

# working together

*Managing Our Shared Waters*

north western  
international  
river basin district



**The North Western International River Basin District**



## River Basin Management Plan 2009 - 2015

This document forms part of the River Basin Management Plan (2009-2015) for the North Western International River Basin District, prepared in accordance with the requirements of the EU Water Framework Directive.

The North Western International River Basin District lies partly in Ireland<sup>1</sup> and partly in Northern Ireland. The Water Framework Directive requires that, in cross-border river basin districts, Member States must coordinate their activities with the aim of producing a single management plan covering the entire district.

The Management Plan has four components:

- This document “**Working Together**” describes the coordination that has taken place between the two jurisdictions and the commitment to future coordination. It focuses on the status of the shared waters (those water bodies which lie along the border), the environmental objectives for those waters and the measures to achieve the environmental objectives. This document also provides a summary of status, objectives and measures for all water bodies in the River Basin District.
- **Plans** containing more focussed information on the status, objectives and measures for each jurisdiction.
- **Electronic information systems** which provide access to the status, objectives and measures for each individual water body.
- An extensive range of **background documents** which contributed to the development of the plans including technical studies of key water issues, details of monitoring programmes, classification of waters, environmental objectives and programmes of measures. Other items covered in the background documents include the registers of protected areas, economic analysis, climate change, strategic environmental assessment, links to plans and programmes, and a list of the International River Basin District’s authorities and stakeholders.

The documents and electronic information are accessible on [www.wfdireland.ie](http://www.wfdireland.ie) & [www.ni-environment.gov.uk/wfd](http://www.ni-environment.gov.uk/wfd).

<sup>1</sup> \* In this document ‘Ireland’ refers to the ‘Republic of Ireland’

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## The Water Framework Directive

The EU Water Framework Directive came into force on 22 December 2000 with the aim of promoting common approaches, standards and measures for water management on a systematic and comparable basis throughout the European Union. It established a new, integrated approach to the protection, improvement and sustainable use of Europe's rivers, canals, lakes, reservoirs, wetlands, transitional waters (estuaries), coastal waters and groundwaters. These waters are to be managed on the basis of natural geographical areas called river basin districts, with a management plan prepared for each district. These plans set out the environmental objectives for the water bodies in each river basin district and the measures that will be required in order to achieve those objectives.

Within the European Union, many river basin districts are shared by Member States; these cross-border districts are called international river basin districts. The Water Framework Directive requires Member States to coordinate their efforts in these districts with the aim of producing a single management plan covering the entire district.

On the island of Ireland, a total of eight river basin districts have been identified. One of these is entirely in Northern Ireland, four are entirely in Ireland and three are international river basin districts. This document forms part of the management plan for the North Western International River Basin District.

Prior to the introduction of this Directive, there had already been a tradition of coordination between the two jurisdictions in relation to the protection of our water resources. Early steps in the coordinated implementation of the Directive included the identification and delineation of the river basin districts in 2003. Since then each stage of implementation has involved substantial coordination between the two jurisdictions. The publication of this joint ***Working Together*** document marks a further important step in this process. It identifies the work already done and underlines the common commitment to implement plans to protect and conserve the island's shared waters.



## The need for coordination

The Directive requires Member States to coordinate their efforts in relation to international river basin districts with the aim of producing a single management plan. The Directive also makes it clear that individual Member States carry full responsibility for ensuring implementation of all aspects of the Directive in their national territory, including any part of an international river basin district that lies within their national territory.

On the island of Ireland:

- substantial areas lie within cross-border river basins;
- some waters in each jurisdiction flow into or through the other jurisdiction;
- the rivers and lakes of the island of Ireland are designated as being within a single eco-region (eco-region 17) requiring a high degree of coordination between the authorities in both jurisdictions, to ensure consistent management of the entire aquatic environment;
- all coastal and transitional waters surrounding the island of Ireland are also included in one eco-region (eco-region 1) and their management must be closely coordinated; and
- there are also 37 cross-border groundwater bodies which are shared between the two jurisdictions and require coordinated management.

## What this document covers

This document begins by describing the three international river basin districts on the island of Ireland. This is followed by a brief overview of the North Western International River Basin District, and an overview of the coordination to date between the authorities in Ireland and Northern Ireland leading to the production of the river basin management plans.

The following sections describe the status of our shared waters, the future objectives for these waters and the measures that will be required in order to achieve those objectives. These measures include full and coordinated implementation of 11 key EU Directives, other stipulated (mandatory) measures and whatever supplementary or additional measures may also be necessary.

The document ends with a short section on the continuing process of coordinating activity and a summary of the status and objectives for all water bodies within the International River Basin District. More detail is provided in the plans covering each of the jurisdictions.

## The International River Basin Districts

As Map 1 shows, there are three International River Basin Districts on the island of Ireland:

- **the North Western International River Basin District**, including the Erne and Foyle river basins, together with the basins of Lough Melvin, Bradoge River, Lough Swilly and related small coastal river basins in west County Donegal;
- **the Neagh Bann International River Basin District**, including the Lough Neagh and River Bann basins as well as river basins draining to the outer estuarine limits of Dundalk Bay (Rivers Fane, Castletown, Glyde, Dee, Cully Water, Kilcurry, Ballymascanlan and Flurry) and Carlingford Lough (Newry River);
- **the Shannon International River Basin District**, including the Shannon river basin, which drains the midlands of Ireland and also a small portion of County Fermanagh in Northern Ireland, together with small coastal river basins in Counties Clare and Kerry. Only a very small portion of this International River Basin District lies in Northern Ireland. Consequently the preparation of the plan for the Shannon International River Basin District has been led by the authorities in Ireland. Full consultation has been maintained with the authorities in Northern Ireland, who are represented on the Steering Group for the Shannon International River Basin District.



