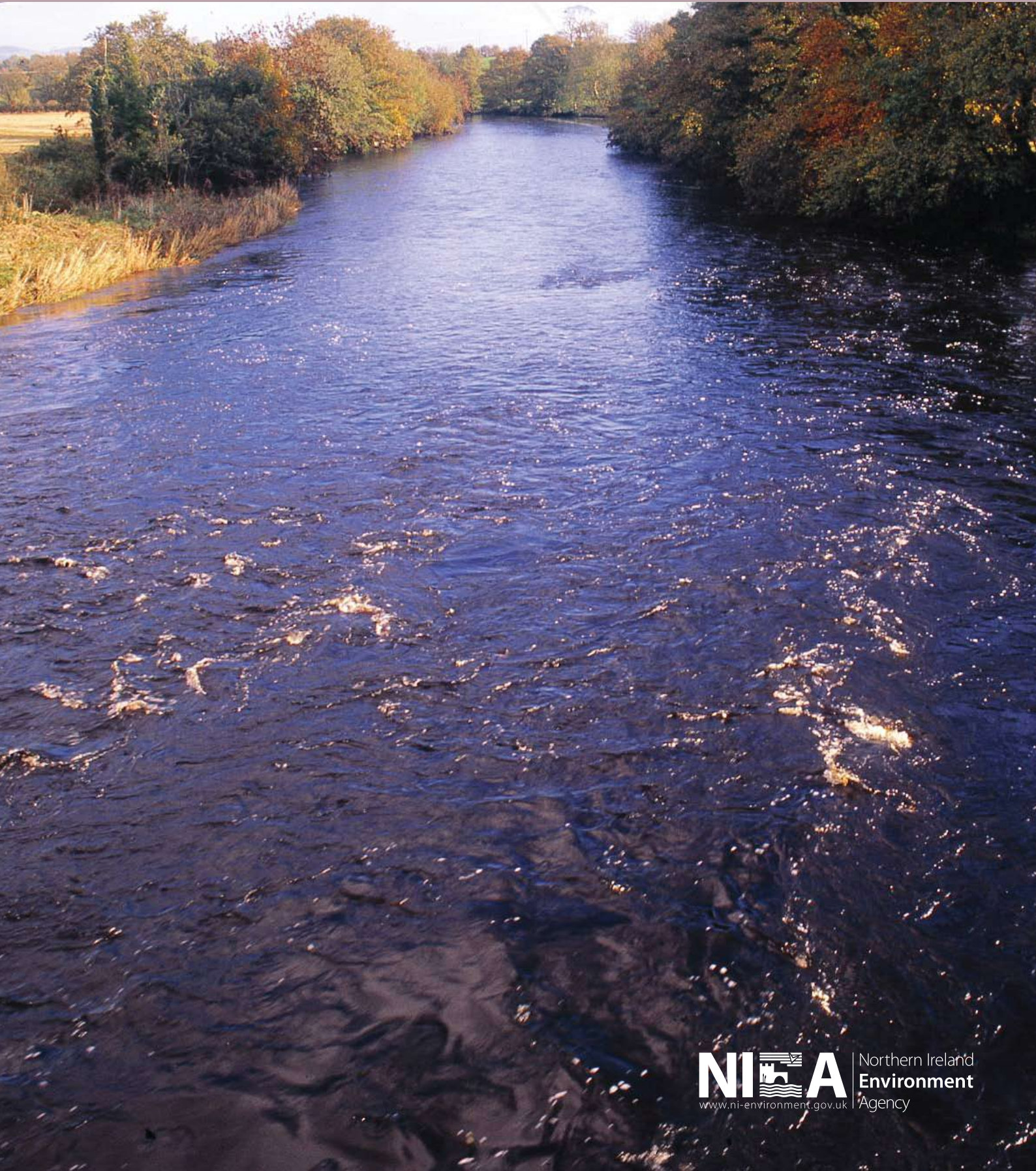


Northern Ireland
Environment Agency

DERG AND MOURNE

Local Management Area Information Leaflet



Information Leaflet - Derg and Mourne 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 North Western District. These LMA Plans will be implemented on a three-year rolling programme within the North Western District as set out below:

- Lower Lough Erne, Owenkilow and Burn Dennet & Foyle in 2010;
- Upper Lough Erne, Derg & Mourne and Roe in 2011;
- Lough Melvin and Arney, Strule and Faughan in 2012.

