

Neagh Bann Draft River Basin Management Plan

Mechanisms for Action

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Contents

1.0 Introduction	3
2.0 Implementation of European Union legislation to protect water in Northern Ireland	4
3.0 Implementation of ‘other’ controls to protect water in Northern Ireland	19

List of Tables

Table 1.0 An outline of the relevant legislation transposing the 11 Directives listed in Annex VI of the WFD in Northern Ireland	5
Table 2.0 An outline of the relevant legislation transposing a number of other Directives relevant to water protection.....	15
Table 3.0 Outline of controls to address the 10 water protection topics outlined in the Water Framework Directive.....	20

List of Figures

Figure 1.0 Range of mechanisms that can be used to implement actions	3
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1.0 Introduction

Article 4 of the Water Framework Directive sets out the environmental objectives or goals that must apply in relation to surface waters and groundwaters. Member States must implement measures that are necessary to achieve these objectives.

A measure includes:

- the action to be taken:
- the mechanism — this is the policy, legal and financial tools for promoting or ensuring the taking of that action. Those tools might include, for instance, regulatory requirements or a management agreement. Some mechanisms apply across the European Union while others are specific to Northern Ireland.

Mechanisms range from hard regulation to softer approaches. Although the softer approaches such as education and codes of practice are less easy to enforce, these can be very effective. See Figure 1.0 for the range of mechanisms that can be used to implement actions.

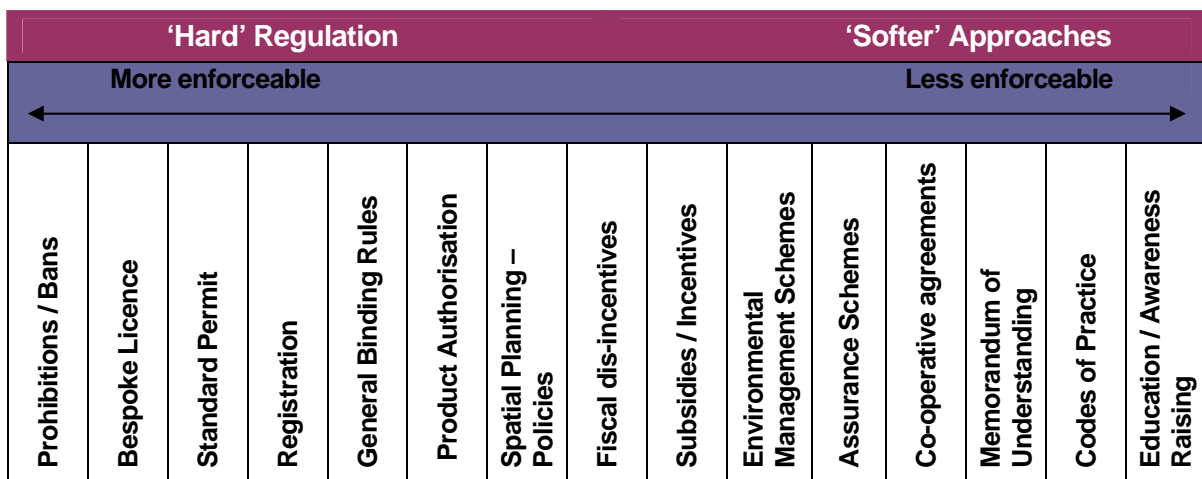


Figure 1.0 Range of mechanisms that can be used to implement actions.

The most important measures, that we are currently carrying out and potential new measures that are under consideration, to address the pressures that have been identified have been summarised in the draft River Basin Management Plans.

Mechanisms that we already have for implementing water related European Directives, are referred to as ‘basic measures’. These ‘basic measures’ comprise a comprehensive suite of obligations under eleven key European Directives. We already use these mechanisms to protect our waters and the dependent ecology. These existing measures have helped to improve water quality and represent a considerable amount of activity and investment. However, further improvements are required in some areas and we must also ensure that existing waters that are at good status do not deteriorate. This document provides a general description of the mechanisms that are currently available and how we are using them.

2.0 Implementation of European Union legislation to protect water in Northern Ireland

Article 11 of the Water Framework Directive sets out requirements for what the Programme of Measures should cover. The Directive requires Member States to fulfil requirements under 11 key European Directives which are listed in Annex VI of the WFD. The 11 Directives are listed below:

- (i) The current Bathing Water Directive (76/106/EEC) and revised Bathing Water Directive (2006/7/EEC);
- (ii) The Birds Directive (79/409/EEC);
- (iii) The Drinking Water Directive (80/778/EEC) as amended by Directive (98/83/EC);
- (iv) The Major Accidents Directive (96/82/EC);
- (v) The Environmental Impact Assessment Directive (85/337/EEC);
- (vi) The Sewage Sludge Directive (86/278/EEC);
- (vii) The Urban Waste-water Treatment Directive (91/271/EEC);
- (viii) The Plant Protection Products Directive (91/414/EEC);
- (ix) The Nitrates Directive (91/676/EEC);
- (x) The Habitats Directive (92/43/EEC); and
- (xi) The Integrated Pollution Prevention Control Directive (96/61/EC).