## The North Western IRBD: a brief overview

The North Western International River Basin District includes all of County Donegal, large parts of Counties Fermanagh, Cavan, Londonderry, Monaghan and Tyrone, significant areas of Counties Leitrim and Longford and a small portion of County Sligo (7,400 km<sup>2</sup> of the district is in Ireland and 4,900 km<sup>2</sup> in Northern Ireland). It is bounded to the north and west by the Atlantic Ocean, to the south by the Western River Basin District and the Shannon International River Basin District and to the east by the Neagh Bann International River Basin District. The climate is temperate; annual rainfall is about 1000 mm in the low-lying areas but exceeds 2000 mm in the Donegal uplands.

### People

The District, which is home to less than half a million people, has a low average population density; less than 2% of the land is urbanised, with many people living in small villages or single dwellings. Most of the main urban areas are located beside rivers: Ballybofey, Cavan Town, Londonderry/Derry, Donegal Town, Enniskillen, Letterkenny and Strabane.

The fertile soils of the Foyle and Erne basins support beef, dairy, sheep and pig farming as well as crop cultivation. Further west, the landscape is mountainous with many coniferous forest plantations and some sheep and cattle grazing. The spectacular coastline, the surfing beaches and the remote beauty spots attract many tourists.

### Waters

#### Surface waters

The District has both lowland rivers (wide valleys, slow flows) and upland rivers (steep valleys, torrential flows). The main rivers are the Foyle (draining much of the mountain regions of County Donegal and the Sperrin mountains in County Tyrone), the Erne (draining parts of Counties Cavan, Fermanagh and Monaghan) and the Swilly.

The two main lakes are Upper Lough Erne (30 km<sup>2</sup>) and Lower Lough Erne (100 km<sup>2</sup>); the District also includes Upper Lough Macnean (7 km<sup>2</sup>), Lower Lough Macnean (4 km<sup>2</sup>) and Lough Melvin (22 km<sup>2</sup>).

The 2,500 km<sup>2</sup> of marine waters are mostly off County Donegal but include small sections of the Counties Leitrim and Sligo coastlines. Major features include many islands, headlands and inlets, Donegal Bay and the Erne, Swilly and Foyle estuaries.



Map 2  
The North Western International River Basin District

## Groundwaters

The more productive aquifers, that contribute approximately half the flow in surface waters, are located in the south of the District, along with some limestone associated with the Erne system and sandstone aquifers. There are also a number of gravel aquifers that are fairly significant throughout the District, particularly in Counties Donegal and Londonderry. Elsewhere, the remaining aquifers are not deemed to be very productive but all have the potential to yield water, and will on average contribute about a third of river flow (mainly from the more weathered zone at the top of the bedrock). Therefore, these aquifers also have an important role to play in management of the District's waters.

## Heavily modified waters

Some surface waters in the District have been substantially changed for such uses as navigation (for example ports), water storage, public drinking water supply, flood defence or land drainage. Such waters are described as **heavily modified**. Four stretches of the River Erne in Counties Donegal and Fermanagh are heavily modified for power supply, navigation or flood defence. The River Skeoge is a cross border river and is heavily modified for flood defence both in County Donegal and the urban areas of County Londonderry. The Rivers Mourne and Strule in County Tyrone are also heavily modified due to flood defences, whilst the River Faughan and the Altnaheglish in County Londonderry are designated due to their modification for drinking water supply. Eleven lakes in the district are heavily modified for drinking water supply including Lough Salt and Lough Bradan, and power supply including Lough Assaroe and Castlehume Lough. Lower Lough Erne is a cross border lake which is heavily modified due to flood defences and has the potential to impact on the wider environment should water levels be returned to their natural condition. The Foyle and Faughan Estuaries and Killybegs Harbour are marine waters that are heavily modified for flood defence and navigation respectively.

Other waters are man-made (**artificial**): these include the Clady headrace and Shannon Erne waterway. The benefits from such modifications need to be retained, and consequently such waters are subject to a different set of environmental objectives.

## Protected areas

A significant proportion of waters in the District are protected under existing EU legislation and they require special protection due to their sensitivity to pollution or their particular economic, social or environmental importance. All of the areas requiring special protection in the District have been identified, mapped and listed in a register of protected areas. The drinking water sources include Gartan Lough and Lower Lough Erne; the shellfish waters include Mulroy Bay and parts of Lough Foyle; the bathing waters include Murvagh and Benone beaches. Nutrient-sensitive areas include Killybegs Harbour and Upper Lough Erne and Special Areas of Conservation and Special Protection Areas include Lough Melvin and the River Foyle and tributaries.

Table 1 Water bodies in the North Western International River Basin District.