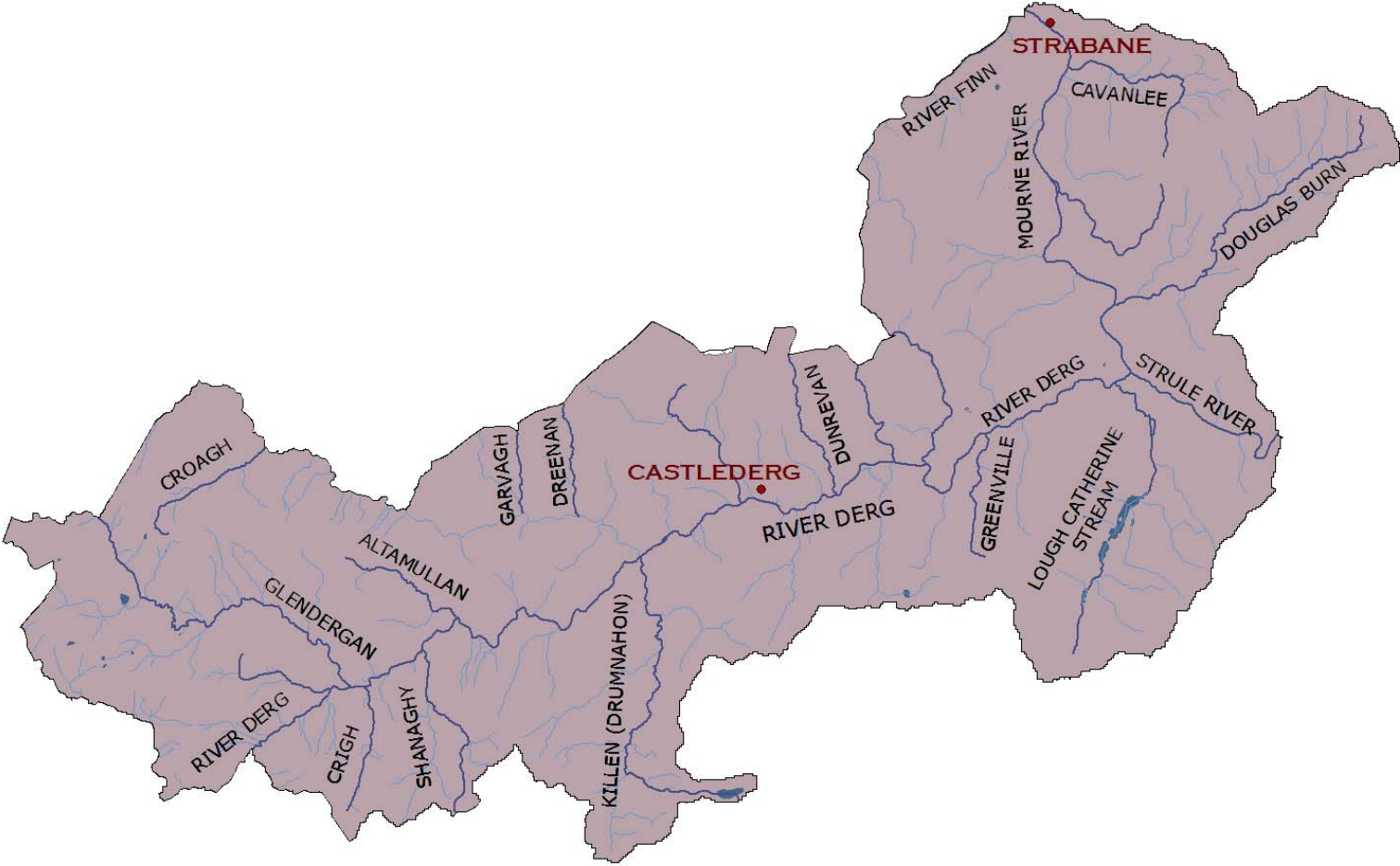
Introduction

Derg and Mourne LMA is part of the North Western River Basin District and covers an area of approximately 410 km². There are several main rivers in this LMA. These are River Mourne/Strule, River Derg, River Finn and Mourne Beg River. They are of international importance for Atlantic Salmon. Other important fish species are also present within this LMA. These include Trout (Sea trout and resident Brown Trout), Sea Lamprey, River/Brook Lamprey, European Eel, Pike and Perch.