Table 1.0 shows how these European Directives have been implemented in Northern Ireland via the relevant transposing legislation.

There are also a number of other European Directives that contribute to water protection. Table 2.0 outlines the legislation that implements these Directives in Northern Ireland.

The Directive also requires Member States to implement controls for a variety of water protection topics, examples of how these controls have been implemented in Northern Ireland are presented in table 3.0.

Table 1.0 An outline of the relevant legislation transposing the 11 Directives listed in Annex VI of the WFD in Northern Ireland.

Directive	Legislation implementing the Directive in Northern Ireland	Details
Bathing Water Directive (76/160/EEC) as amended by Directive 2006/7/EC		
<p>The current Bathing Water Directive (76/160/EEC) sets standards to protect public health at identified bathing waters. The existing Directive is to be repealed in 2013 and a revised Bathing Waters Directive was adopted in 2006 (2006/7/EC). The revised Directive includes much tighter microbiological standards and a requirement to provide information about bathing waters on signs at beaches and online. The Directive requires that Member States monitor bathing waters throughout the bathing season and assess and classify bathing waters as being excellent, good, sufficient or poor. Apart from certain exceptions, bathing waters must achieve at least a 'sufficient' standard by 2015. Assessment against this revised Directive will be made using a 4 year data set. The first assessment against this revised Directive must be made in 2015, which means that monitoring against the revised Directive must commence in 2012 to give an adequate data set. The finer details of the implementation of this Directive are still being discussed at UK and Commission level.</p>	<p>Quality of Bathing Water Regulations (Northern Ireland) 1993 (S.R. 1993/205)</p> <p>Quality of Bathing Water Regulations (Northern Ireland) 2008 (S.R. 2008/231)</p>	<p>The existing Directive (76/160/EEC) is implemented by the Northern Ireland Environment Agency under the Quality of Bathing Water Regulations (NI) 1993.</p> <p>The bathing season in Northern Ireland runs from 1st June through to mid-September. Water quality is monitored by the Northern Ireland Environment Agency on 20 occasions during this period. The results of this monitoring programme are available online at http://www.ni-environment.gov.uk/water/quality/bathingqualityni/data.htm and are in general displayed by local authorities on colour coded posters on each beach. Where bathing waters have failed to meet the required standards, improvement programmes have been developed. These will become an integral part of the river basin management plans in the future.</p> <p>The revised Directive (2006/7/EC) is implemented through the Quality of Bathing Water Regulations (NI) 2008. The Northern Ireland Environment Agency is the competent Authority under both sets of Regulations.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Birds Directive 79/409/EEC		
<p>The Birds Directive provides for the long term protection and conservation of all bird species, their nests and habitats, that live naturally and occur in the wild throughout Europe.</p>	<p>Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (S.R. 1995/380) as amended by S.R. 2004 No.435, S.R. 2003 No.46 and S.R. 2007 No. 345</p>	<p>The Regulations were established to designate sites as Special Areas of Conservation and to introduce management agreements which maintain these sites and remove the threat of their degradation and destruction, by restricting potentially damaging operations. The Regulations also provide the Department of the Environment with powers to make byelaws which prevent the entry or movement into a site and the killing or taking of wildlife, or plants, protected by European law, as well as prohibiting the disturbance of their habitats, breeding grounds and surrounding vegetation.</p>
	<p>Offshore Petroleum Activities (Conservation of Habitats) Regulations (S.R. 2001/1754) as amended by S.R. 2007 No. 77</p>	<p>The Regulations apply to England, Scotland, Wales and Northern Ireland. They implement the Birds Directive, in relation to oil and gas activities carried out wholly or partly on the UK continental shelf.</p>
	<p>Offshore Marine Conservation (Natural Habitats etc.) Regulations (S.R. 2007/1842)</p>	<p>The Regulations apply to England, Scotland, Wales and Northern Ireland. They implement Birds Directive with regard to offshore marine areas, offshore marine installations and certain ships and aircraft.</p>
Drinking Water Directive 80/778/EEC amended by 98/83/EC		
<p>The Directive applies to all water, either in its original state or after treatment, used for the drinking and other domestic purposes, regardless of its origin or whether it is available from the tap or in bottles or other containers. It also applies to water used in food production.</p>	<p>Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (S.R. 2007/147)</p>	<p>The Regulations deal with the quality of water supplied in Northern Ireland for drinking, washing, cooking and food preparation and production.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Major Accidents (Seveso) Directive 96/82/EC		
<p>This Directive places a duty on all establishments where dangerous substances are present in sufficiently large quantities to create a major-accident hazard. All covered sites must prepare policies for the prevention of major accidents and these must be integrated into other policy areas.</p>	<p>Control of Major Accident Hazards Regulations (Northern Ireland) 2000 (S.R. 2000/93), as amended by S.R. 2005 No. 305</p>	<p>These Regulations apply to establishments where dangerous substances are present above certain thresholds defined in Schedule 1 to these Regulations. Operators at all sites covered by these regulations must take measures to prevent major accidents and limit their consequences to persons and the environment. They must also establish a major accident prevention policy.</p>
	<p>Planning (Control of Major-Accident Hazards) Regulations (Northern Ireland) (S.R. 2000/101)</p>	<p>These Regulations implement Article 12 of the Seveso Directive, which requires Member States to make sure that the objectives of preventing major-accidents and limiting the consequences of such accidents are taken into account in their land-use planning policies.</p>
Environmental Impact Assessment Directive 85/337/EEC		
<p>This Directive aims to introduce a preventative approach to the environmental impact caused by large scale development projects, by providing the competent authorities with enough relevant information to enable them to make a decision regarding a project, in full knowledge of its likely significant impact on the environment.</p>	<p>Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 1999 (S.R. 1999/73), as amended by S.R. 2008 No. 17</p>	<p>The Regulations impose requirements with regard to the consideration of applications for planning permission. The amending regulations implement Directive 2003/35/EC, on public participation in respect of the drawing up of certain plans and programmes relating to the environment.</p>
	<p>Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2006 (S.R. 2006/3295)</p>	<p>These Regulations apply in relation to England only, except for Regulation 22 which relates to projects serving national defence purposes and inserts provisions that apply in relation to Scotland, Wales and Northern Ireland.</p>
	<p>Roads (Environmental Impact Assessment) Regulations (Northern Ireland) (S.R. 1999/89)</p>	<p>These Regulations provide for the assessment of the effects of certain public and private projects on the environment, with regard to proposals to construct new roads and improve existing ones.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
	Environmental Impact Assessment (Fish Farming in Marine Waters) Regulations (Northern Ireland) (S.R. 2007/23)	These Regulations make provision for the carrying out of developments with regard to fish farming in marine waters, where any part of the proposed development is in a sensitive area.
	Harbour Works (Environmental Impact Assessment) Regulations (Northern Ireland) S.R. 2003/136 as amended by S.R. 2007 No. 312	Most harbour works fall under the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 1999. Only those which fall under permitted development, or are outside the planning limit, attract the Harbour Works regulations. The Harbour Work Regulations implement the need for Environmental Impact Assessment for harbour works that fall under Annex I of the Environmental Impact Assessment Directive or under Annex II of the Directive where the project is likely, because of its size, nature or location, to have significant effects on the environment.
	Drainage (Environmental Impact Assessment) Regulations (Northern Ireland) (S.R. 2006/34)	The Regulations prohibit the carrying out of drainage works, marina works, drainage schemes or canal schemes unless certain conditions are met.
	Environmental Impact Assessment (Uncultivated Land and Semi Natural Areas) Regulations (Northern Ireland) (S.R. 2006/90)	These Regulations have now been revoked by the Environmental Impact Assessment (Agriculture) Regulations.
	Environmental Impact Assessment (Agriculture) Regulations (Northern Ireland) (S.R. 2007/421) as amended by S.R. 2008 No. 278	The Regulations impose restrictions on farmers and rural land managers when carrying out certain development projects above certain thresholds on land they own or rent.
	Environmental Impact Assessment (Forestry) Regulations (Northern Ireland) (S.R. 2006/518) as amended by S.R. 2007 No. 355	The Regulations make provisions for the carrying out of Environmental Impact Assessments on forestry projects relating to for example, afforestation, deforestation, forest roadworks and forest quarries.