Waterbody	Number of Waterbodies			Total
	Shared Waterbodies	Northern Ireland Waterbodies	Ireland Waterbodies	
Rivers/Canals	53	163	652	868
Lakes/Reservoirs	3	5	230	238
Estuaries (transitional)	1	1	21	23
Coastal waters	1	0	22	23
Groundwater	29	16	43	88

## Coordination so far

A tradition of coordination has been maintained for many years in relation to cross-border water quality management. Before the introduction of the Water Framework Directive, this coordination was less structured and formalised, but it included arrangements on notification of pollution incidents and responses to these incidents. During the early 1990s water quality management strategies were jointly developed for the Foyle and Erne catchments.

The responsible government authorities in both jurisdictions have maintained a high level of coordination in preparing the river basin management plans. The primary means of co-ordination is through the North-South Water Framework Directive Coordination Group, which is supported by a number of technical working groups with representatives from the implementing authorities in Ireland and Northern Ireland. The principal areas of coordination are set out in Table 2.

Table 2 Coordination so far

Date	WFD requirements	Implementation: Ireland	Implementation: Northern Ireland
2000	Directive enters into force	n/a	n/a
2003	Transposition of Directive into national law	<i>Water Policy Regulations</i> (SI 722 of 2003), includes requirement to consult with Northern Ireland authorities	<i>Water Environment (WFD) Regulations (Northern Ireland) 2003</i> (SR No. 544); includes requirement to consult with Ireland authorities
	Identification of River Basin Districts	Joint consultation document <i>Managing our Shared Waters</i> identified international river basin districts and set out the administrative arrangements	
	Identification of competent authorities	Listed in regulations	Listed in regulations
2004	Characterisation of surface waters and groundwaters	Submitted to European Commission in 2005	Submitted to European Commission in 2005
	Identification of impacts of human activity (industry, farming etc)	Both jurisdictions used the same systems for characterising groundwaters, transitional waters and coastal waters. Both used the RIVTYPE system, developed in Ireland, for rivers. The lake typology systems used in both jurisdictions were also comparable. A joint identification code, recognising both jurisdictions, was used for cross-border shared waters.	
	Economic analysis of water use	Submitted to European Commission in 2005	Submitted to European Commission in 2005
	Identification of location and boundaries of water bodies	Common risk assessment methodologies and rules developed by eco-region Technical Advisory Groups were applied. A joint working group ensured consistency. Results for shared waters were reviewed; most assessments were similar with some variations due to differences in national datasets; overall the process was well harmonised. A single characterisation report was prepared for each river basin district. Results from both jurisdictions are available on WISE (Water Information System for Europe).	
	Definitions of reference conditions for water status	Baseline submitted to European Commission in 2005	Baseline submitted to European Commission in 2005
	Establishment of register of protected areas	Consultation between the two jurisdictions. Some differences in availability of economic data and in extent of cost recovery. Difficult to harmonise baseline economic information; consultations on economic analysis continue.	
		Submitted to European Commission in 2005	Submitted to European Commission in 2005
		The authorities consulted each other on the boundaries before reporting.	
		Submitted to European Commission in 2005	Submitted to European Commission in 2005
		The authorities consulted each other on the conditions before reporting.	
		Submitted to European Commission in 2005	Submitted to European Commission in 2005
		The authorities consulted each other on the registers before reporting. There is a high level of consistency in the approaches but with some differences stemming from historic decisions. Since then conservation authorities (Northern Ireland Environment Agency (NIEA) and National Parks and Wildlife Service) have been harmonising the registers, producing a joint electronic map of protected areas and progressing joint studies.	