Strabane, Sion Mills and Castlederg are the largest towns in the area. The land usage is predominantly improved grassland giving way to acid grass, fen, mixed woodland and coniferous woodland west of Killeter. There are large areas of cut over blanket bog and large expanses of intact bog of national and international importance within the LMA.

The area fringes on the Sperrin Area of Outstanding Natural Beauty and supports a wide range of recreational activities including walking, cycling, angling, canoeing and other outdoor pursuits.

Derg and Mourne LMA with main rivers identified



The quality of water bodies in Derg and Mourne LMA

Our understanding of the state of Northern Ireland's water environment and Derg and Mourne 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 these factors.

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.

Some sections of Mourne River have been identified as heavily modified.

What is the current status of surface waters in Derg and Mourne LMA?

82.4% of surface water bodies in Derg and Mourne LMA have been classified as less than good status. Many of the rivers failed to achieve good status due to impacted invertebrate and diatom communities and elevated specific pollutant levels.

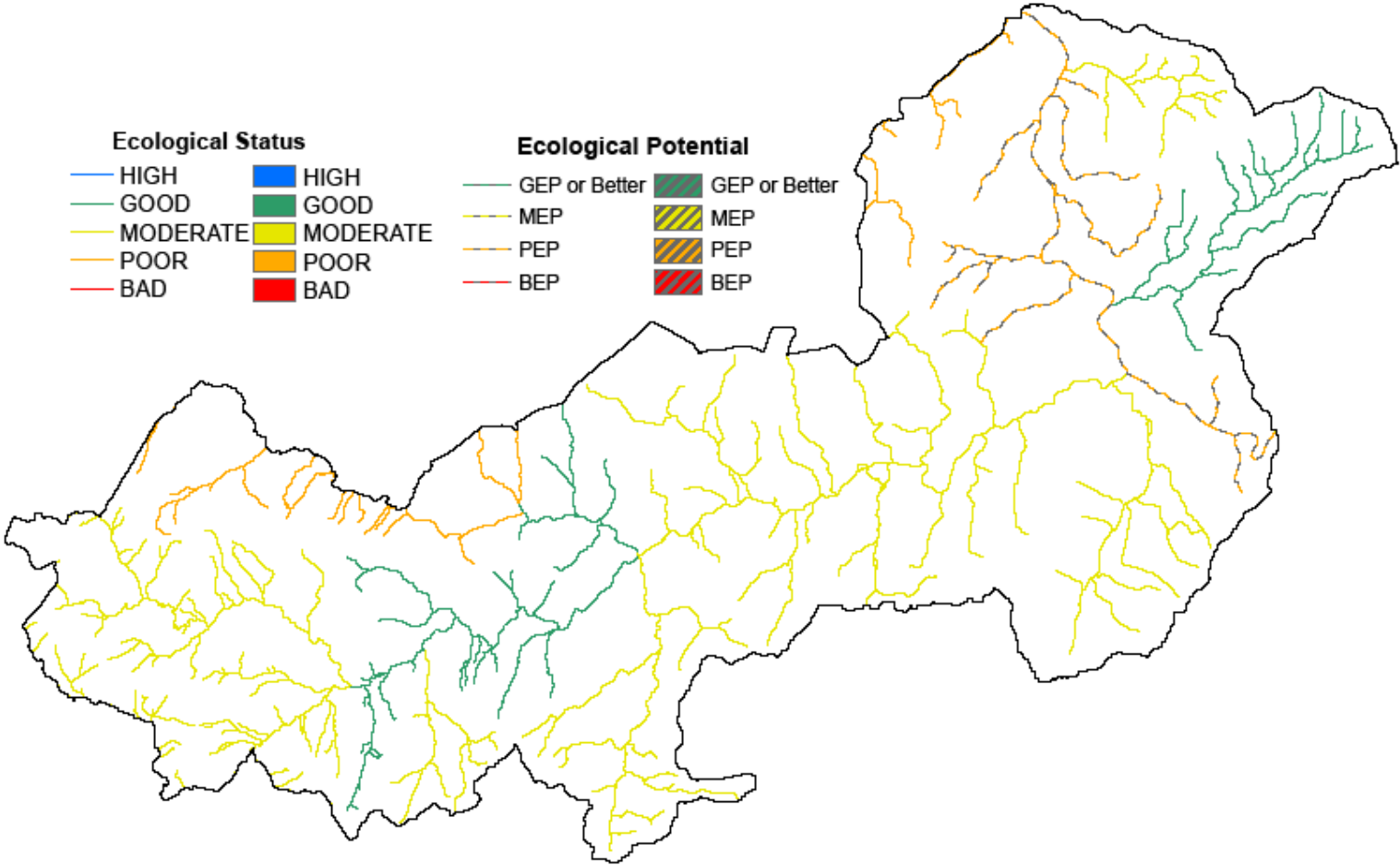
Table 1: Status of surface waters in Derg and Mourne LMA