Directive	Legislation implementing the Directive in Northern Ireland	Details
	Environmental Impact Assessment and Natural Habitats (Extraction of Minerals by Marine Dredging) (England and Northern Ireland) Regulations (S.I. 2007/1067)	These Regulations establish a scheme which regulates marine minerals dredging in English and Northern Ireland waters, and make provision for Environmental Impact Assessments to be carried out for projects which are likely to have significant effects on the environment.
	Water Resources (Environmental Impact Assessment) Regulations (Northern Ireland) 2005 (S.R. 2005/32) as amended by S.R. 2006 No. 483	These Regulations make provision for Environmental Impact Assessments to be carried out on all relevant projects. Relevant projects include projects that are likely to have significant effects on the environment and water management projects for agriculture.
	Offshore Electricity Development (Environmental Impact Assessment) Regulations (Northern Ireland) (S.R. 2008/55)	The Regulations set out the procedures for developers proposing to apply for a consent under the under the Electricity (Northern Ireland) Order 1992. The Regulations also make provision for Environmental Impact Assessments to be carried out for offshore developments that are likely to have significant effects on the environment because of their nature, size and location.
	Marine Works (Environmental Impact Assessment) Regulations (S.I. 2007/1518)	The Marine Works Regulations apply across the UK, and implement the need for Environmental Impact Assessments to be carried out before consent can be granted for certain regulated activities in UK waters and controlled waters.
	Offshore Petroleum Production and Pipe lines (Assessment of Environmental Effects) Regulations (S.R. 1999/360) as amended by S.R. 2007 No. 933	These Regulations apply to England, Scotland, Wales and Northern Ireland and relate to the environmental effects of certain offshore oil and gas projects.