<b>2006</b>	Establishment of environmental monitoring to ensure comprehensive view of water quality in each river basin district	Monitoring programmes designed, consulted on and implemented by end-2006	Monitoring programmes designed, consulted on and implemented by end-2006
	Both jurisdictions monitor groundwater sites and transitional and coastal waters, as well as representative sites on crossborder rivers and lakes. Joint programmes, set up through the NS Share study, monitored dangerous substances and biological status. Scientists across Europe have collaborated on the development of compatible water classification systems; Ireland and the UK are in the same geographical intercalibration groups. The authorities in Ireland and Northern Ireland are also coordinating their efforts through the eco-region's Technical Advisory Groups, on harmonising water status systems. Maps of monitoring networks for both jurisdictions are available on WISE.	Both jurisdictions monitor groundwater sites and transitional and coastal waters, as well as representative sites on crossborder rivers and lakes. Joint programmes, set up through the NS Share study, monitored dangerous substances and biological status. Scientists across Europe have collaborated on the development of compatible water classification systems; Ireland and the UK are in the same geographical intercalibration groups. The authorities in Ireland and Northern Ireland are also coordinating their efforts through the eco-region's Technical Advisory Groups, on harmonising water status systems. Maps of monitoring networks for both jurisdictions are available on WISE.	Both jurisdictions monitor groundwater sites and transitional and coastal waters, as well as representative sites on crossborder rivers and lakes. Joint programmes, set up through the NS Share study, monitored dangerous substances and biological status. Scientists across Europe have collaborated on the development of compatible water classification systems; Ireland and the UK are in the same geographical intercalibration groups. The authorities in Ireland and Northern Ireland are also coordinating their efforts through the eco-region's Technical Advisory Groups, on harmonising water status systems. Maps of monitoring networks for both jurisdictions are available on WISE.
<b>2006</b>	Publication of work programme for production of river basin management plans	Published in 2006	Published in 2006
	Public Participation	The two environment departments consulted each other on the draft work programmes. Both work programmes confirmed that coordinated action in shared waters would include production of a single report on significant water management issues for each international river basin district.	The two environment departments consulted each other on the draft work programmes. Both work programmes confirmed that coordinated action in shared waters would include production of a single report on significant water management issues for each international river basin district.
<b>2007</b>	Publication of interim overview of the significant water management issues for each river basin district	Published June 2007	Published June 2007
	Publication of draft river basin management plans for public consultation	For each international river basin district, a single report on significant water management issues was published for public consultation. A strategic environmental assessment scoping study and subsequent consultations were undertaken, based on the single Significant Water Management Issues report for the international river basin districts.	Ongoing coordination arrangements regarding public participation include reciprocal invites to attend meetings of the formal stakeholder groups in Northern Ireland and the Advisory Councils in Ireland.
<b>2008</b>	Publication of draft river basin management plans for public consultation	Draft management plans published for public consultation in December 2008	Draft management plans published for public consultation in December 2008
	Public consultation on Draft River Basin Management Plans	Preparation of the draft plans was coordinated, with both jurisdictions working from similar templates. Representatives from environmental agencies in both jurisdictions were involved in steering groups to share knowledge, aiming for consistency in method and approach. North South Technical Advisory Groups applied the classification systems to determine the status of waters, with the results being reviewed by officials in both jurisdictions. Consultations on objective setting for shared waters continued during 2007 and 2008, including shared technical studies of objectives for heavily modified waters and protected areas. A single strategic environmental assessment was undertaken, for each international river basin district. During 2008 an environmental report was produced for each of the island's eight national and international river basin management plans and their associated programmes of measures.	Preparation of the draft plans was coordinated, with both jurisdictions working from similar templates. Representatives from environmental agencies in both jurisdictions were involved in steering groups to share knowledge, aiming for consistency in method and approach. North South Technical Advisory Groups applied the classification systems to determine the status of waters, with the results being reviewed by officials in both jurisdictions. Consultations on objective setting for shared waters continued during 2007 and 2008, including shared technical studies of objectives for heavily modified waters and protected areas. A single strategic environmental assessment was undertaken, for each international river basin district. During 2008 an environmental report was produced for each of the island's eight national and international river basin management plans and their associated programmes of measures.
<b>2009</b>	Public consultation on Draft River Basin Management Plans	Consultation period December 2008 – June 2009	Consultation period December 2008 – June 2009
<b>2009/2010</b>	Publication of finalised river basin management plans and programmes of measures	Public consultation on the draft plans took place in both jurisdictions during the first 6 months of 2009. River basin management plans finalised in June 2010	Public consultation on the draft plans took place in both jurisdictions during the first 6 months of 2009. River basin Management plans finalised in December 2009
	Activities continued to be coordinated in finalising the plans for the international river basin districts. The finalised plans consist of a number of components: this document which describes the coordination that has taken place between the two jurisdictions; plans containing more focussed information on the status, objectives and measures for each jurisdiction; electronic information systems which provide access to the status, objectives and measures for each individual water body, and an extensive range of background documents.	Activities continued to be coordinated in finalising the plans for the international river basin districts. The finalised plans consist of a number of components: this document which describes the coordination that has taken place between the two jurisdictions; plans containing more focussed information on the status, objectives and measures for each jurisdiction; electronic information systems which provide access to the status, objectives and measures for each individual water body, and an extensive range of background documents.	Activities continued to be coordinated in finalising the plans for the international river basin districts. The finalised plans consist of a number of components: this document which describes the coordination that has taken place between the two jurisdictions; plans containing more focussed information on the status, objectives and measures for each jurisdiction; electronic information systems which provide access to the status, objectives and measures for each individual water body, and an extensive range of background documents.

## The status of our shared waters

In accordance with the Water Framework Directive, surface waters have been classified according to their ecological status and chemical status; and groundwaters according to their chemical and quantitative status. Surface waters are classified as high, good, moderate, poor or bad. Groundwaters are classified as good or poor. The status of our shared surface waters and groundwaters (i.e. those which lie along the border) is presented in Tables 3 and 4 and in Maps 3 and 4.

**Table 3 North Western International River Basin District - Status in Shared Surface Water Bodies (2009)**

Surface Water Category	High	Good	Moderate	Poor	Bad
Rivers and canals (number)	(0)	(12)	(29)	(12)	(0)
% of total	0	22.6	54.7	22.6	0
Lakes and reservoirs (km <sup>2</sup> )	(0)	(0)	(61)*	(0)	(0)
% of total	0	0	100	0	0
Estuaries (km <sup>2</sup> )	(0)	(0)		(34)	
% of total	0	0		100	
Coastal (km <sup>2</sup> )	(0)	(0)		(166)	
% of total	0	0		100	

\*Status based on EPA status classification of Lough Melvin and Upper Lough Macnean at moderate status (NIEA status classification is good for these two waterbodies)

**Table 4 North Western International River Basin District - Status in Shared Groundwater Bodies (2009)**

Groundwater	Good	Poor
Chemical Status (km <sup>2</sup> )	(4,249)	(0)
% of total	100	0
Quantitative Status (km <sup>2</sup> )	(4,249)	(0)
% of total	100	0
Combined Status (km <sup>2</sup> )	(4,249)	(0)
% of total	100	0

## Objectives for our shared waters

The core objectives of the WFD are to:

