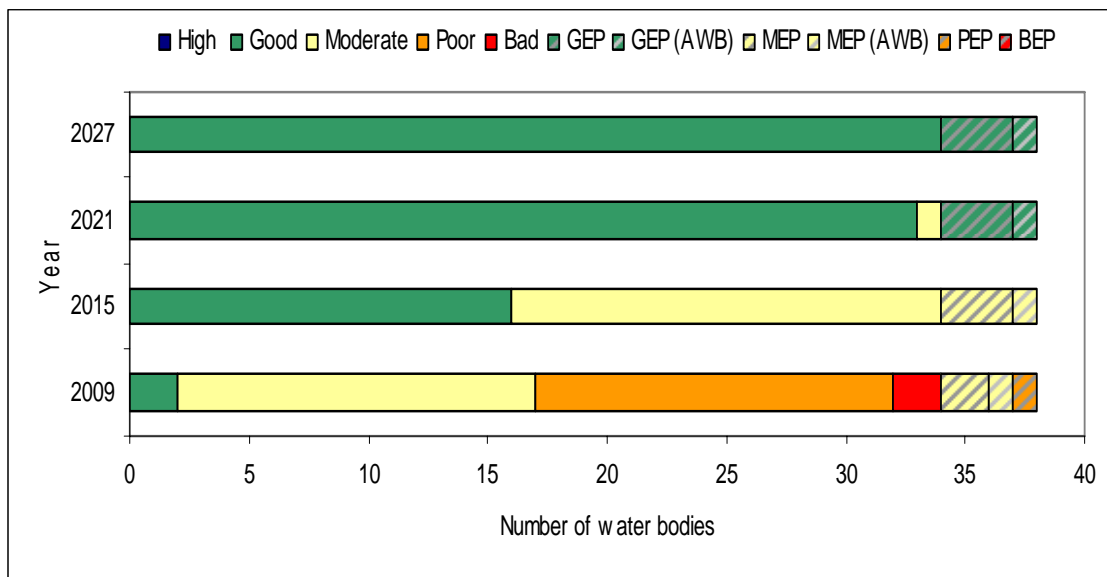
The water environment in Northern Ireland has been impacted by the introduction of **invasive alien species**. Species which have already become established in this area include:

- Canadian Pondweed (*Elodea canadensis*)
- Giant Hogweed (*Heracleum mantegazzianum*)
- Japanese Knotweed (*Fallopia japonica*)

What improvements do we plan to achieve?

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

Current status and proposed objectives for surface waters in Carlingford and Newry LMA



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

There are a number of measures which will be implemented in Carlingford and Newry LMA in order to maintain and improve the water environment.

The programme of measures described in the Neagh Bann River Basin Management Plan has been categorised into two types of measures: **existing and planned** and **supplementary**. Existing and planned measures aim to ensure that existing water uses are appropriately managed and that the water environment remains at good status.

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

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

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

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

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

The following measures are in place to manage the problems with alien species:

- Rivers Agency Management protocols (Giant Hogweed and Japanese Knotweed)
- NIEA/National Parks and Wildlife Service best practice management guidance for Japanese Knotweed and Giant Hogweed.

www.ni-environment.gov.uk/wfd

- A number of codes of practice, educational and awareness leaflets have been prepared and are available to download from www.invasivespeciesireland.com

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

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

There are no specific measures for Derryleckagh, Rostrevor Wood and Eastern Mourne Special Areas of Conservation as there are no water related adverse activities causing the unfavourable condition assessment of the water dependent features. Features in Slieve Gullion Special Area of Conservation are in unfavourable condition, but they are recovering with current measures. The Carlingford Lough water dependent Special Protection Area is in favourable condition. Further details on Special Areas of Conservation and Special Protection Areas in the Carlingford and Newry LMA are available in the **protected areas** section of the website.

Supplementary measures required to achieve environmental objectives for rivers, lakes, transitional and coastal water bodies have been identified for a number of sectors and pressures in this LMA. Supplementary measures will be applied during the implementation phase of the River Basin Management Plans subject to necessary funding and tests to justify technical feasibility and cost effectiveness.