Directive	Legislation implementing the Directive in Northern Ireland	Details
Sewage Sludge Directive 86/278/EEC		
<p>This Directive regulates the use of sewage sludge in agriculture in such a way as to prevent the harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sludge. It covers the use of sewage sludge from sewage plants, septic tanks and other treatment installations in any commercial crops including stock-rearing.</p>	<p>Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990 (S.R. 1990/245)</p>	<p>The Regulations apply only to the application of sewage sludge and septic tank sludge to commercial food crops, including for stock rearing purposes. These Regulations prohibit the use of sludge in agriculture as described above unless specified requirements are fulfilled. These include spreading controls, crop nutrient requirements, harvesting timetables, controls on the addition of certain metals and requirements to supply information. Both the sludge and the soil must be tested regularly to avoid a build up of nutrients and heavy metals.</p>
Urban Wastewater Treatment Directive 91/271/EEC		
<p>This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. It lays down minimum standards for the treatment of urban waste water.</p>	<p>Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (S.R. 2007/187)</p>	<p>The Regulations revoke and replace the Urban Waste Water Treatment Regulations (NI) 1995, to reflect the new arrangements for the delivery of sewerage services set out in the Water and Sewerage Services (Northern Ireland) Order 2006.</p> <p>The Regulations require that all significant discharges of sewage are treated, before discharge to inland surface water, groundwater, estuaries or coastal waters and that towns and cities above a certain population are provided with an adequate sewer system.</p> <p>The Regulations identify sensitive areas where receiving waters are susceptible to the amount of nutrients discharged and further treatment of waste water effluent is required (e.g. Lough Erne and Lough Neagh catchments). In these incidences additional treatment in the form of nitrate or phosphate removal may be required in areas sensitive to eutrophication or intended for abstraction where nitrate levels are high.</p> <p>Bathing waters can also be identified as sensitive areas and additional treatment may be required to meet the standards of the Bathing Water Directive. This may also involve a form of tertiary treatment during the bathing season, such as disinfection of the effluent using ultra violet light. Additionally, the Regulations have also banned the disposal of sewage sludge at sea since 1998.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Plant Protection Products Directive 91/414/EEC		
<p>The Plant Protection Products Directive requires that all new plant protection products be approved before they can be sold or used. Plant protection products include herbicides (weed killers), insecticides, fungicides, molluscicides (slug/snail killer) and other pesticide products used to protect plants. To gain approval, the producers must submit a complete product data package identifying the plant protection product (and the active substance contained in it); their physical and chemical properties; their effects on target pests; and any possible effects on workers, consumers, the environment and non-target plants and animals. These packages are evaluated at European level and a decision made on whether the new product can be approved and the conditions of its approval across all Member States.</p>	<p>Plant Protection Products Regulations (Northern Ireland) 2005 (S.R. 2005/526), as amended by S.R. 2008 No. 85</p>	<p>The Plant Protection Products Regulations (NI) 2005, control the sale and supply of plant protection products in Northern Ireland. Under the Regulations it is an offence to use or distribute a non-approved plant protection product.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Nitrates Directive 91/676/EEC		
<p>The Directive seeks to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. Member States are required to identify "Nitrate Vulnerable Zones" (NVZs) which are areas with waters affected by pollution or areas which drain into such waters and which contribute to pollution. Member states can either designate discrete areas of land as NVZs and apply an action programme or establish an action programme to be applicable to the whole territory. In these Nitrate Vulnerable Zones a number of protective measures must be taken.</p>	<p>The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004 (S.R. 2004/419) as amended by S.R. 2005 No. 306</p> <p>Nitrates Action Programme Regulations (Northern Ireland) 2006 (S.R. 2006/489), as amended by S.R. 2008 No. 196.</p>	<p>The Protection of Water Against Agricultural Nitrate Pollution Regulations state that the Department of the Environment for Northern Ireland and the Department of Agriculture and Rural Development can produce Regulations which establish and apply an action programme for territory in Northern Ireland.</p> <p>The Nitrates Action Programme Regulations aim to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. The Regulations came into effect on the 1st January 2007 and apply to all farmers across Northern Ireland from that date apart from some transitional arrangements on closed spreading periods and manure storage requirements. The key measures in the Nitrates Action Programme Regulations include: a closed period for the application of organic and inorganic fertilisers; a minimum livestock manure storage requirement; a limit on the amount of nitrogen that can be applied to land from livestock manures of 170 kg nitrogen per hectare per year; and the inclusion of nitrogen efficiency measures. The action programme covers the period 1st January 2007 – 31st December 2010 and will be subject to review in 2010.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Habitats Directive 92/43/EEC		