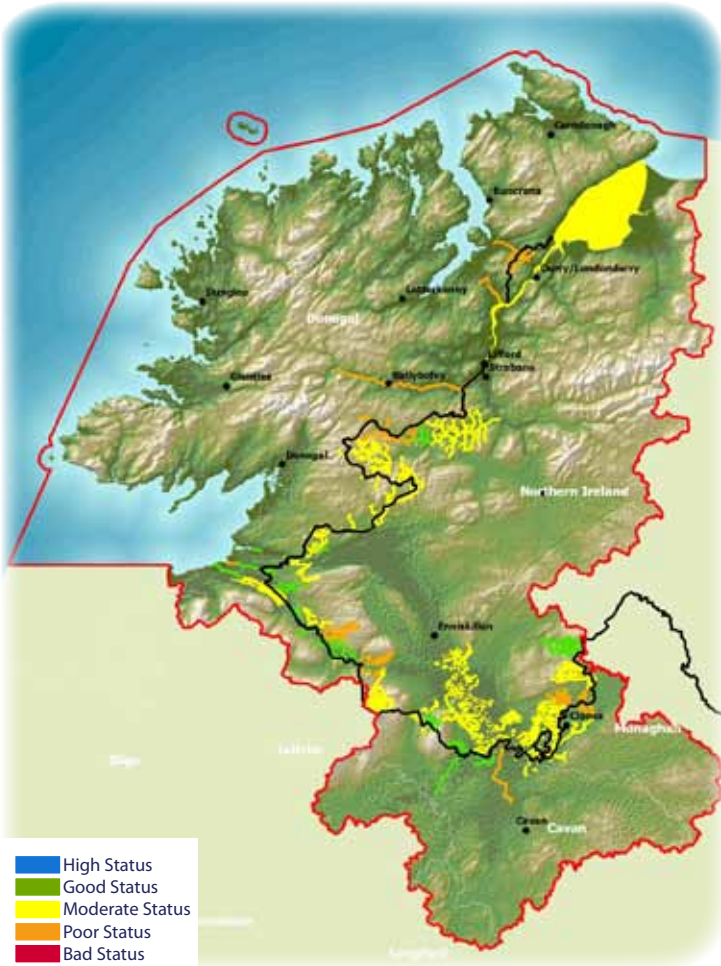
- prevent deterioration;
- restore good status;
- reduce chemical pollution; and
- achieve the objectives for protected areas.

In general, the aim of the Water Framework Directive is to achieve these core objectives by 2015, however objectives may be achieved over longer timescales due to technical, economic, environmental or recovery constraints. The core objectives have been translated into detailed and specific objectives for each of our shared surface waters and groundwaters (Map 5 and Map 6). The timetable for achieving those objectives is set out in Table 5.

**Table 5 North Western International River Basin District - Timescales for achieving objectives in shared surface waters and groundwaters**

	Rivers and Canals (number)	Lakes and Reservoirs (km <sup>2</sup> )	Estuaries (km <sup>2</sup> )	Coastal Waters (km <sup>2</sup> )	Groundwaters (km <sup>2</sup> )
Objective Achieved 2009	(12) (23%)	(0) 0%	(0) 0%	(0) 0%	(4,249) 100%
Objective Achieved 2015	(27) (51%)	(29) (48%)	(0) 0%	(0) 0%	(4,249) 100%
Objective Achieved 2021	(51) (96%)	(61) 100%	(34) 100%	(166) 100%	(4,249) 100%
Objective Achieved 2027	(53) (100%)	(61) 100%	(34) 100%	(166) 100%	(4,249) 100%
Less Stringent Objective – objective timescale beyond 2027	(0) 0%	(0) 0%	(0) 0%	(0) 0%	(0) 0%

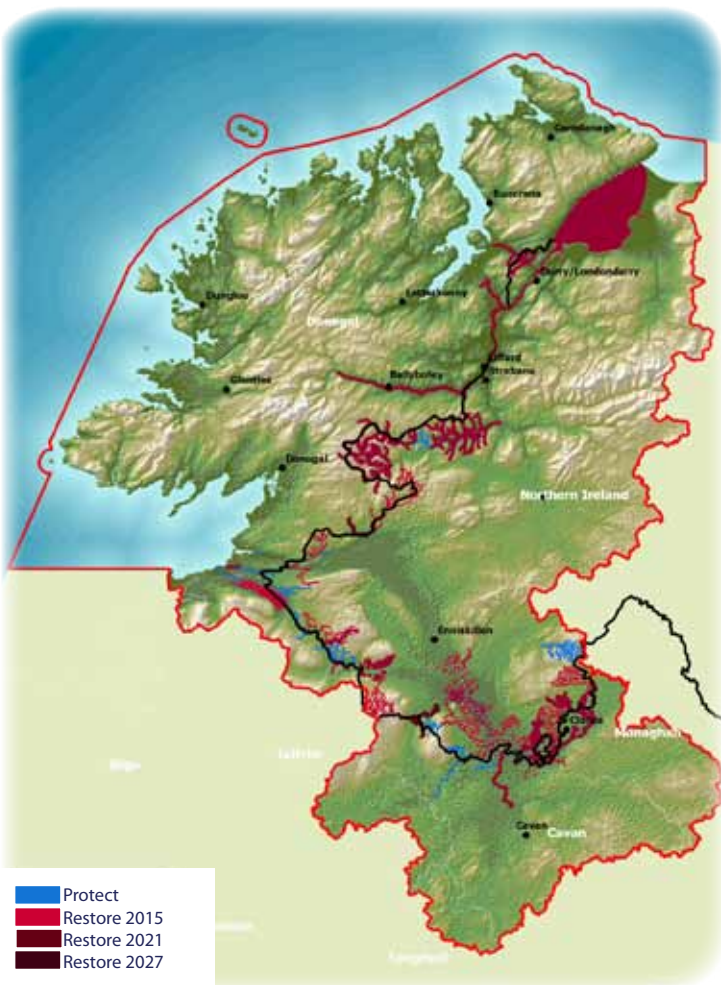
All objectives have to be reviewed every six years as part of the river basin planning cycle.