Water body type	High	Good	Moderate	Poor	Bad	GEP	MEP	PEP	BEP
River	0	3	11	2	0	0	0	1	0
%	0	17.6	64.7	11.8	0	0	0	5.9	0
Lake	0	0	0	0	0	0	0	0	0
%	0	0	0	0	0	0	0	0	0
Total Surface Waters	0	3	11	2	0	0	0	1	0
%	0	17.6	64.7	11.8	0	0	0	5.9	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.

All of the groundwater bodies in Derg and Mourne LMA are achieving good status.

Overall status of water bodies in Derg and Mourne LMA



Protected areas in Derg and Mourne 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 Derg and Mourne LMA

Protected Area Type	Location
Waters used for the abstraction of drinking water (drinking water protected areas)	There are groundwater and 2 drinking water protected areas.
Areas designed to protect economically significant aquatic species Freshwater Fish Directive (78/659/EEC) Shellfish Waters Directive (79/923/EC)	There are 145 km of rivers identified under the Freshwater Fish Directive all designated Salmonid There are no designated shellfish waters.
Bathing Waters These are bathing waters identified under the Bathing Waters Directives (76/160/EEC)	There are no identified bathing waters.
Nutrient Sensitive Areas Areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC) and the Nitrates Directive (91/676/EEC)	There is 1 Urban Waste Water Treatment Directive sensitive area; River Foyle. 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 is 1 water dependent Special Area of Conservation; River Foyle and its tributaries. There are no water dependent Special Protection Areas.

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**

Three water bodies in the area were identified as being impacted by **abstraction and flow regulation**. The main rivers affected were Mourne Beg and River Derg. In Mourne Beg River the impact did not result in a lowering of the overall status and we will continue to monitor this river for any further changes.

A number of 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
Macrophytes	1
Diatoms	3
Phytoplankton	N/A
Macroalgae	N/A
Angiosperms	N/A
Invertebrates	5
Fish	0
DIN	N/A
Phosphorous	0
Dissolved Oxygen	0
Specific Pollutants/Priority Substances	3

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

In this LMA the main impact was seen in the invertebrate communities. This element is associated with organic enrichment and the rivers affected were: River Derg tributary, Lough Catherine, Shanaghy Burn, Mourne Beg and Cavanalee.

There was also evidence of nutrient enrichment within the LMA. The main impact was observed in diatom communities. The rivers affected were: Killen Burn, Mourne River and River Derg.

Three river water bodies failed to achieve good status for specific pollutants/priority substances (specifically copper and zinc). It is currently unclear if this is due to natural conditions. The elevated metal levels may be associated with upland peaty soils and granite outcrops. The rivers that were affected were: Shanaghy Burn, Mourne Beg and Glendergan.

Two water bodies were identified as being affected by **changes to morphology (physical habitat)**. The rivers that were affected were: Finn (Foyle) and Mourne.

Reaches of the Mourne River are classified as heavily modified due to the presence of weirs and flood control at Strabane.