<p>The Directive aims to maintain or restore to 'favourable conservation status' the species and habitats identified as being of community importance (as specified in Annexes to the Directive). Member States must designate areas, which host these species and habitats, as Special Areas of Conservation, and ensure that plans or projects likely to have a significant effect on these sites are assessed to ensure that they will have no adverse effect on site integrity. Member States must also introduce a range of measures including the protection of species and habitats listed in the Annexes, undertake surveillance of habitats and species and produce a report every six years on the implementation of the Directive.</p>	<p>Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (S.R. 2007/380) as amended by S.R. 2004 No.435, S.R. 2003 No.46 and S.R. 2007 No. 345</p>	<p>The Conservation (Natural Habitats, etc.) Regulations (NI) 1995 (as amended) were established to designate sites as Special Areas of Conservation and to introduce management agreements which maintain these sites and remove the threat of their degradation and destruction, by restricting potentially damaging operations. The Regulations also provide the Department of the Environment with powers to make byelaws which prevent the entry or movement into a site and the killing or taking of wildlife, or plants, protected by European law, as well as prohibiting the disturbance of their habitats, breeding grounds and surrounding vegetation.</p>
	<p>Environmental Impact Assessment and Natural Habitats (Extraction of Minerals by Marine Dredging) (England and Northern Ireland) Regulations (S.I. 2007/1067)</p>	<p>These Regulations establish a scheme which regulates marine minerals dredging in English and Northern Ireland waters, and make provision for Environmental Impact Assessments to be carried out for projects which are likely to have significant effects on the environment.</p>
	<p>Environmental Impact Assessment (Agriculture) Regulations (Northern Ireland) (S.R. 2007/421) as amended by S.R. 2008 No. 278</p>	<p>The Regulations impose restrictions on farmers and rural land managers when carrying out certain development projects above certain thresholds on land they own or rent.</p>
	<p>Offshore Petroleum Activities (Conservation of Habitats) Regulations (S.R. 2001/1754) as amended by S.R. 2007 No. 77</p>	<p>The Offshore Petroleum Activities (Conservation of Habitats) Regulations apply to England, Scotland, Wales and Northern Ireland. They implement the Habitats Directive, in relation to oil and gas activities carried out wholly or partly on the UK continental shelf.</p>
	<p>Offshore Marine Conservation (Natural Habitats etc.) Regulations (S.I. 2007/1842)</p>	<p>The Offshore Marine Conservation (Natural Habitats etc.) Regulations apply to England, Scotland, Wales and Northern Ireland. They implement the Habitats Directive with regard to offshore marine areas, offshore marine installations and certain ships and aircraft.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Integrated Pollution Prevention Control Directive 96/61/EC as amended by Directive (08/1/EC)		
<p>Directive 96/61/EC had been subject to a number of amendments over the years and the new Directive 08/1/EC consolidates these amendments and revokes the 96/61/EC Directive.</p> <p>The Directive aims to achieve integrated prevention and control of pollution arising from certain industrial activities. It sets out measures designed to prevent and reduce emissions in the air, water and land from such activities, including measures regarding waste, in order to reach a high level of protection of the environment.</p>	<p>Pollution Prevention and Control Regulations (Northern Ireland) 2003 (S.R. 2003/46) as amended by S.R. 2004 No. 507, S.R. 2005 No. 285, S.R. 2005 No. 454, S.R. 2006 No. 98 and S.R. 2007 No. 245</p> <p>Offshore Combustion Installation (Prevention and Control of Pollution) (S.I. 2001/1091) as amended by S.R. 2007 No. 938</p>	<p>The Pollution Prevention Control Regulations control the operation of any installations or mobile plant carrying out activities listed in Schedule 1 of the Regulations. Industries that are controlled under these Regulations include food processing industries, chemical manufacturers, power plants and intensive agricultural operations. The Northern Ireland Environment Agency regulates both part A and B processes, Part A permits cover releases to all media, Part B Permits cover releases to air only.</p> <p>These Regulations control the operation of offshore combustion installations, through establishment of a pollution control regime.</p>