**Map 3** North Western International River Basin District – Status of Shared Surface Water Bodies (2009)



**Map 4** North Western International River Basin District – Status of Shared Groundwater Bodies



**Map 5** North Western International River Basin District – Objectives for Shared Surface Water Bodies



**Map 6** North Western International River Basin District – Objectives for Shared Groundwater Bodies 11

## Measures to be implemented

The river basin management plans set out the measures which will be implemented in order to achieve the environmental objectives. The measures fall into three categories:

- The implementation of **11 key Directives** specified under the Water Framework Directive. These Directives have already been transposed into domestic legislation in both Ireland and Northern Ireland.

### The 11 key EU Directives

Bathing waters

Birds

Habitats

Drinking waters

Major accidents

Environmental impact assessment

Sewage sludge

Urban wastewater treatment

Plant protection products

Nitrates

Integrated pollution prevention control

- The implementation of **other stipulated measures** required by the Water Framework Directive. Again domestic legislation has been or will be made in both Ireland and Northern Ireland to address these stipulated measures: for example both jurisdictions have introduced new legislation requiring establishment of inventories of emissions, discharges and losses of priority substances

### Other stipulated measures

Cost recovery for water use

Promotion of efficient and sustainable water use

Protection of drinking water sources

Control of abstraction and impoundment

Control of point source discharges

Control of diffuse source discharges

Authorisation of discharges to groundwaters

Control of priority substances

Controls on physical modifications to surface waters

Controls on other activities impacting on water status

Prevention or reduction of the impact of accidental pollution incidents

- The use of **additional or supplementary measures**. A range of possible additional or supplementary measures has been identified by a series of technical studies in both Ireland and Northern Ireland. Some are already being taken: these include farm based environmental protection schemes and implementation of a suite of forestry good practice guidelines. Other possible measures are codes of practice, voluntary agreements, demand reduction and rehabilitation programmes and legal, administrative and economic instruments.

The full suite of proposed additional or supplementary measures is set out in the accompanying plans for each of the two jurisdictions.

## Continuing coordination

There is important work to be done to support successful implementation of the plans. Authorities in both jurisdictions will continue to coordinate their activities with the aim of jointly implementing the International River Basin District management plans in each jurisdiction.

### Coordinating with other plans and programmes

It will be necessary to integrate and coordinate river basin management plans with plans and programmes in other relevant policy areas, both at national level and for shared waters. These plans and programmes include:

- Habitat and Species Protection Plans under the Habitats Directive;
- Water Services Strategic Plans (Ireland) and Northern Ireland Water investment programmes;
- Nitrates Action Programmes, already closely aligned in both jurisdictions; and
- Strategic National Development Plans and related Local Plans.

### Assessing regulatory impacts

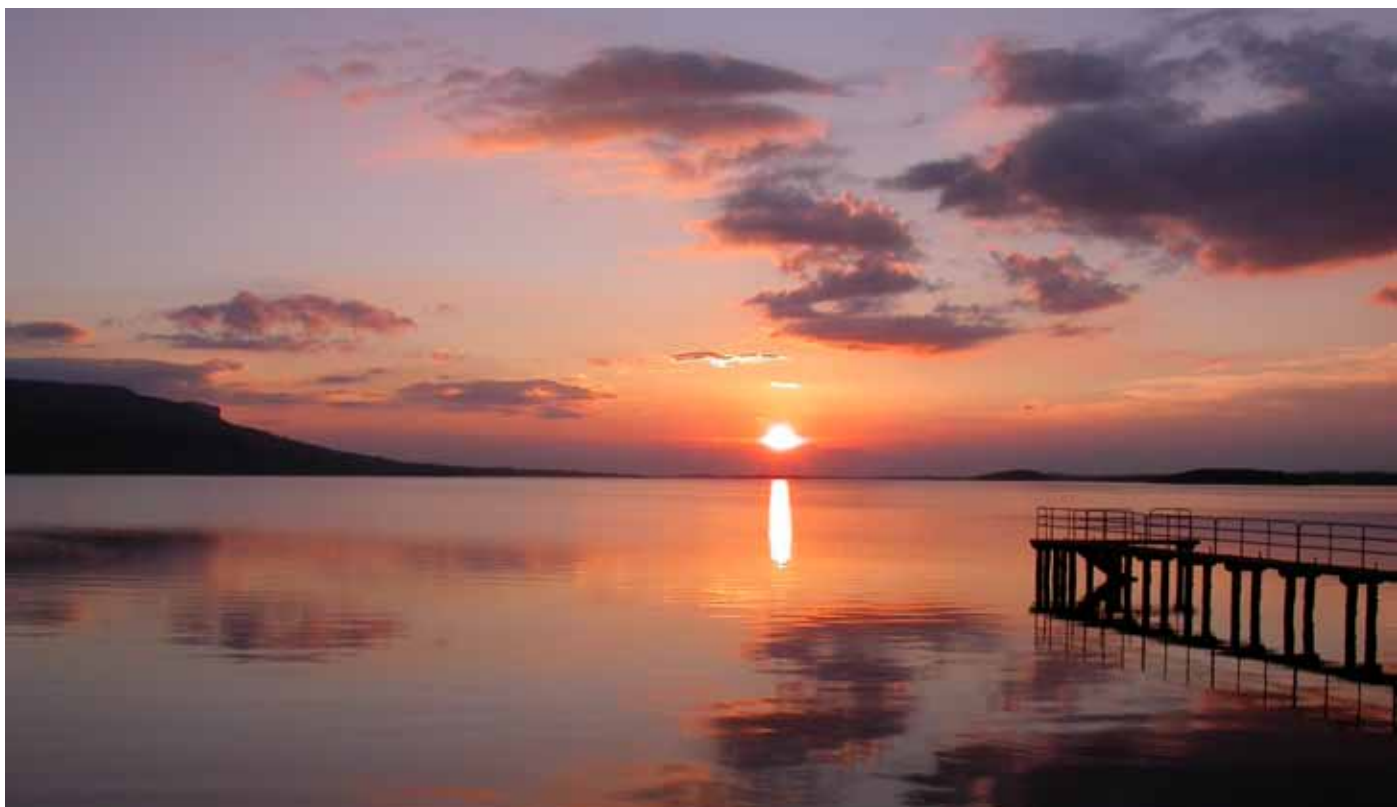
The Water Framework Directive requires a range of regulatory controls (for example authorisation of direct discharges to water, abstractions and physical modifications) to give legal effect to measures. Any significant regulatory proposals in either jurisdiction require regulatory impact assessment to evaluate whether new regulations will have the desired impact or will have undesirable side-effects or unforeseen extra costs. Such assessment also helps to clarify the cost of enforcement of the regulation.