Table 4: ¹Supplementary measures in Carlingford and Newry LMA

Key sectors	Supplementary measures	Additional information
Agriculture	Target education, advice and regulatory action	See Table 3 for number of water bodies where invertebrates are less than good.
Collection & treatment of sewage	Assess significance of septic tanks and take action accordingly	See Table 3 for number of water bodies where invertebrates are less than good.
	Upgrade WWTW under the Rural Wastewater Investment Programme	² Armagh Road, Carrickrovaddy, Loughdian, Mullaghglass (Loughgilly) and Savalmore Cottage to be completed by 2010
	Upgrade WWTW with a population equivalent greater than 250	² Forkhill upgrade under PC10 Lurganare upgrade under PC10 Mullaghbane upgrade under PC10
Industry & other business	Improve compliance with discharge consents	There are 8 non compliant discharges based on 2008 compliance data
Agriculture Collection & treatment of sewage Industry & other business	Assess point source phosphorus loads	See Table 3 for number of water bodies where SRP, diatoms or macrophytes are less than good.
	Target further phosphorus controls from point sources	
	Assess diffuse nutrient loads using mathematical modelling	
	Target further phosphorus controls from diffuse sources	
Pressures	Supplementary measures	Additional information
Abstraction and flow regulation Morphology	Develop mitigation measures identified for hydromorphology pressures	There are 4 HMWBs at <GEP and 13 water bodies are affected by changes to morphology.
Specific Priority Substances	Develop and implement Pollution Reduction Programmes	See Table 3 for number of water bodies impacted by Specific Pollutants/Priority Substances
Pressure unknown	Carry out further Investigation	There is 1 water body which fails due to copper. There are 20 water bodies where confidence in class is low.
Alien species	Education and awareness campaigns and, where presence of aliens exist, eradicate where possible	

¹ Strategic Environmental Assessment has considered the impacts associated with the suite of supplementary measures proposed. Where impacts were identified, mitigation measures were proposed and are detailed in the SEA Mitigation Measures document which is available on the website.

² The dates/works upgrades may be subject to change. PC10 upgrades cover the period April 2010 – March 2013

Responses from the draft River Basin Plan consultation were used to identify the measures below:

- promote efficient use of water;
- introduce seasonal discharge consents, where possible, to promote installation of reed beds and constructed wetlands for sewage treatment;
- improve septic tank maintenance installation and design;
- review and investigate the effectiveness of wetlands in the reduction of nutrient loadings;
- facilitate River Trusts across Northern Ireland.

The improvements in water quality proposed above will be delivered through a programme of measures, coordinated by the Department of the Environment, some of which are already being carried out in Carlingford and Newry LMA.

Local measures are also being applied in this LMA. There are a number of projects and initiatives run, for example, by local communities, angling groups and voluntary environmental organisations that will contribute to achieving the objectives we have set for our waters. Some of those happening in the Carlingford and Newry LMA are shown below.

National Trust Projects

- The National Trust has local measures against point and diffuse pollution through their Environmental Compliance Audit of all National Trust owned sites. Emergency remedial action has been or is being completed on possible diffuse and point pollution sources. A code of practice has also been issued for sites with septic tanks. This specifically relates to a property at Derrymore House.
- Control of invasive species on National Trust land. Participation in invasive species control forums and provide advice on good practice in invasive species control. This project is ongoing at Derrymore House.
- There are project to audit of water use at all National Trust sites to establish a baseline then set targets for reduction and introduce water efficiency measures. This project is ongoing at Derrymore House.
- There are site specific projects to improve fish habitats and access for salmonids where the main pressure is fishing. This project is ongoing at Derrymore House.

The Clanrye Angling Project involves monitoring improvements using a fish counter installed at Thompsons Weir in Newry following a project to increase populations of salmon and trout in the Clanrye River system.

If you are running a project or carrying out work that will assist in protecting the water environment or water dependant features, or restoring natural waters then we would encourage you to let us know.

www.ni-environment.gov.uk/wfd

Contact details for your **Catchment Stakeholder Group** are available on the **public participation** section of the website.

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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