Table 2.0 An outline of the relevant legislation transposing a number of other Directives relevant to water protection.

Directive	Legislation implementing the Directive in Northern Ireland	Details
Biocidal Products Directive 98/8/EC		
<p>This Directive deals specifically with the authorisation and placing on the market of biocidal products. The Directive aims to harmonise the European market for biocidal products, their active substances and product authorisation. The Directive requires the submission and evaluation of data on substances' chemistry, toxicity to humans, and toxicity and fate in the environment.</p>	<p>Biocidal Products Regulations (Northern Ireland) 2001 (S.R. 2001/422) as amended by S.R. 202 No. 302, S.R. 2003 No. 429, S.R. 2005 No. 2451 and S.R. 2007 No. 190</p>	<p>The Regulations make provisions for active substances to be used in a biocidal product and authorise the placing on the market and use of biocidal products. Under the Regulations a "biocidal product" is defined as an active substance which is intended to destroy, deter, render harmless, prevent the action of, or control any harmful organism.</p>
Dangerous Substances Directive 2006/11/EC		
<p>The directive 2006/11/EC (replacing repealed directive 76/464/EEC) on pollution caused by certain substances discharged into the water environment aims to reduce pollution of waters by these dangerous substances, which have been selected mainly on the basis of how toxic or persistent they are, including how much they may accumulate in organisms.</p> <p>The Directive requires the control of discharges that are liable to contain substances defined in List I or List II of the Dangerous Substances Directive and any other substances determined as hazardous by the Agency.</p> <p>The Dangerous Substances Directive will be repealed in 2013, after which controls under the Water Framework Directive will provide at least the same level of protection.</p>	<p>Surface Waters (Dangerous Substances) (Classification) Regulations (Northern Ireland) 1998 S.R. 1998/397</p>	<p>The Regulations prescribe a system of classifying the quality of inland freshwaters, coastal waters and relevant territorial waters.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Floods Directive 2007/60/EC		
<p>The Directive is designed to help European Union member states prevent and limit floods and their damaging effects on human health, the environment, infrastructure and property.</p> <p>Member States are required to identify river basins and associated coastal areas at risk of flooding and draw up flood risk maps and management plans for these areas.</p>	<p>----- -----</p>	<p>The Floods Directive came into force on 26th November, 2007. The UK and other European Union Member States must establish legislation to implement the Directive within two years of this date.</p>
Freshwater Fish Directive (2006/44/EC) (Quality of fresh waters needing protection or improvement in order to support fish life)		
<p>The directive on the quality of fresh waters that need protecting or improving to support fish life (2006/44/EC replacing directive 78/659/EEC which is repealed) aims to protect and improve running or still waters capable of supporting "indigenous species offering a natural diversity". It protects those fresh water bodies identified by European Union member states as waters suitable for sustaining fish.</p> <p>It sets physical and chemical water quality objectives for salmonid (salmon and trout) waters and cyprinid (for example roach and bream) waters. The directive will be repealed in 2013 after which controls will be put in place under the Water Framework Directive.</p>	<p>The Surface Waters (Fishlife) (Classification) (Northern Ireland) 1997 Regulations S.R. 1997/488</p>	<p>The Regulations set out a system for classifying the quality of inland waters which need either protection or improvement so they can support fish life.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Groundwater Directive 80/68/EC and Directive 2006/118/EC		
<p>The objective of this Directive is to protect groundwater from future pollution and to reduce current pollution by prohibiting the discharge of certain very dangerous substances into these waters.</p> <p>Substances on List I, which are the most toxic and dangerous, must be prevented from entering groundwater. They include most pesticides, organohalogens, mercury and its compounds, cadmium and its compounds, mineral oils and hydrocarbons, and cyanides. Substances on List II are less dangerous but could still be harmful to groundwater in large amounts. These substances must be restricted from entering groundwater to prevent pollution. The Directive controls both deliberate disposals of listed substances, and other activities that might lead to accidental losses.</p> <p>A new directive (2006/118/EC) (on the protection of groundwater against pollution and deterioration, also known as the Groundwater Daughter Directive) came into force in 2006, and this works alongside the old Groundwater Directive and the Water Framework Directive. It will be enacted during 2008-09. The old directive will be repealed in 2013.</p>	<p>Groundwater Regulations (Northern Ireland) 1998 S.R. 1998/401</p> <p>Waste Management Licensing Regulations (Northern Ireland) 2003 S.R. 2003/493</p>	<p>The Regulations allow the Department of the Environment for Northern Ireland to prevent the discharge of List 1 substances to groundwater and control the pollution resulting from the discharge of List 2 substances.</p> <p>In Northern Ireland a consultation exercise setting out proposals to transpose the new Groundwater Daughter Directive (2006/118/EC) is ongoing. Following the consultation exercise new transposing Regulations incorporating the existing Groundwater Regulations and the relevant requirements of the Water Framework Directive and the Ground Water Daughter Directive will be introduced in 2009.</p> <p>The Regulations make provision to bring into operation a waste management licensing system, they implement the Waste Framework Directive (2006/12/EC) and the Groundwater Directive (80/68/EC).</p>
Strategic Environmental Assessment Directive 2001/42/EC		
<p>The Directive requires a formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment. Authorities which prepare and/or adopt such a plan or programme must prepare a report on its likely significant environmental effects, consult environmental authorities and the public, and take the report and the results of the consultation into account during the preparation process and before the plan or programme is adopted.</p>	<p>Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 S.R. 2004/280</p>	<p>The Regulations transpose the Directive in Northern Ireland and set requirements for certain types of plan and programme to undergo Strategic Environmental Assessment. River Basin Management Plans fall within the scope of the Strategic Environmental Assessment Directive. Plans for the Neagh Bann, North Western and Shannon International River Basin Districts and the North Eastern River Basin District have been strategically assessed and the results of these assessments can be found in Environmental Reports which can be found on www.ni-environment.gov.uk/wfd.</p>