### Implementing the management plans

In Northern Ireland, implementation of each plan will be coordinated by the Department of the Environment (including NIEA), through the Interdepartmental Working Group, which includes the four main government departments responsible for implementing the plan.

Implementation of the plans in Ireland will be overseen by the Water Framework Directive National Advisory Committee; this committee is chaired by the Department of the Environment, Heritage and Local Government and involves representatives from the Department of Agriculture, Fisheries and Food, the Environmental Protection Agency, the City and County Managers Association (representing local authorities) and other Government Departments as appropriate.

The North South Water Framework Directive Coordination Group will continue to oversee the ongoing coordination between the authorities in the two jurisdictions during the implementation of the plans.





# appendix

*Summary of status and objectives for all water bodies in the North Western International River Basin District*

This appendix presents details on status, objectives and measures for all water bodies in the North Western River Basin District. The preceding sections presented details for the shared waters, i.e. only those water bodies which lie along the border.



## Current status

The status of all surface waters and groundwaters (2009) in the North Western International River Basin District are presented in Tables 7 and 8 and Maps 7 and 8.

**Table 7 North Western International River Basin District – Status of All Surface Water Bodies 2009**

Surface Water Category	High	Good	Moderate	Poor	Bad	Yet to be Determined
Rivers and canals (number)	(99)	(338)	(247)	(178)	(5)	(1)
% of total	11	39	29	20	1	0.1
Lakes and reservoirs (km <sup>2</sup> )	(12)	(27)	(231)	(3)	(3)	(0.1)
% of total	4	10	84	1	1	0.04
Estuaries (km <sup>2</sup> )	(12)	(0)	(118)			(3)
% of total	9	0	89			2
Coastal (km <sup>2</sup> )	(239)	(0)	(215)			(1,776)
% of total	11	0	9			80

**Table 8 North Western International River Basin District – Status of All Groundwater Bodies 2009**

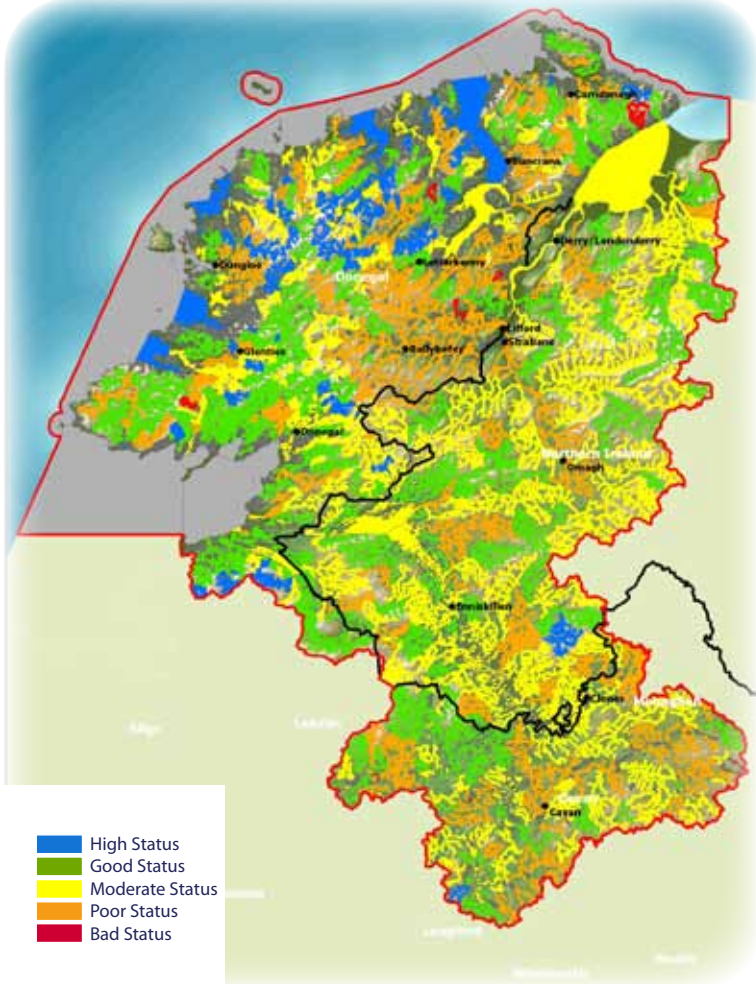
Groundwater	Good	Poor
Chemical Status (km <sup>2</sup> )	(12,077)	(0)
% of total	100	0
Quantitative Status (km <sup>2</sup> )	(12,077)	(0)
% of total	100	0
Combined Status (km <sup>2</sup> )	(12,077)	(0)
% of total	100	0