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:

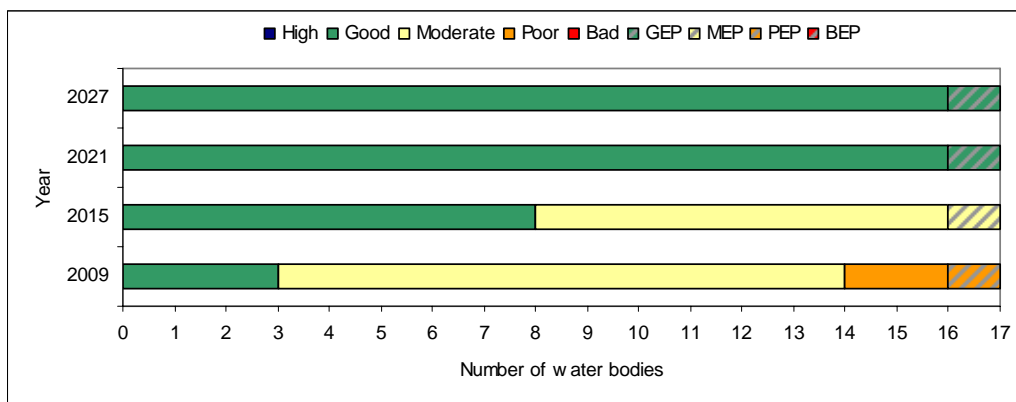
- Japanese Knotweed (*Fallopia japonica*)
- Himalayan Balsam (*Impatiens glandulifera*)

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 47.1% of our surface waters by 2015 and GEP (for Heavily Modified Water Bodies) in 5.9% of our surface waters by 2021.

We also aim to maintain good status in 100% of our groundwaters.

Current status and proposed objectives for surface waters in Derg and Mourne LMA



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

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

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

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

- The Drinking Water Directive (80/778/EEC) as amended by Directive (98/83/EC);
- The Sewage Sludge Directive (86/278/EEC);
- The Urban Waste-water Treatment Directive (91/271/EEC);
- The Environmental Impact Assessment Directive (85/337/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 (Himalayan Balsam and Japanese Knotweed)
- NIEA/National Parks and Wildlife Service best practice management guidance for Japanese Knotweed and Himalayan Balsam.
- 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.

The condition of all the features of the River Foyle and Tributaries Special Area of Conservation has not been assessed. There are no water dependent Special Protection Areas in this LMA. Further details on Special Areas of Conservation in Derg and Mourne 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 Derg and Mourne 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
Industry and other business	Improve compliance with discharge consents	There are 9 non compliant discharges based on 2008 compliance data
Agriculture Collection & treatment of sewage Industry & other business	Assess point source phosphorus loads Target further phosphorus controls from point sources Assess diffuse nutrient loads using mathematical modelling Target further phosphorus controls from diffuse source	See Table 3 for number of water bodies where SRP, diatoms or macrophytes are less than good
Pressures	Supplementary measures	Additional Information
Specific & priority substances	Develop and implement Pollution Reduction Programmes	See Table 3 for number of water bodies impacted by specific pollutants/priority substances
Abstraction & flow regulation Morphology	Develop Mitigation measures identified for hydromorphology pressures	There is 1 HMWB at <GEP and 2 water bodies are affected by changes to morphology
Pressure Unknown	Carry out further Investigation	There are 3 water bodies where there are metal failures zinc and copper. There are 2 waterbodies where confidence in class is low.

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.

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 these measures are already being carried out in Derg and Mourne 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 Derg and Mourne LMA are shown below.

Derg Mourne Issue Log

Pesticide exceedences have been detected at a drinking water abstraction site in the Derg catchment. There has also been an issue with intermittent plugs of ammonia pollution which have caused the abstraction plant to shut down on a number of occasions. An issue log has been created and investigations are on-going to detect the source of the ammonia pollution.

National Trust Projects

Grays Printing Press (Strabane).

- Environmental Compliance Audit of all National Trust owned sites. Water Pressure is diffuse and Point source pollution. Emergency remedial action has been completed. Action on the remaining assets presenting a risk to water quality completed or in progress. Issue a code of practice to septic tank users.
- Audit of water use at all National Trust sites to establish a baseline then set targets for reduction and introduce water efficiency measures. Abstraction and flow pressure.

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.

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