Directive	Legislation implementing the Directive in Northern Ireland	Details
Waste Framework Directive 2006/12/EC		
<p>This Directive makes provision for waste disposal and the protection of the environment from harmful effects caused by the collection, transport, treatment, storage and tipping of waste. In particular, it aims to encourage the recovery and use of waste in order to conserve natural resources.</p>	<p>Waste Management Licensing Regulations (Northern Ireland) 2003 S.R. 2003/493</p>	<p>The Regulations make provision to bring into operation a waste management licensing system. NIEA is responsible for processing applications for waste management licences, exemptions, pollution prevention and control permits and the registration of waste carriers under this legislation.</p>
Marine Strategy Directive 2008/56/EC		
<p>This Directive establishes a framework within which Member States must take the necessary measures to achieve or maintain a good environmental status in their marine environment by the year 2020, at the latest. This Directive must be implemented in the UK by 15th July 2010.</p>	<p>----- -----</p>	<p>The directive will require new legislation to be implemented in Northern Ireland. It will have implications for fishing, ports, coastal businesses, coastal tourism and recreation, non-governmental organisations and regulators of marine activities.</p>
Shellfish Waters Directive 2006/113/EC		
<p>This Directive applies to those coastal and brackish waters designated by national Governments as needing protection or improvement in order to support shellfish (bivalve and gastropod molluscs) life and growth and contribute to the quality of shellfish products for consumption.</p> <p>This Directive will be repealed in 2013 by the Water Framework Directive 2000/60/EC controls under the WFD will provide at least the same level of protection.</p>	<p>Surface Water (Shellfish) (Classification) (Northern Ireland) Regulations 1997 S.R. 1997/489</p>	<p>The Regulations set out a system for classifying the quality of coastal and brackish waters which need either protection or improvement so they can support shellfish life and growth. Specific requirements for range of parameters, some of which include pH, suspended solids, certain metals, petroleum hydrocarbons and substances that affect the taste of shellfish, must be satisfied.</p>

3.0 Implementation of ‘other’ controls to protect water in Northern Ireland

As mentioned previously, in addition to controls under the 11 key Directives listed above, the Water Framework Directive also requires Member States to implement controls to address a stipulated series of water protection topics. These water protection topics are outlined below and table 3.0 shows how control under these topics is implemented in Northern Ireland.

- 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;
- Controls on other activities impacting on water status; and
- Controls to avoid increase in pollution of marine waters.

Table 3.0 Outline of controls to address the 10 water protection topics outlined in the Water Framework Directive.

Measure	Implementation in Northern Ireland
Cost recovery for water use and promotion of efficient and sustainable water use	
	<p>Currently non-domestic customers are charged for water consumption and sewerage and trade effluent discharge by Northern Ireland Water. The Northern Ireland Executive is currently considering charging methodologies to introduce charging for domestic users.</p> <p>The proposed Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 when finalised will replace the Water Regulations (Northern Ireland) 1991 and will reduce possible contamination of the public drinking water supply through prescribing appropriate backflow prevention devices to prevent contaminated water from entering public supplies. The proposed regulations represent the final stage in the Water Safety Plan approach and are designed to ensure that water systems in premises do not contaminate the wider mains water supply.</p> <p>A key priority for Northern Ireland Water is to reduce water leakage to the Economic Level of Leakage, this is a calculated level of leakage at which any further reduction in the leakage level would incur costs in excess of the benefits derived from the savings. The current figure to be achieved by March 2010 is 135.5 mega litres per day. However in accordance with industry best practice the Economic Level of Leakage figure is currently being reviewed.</p>
Protection of drinking water sources	
	<p>Northern Ireland Water has initiated a programme to develop Drinking Water Safety Plans by 2010. As part of the development of water safety plans Northern Ireland Water and the Northern Ireland Environment Agency will develop a risk assessment approach to identify where action is required to reduce the risk of pollution which could affect public drinking water sources.</p>
Abstraction and impoundment control	
	<p>The Department of the Environment introduced Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 (S.R. 2006/482) in 2006. The regulations came into effect in February 2007 and involve licensing and charging for all applications above abstracting volumes above 20m³ per day. Abstractions below this threshold are required to adhere to Permitted Controlled Activity Conditions. The regulations also require authorisation of impounding works/structures that control water levels upstream. A dataset of authorisations and licences issued by the Northern Ireland Environment Agency is available from http://www.ni-environment.gov.uk/water/water_resources/abstraction/view_abstraction_dataset.htm</p>
Point source and diffuse source discharge control	
	<p>There are many measures and activities in place to prevent and control point and diffuse source discharges, some of these include:</p> <ul style="list-style-type: none"> • Regulation of wastewater discharges under the Water and Sewerage Services (Northern Ireland) Order 2006 (S.I. 2006/3336); • Northern Ireland Water Capital Works Programme; • Regulation of industrial discharges under the Water (Northern Ireland) Order 1999 (S.I. 1999/662); • Review of discharge consents to meet WFD environmental standards; • Regulation of major industrial activities under the Pollution Prevention and Control Regulations (Northern Ireland) 2003 (S.R. 2003/46) as amended by S.R. 2004 No. 507, S.R. 2005 No. 285, S.R. 2005 No. 454, S.R. 2006 No. 98 and S.R. 2007 No. 245; • Regulation non-mains sewage under the Water Order (Northern Ireland) 1999 (S.I. 1999/662);