## Objectives

The objectives for all surface waters and groundwaters in the North Western International River Basin District are presented in Table 9 and Maps 9 and 10. These set out the timescales within which the objectives are to be achieved.

**Table 9 North Western International River Basin District - Timescale for Achieving Objectives for All Surface Water Bodies and Groundwater Bodies**

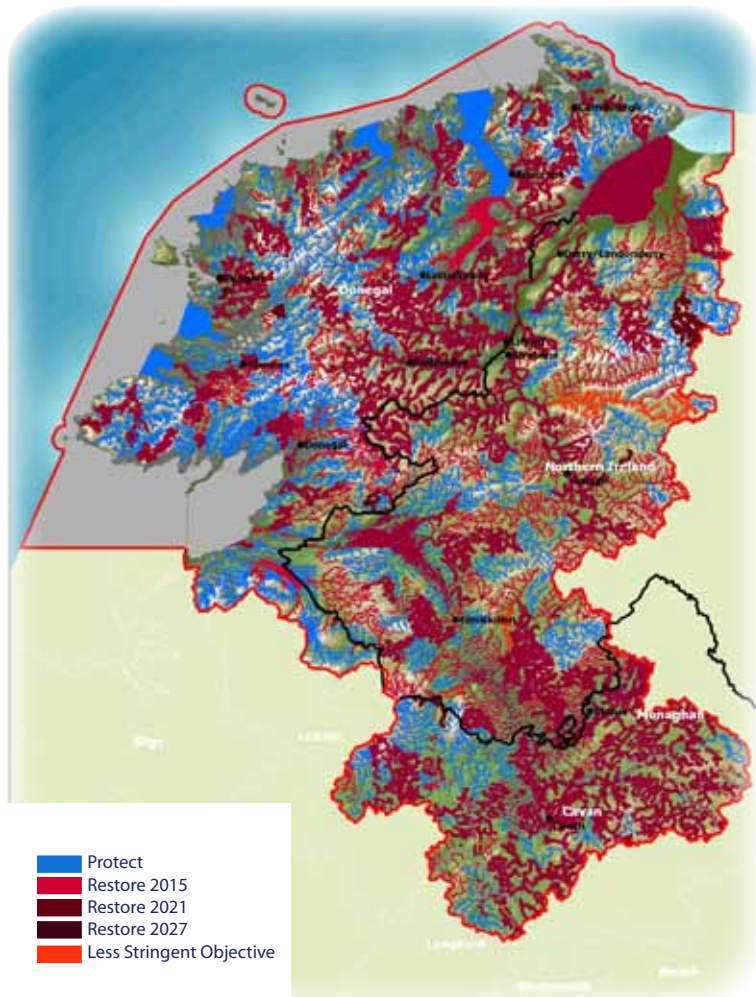
	Rivers and Canals (Number)	Lakes and Reservoirs (km <sup>2</sup> )	Estuaries (km <sup>2</sup> )	Coastal Waters (km <sup>2</sup> )	Groundwaters (km <sup>2</sup> )
Objective Achieved 2009	(437) 50%	(38) 14%	(12) 9%	(239) 10.7%	(12,077) 100%
Objective Achieved 2015	(621) 72%	(99) 36%	(75) 56%	(248) 12.8%	(12,077) 100%
Objective Achieved 2021	(855) 98.5%	(275) 99.9%	(130) 98%	454 20%	(12,077) 100%
Objective Achieved 2027	861 99.2%	(275) 99.9%	(130) 98%	454 20%	(12,077) 100%
Less Stringent Objective – objective timescale beyond 2027	(6) (0.7%)	(0) 0%	(0) 0%	(0) 0%	(0) 0%
To be determined	(1) 0.1%	(0.1) 0.04%	(3) 2%	(1,776) 80%	(0) 0%



**Map 7** North Western International River Basin District  
 – Status of all Surface Water Bodies 2009



**Map 8** North Western River International Basin District  
 – Status of all Groundwater Bodies 2009



**Map 9** North Western International River Basin District  
 - Objectives for all Surface Water Bodies



**Map 10** North Western International River Basin District  
 - Objectives for all Groundwater Bodies







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