Measure	Implementation in Northern Ireland
	<ul style="list-style-type: none"> • Nitrates Action Programme under the Nitrates Action Programme Regulations (Northern Ireland) 2006 (S.R. 2006/489), as amended by S.R. 2008 No. 196; • Phosphorus use in Agriculture Regulations (Northern Ireland) 2006 (S.R. 2006/488); • Control Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 (S.R. 2003/319); • Control of waste under the Waste and Contaminated Land (Northern Ireland) Order 1997 (S.I. 1997/2778); • Control discharges to groundwater under the Groundwater Regulations (Northern Ireland) 1998 (S.R. 1998/401); • Surface Waters (Fishlife) (Classification) (Northern Ireland) Regulations 1997 (S.R. 1997/488) as amended by S.R. 2003 No. 194 and S.R. 2007 No. 405; • Surface Water (Shellfish) (Classification) Regulations (Northern Ireland) 1997 (S.R. 1997/489); and • Quality of Bathing Water Regulations (Northern Ireland) 1993 (S.R. 1993/205). <p>For a comprehensive list of point and diffuse source discharge controls please refer to the Northern Ireland River Basin Management Plans (Tier 2) Programme of Measures for point and diffuse source pressures.</p>
Controls on physical modifications to surface waters	
	<p>There are a number of existing systems in place for the control of physical modifications in freshwater and marine waters.</p> <p>Freshwaters</p> <ul style="list-style-type: none"> • General control on development under the Planning (Northern Ireland) Order 1991; • Control of culverting through consent or approval under Schedule 6 of the Drainage (Northern Ireland) Order 1973; • Regulation of the removal of material from river beds under the Fisheries Act (Northern Ireland) 1966 (c.17) as amended by 2001 (c.4); and • Control of any physical modification in designated areas under the Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007 (S.R. 2007/345). <p>Marine waters</p> <ul style="list-style-type: none"> • In estuarine and coastal waters the deposit of articles and substances in the sea, including coastal defence structures, harbour works, land reclamation and sea disposal of dredged material require a licence under Part II of the Food and Environmental Protection Act 1985; • Control of works in harbours through the Harbour Works (Environmental Impact Assessment) Regulations (Northern Ireland) 2003 (S.R. 2003/136); • The extraction of marine minerals is controlled by a licensing system under the Environmental Impact Assessment and Natural Habitats (Extraction of Minerals by Marine Dredging (England and Northern Ireland) Regulations, 2007 (S.I. 2007/1067); and • Control of any physical modification in designated areas under the Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007 (S.R. 2007/345). <p>The Department of Environment is undertaking a review of existing legislative controls to control physical modifications to surface waters. Further detail on the outcome of the review and any proposals arising from it will be made available in the final river basin plan in 2009.</p>

Measure	Implementation in Northern Ireland
Prevention or reduction of the impact of accidental pollution incidents	
	<p>There are a number of existing systems in place to prevent or reduce the impact of accidental pollution incidents, they include:</p> <ul style="list-style-type: none"> • The UK National Contingency Plan which sets out detailed plans to ensure there is a timely, measured and effective response to marine pollution incidents; • The Northern Ireland Coastal Contingency Plan details the actions to be taken to minimise the effects of unauthorised discharges of polluting substances to coastal waters; • Northern Ireland Environment Agency's Water Pollution Response Procedures are aimed at mitigating and reducing the impact of pollution incidents; • Harbour authorities and oil handling facilities of a certain size and or turnover are required to produce Oil Pollution Preparedness, Response and Co-operation Plans to respond to pollution incidents; • In major ports and harbours the Port Marine Safety Code is implemented through Port Safety Management Systems; • NIEA uses a Pollution Risk Assessment mechanism to provide advice and in certain circumstances enforcement options under the Water Order 1999 to negate or prevent accidental pollution; and • The Water Pollution Hotline has enabled staff from NIEA to take steps to contain pollution and in numerous cases bring successful legal action against individuals and businesses that have been proven to be responsible for pollution events.
Authorisation of discharges to groundwater	
	<p>The Department of the Environment introduced the Groundwater Regulations (Northern Ireland) 1998 (S.R. 1998/401) in 1998. These Regulations, along with the Water (Northern Ireland) Order 1999, require the Department of the Environment to prevent the direct or indirect discharge of List I substances to groundwater and to control pollution resulting from the direct or indirect discharge of List II substances.</p> <p>A consultation exercise setting out proposals to transpose the new Groundwater Daughter Directive (2006/118/EC) is ongoing. Following the consultation exercise new transposing Regulations incorporating the existing Groundwater Regulations and the relevant requirements of the WFD and the Ground Water Daughter Directive will be introduced in 2009.</p>
Priority substances control	
	<p>Thirty three Priority Substances have been identified at European level. The Daughter Directive concerning these substances is due to be published in the European Journal by December 2008. The Directive will implement new standards for these substances. After publication, the UK will have a period of up to 18 months to produce new legislation. Under the Daughter Directive, NIEA will be required to establish inventories of emissions, discharges and losses of priority substances by no later than 2010. NIEA is carrying out work to monitor for these substances and will implement the requirements for phase out or reduction of them through pollution reduction plans.</p> <p>The European REACH Regulation will be implemented progressively over a number of years in Northern Ireland with the most hazardous, high volume substances addressed first. Risks to the environment and human health will be identified and, where necessary, controls will be put in place to ensure a high level of protection.</p>

Measure	Implementation in Northern Ireland
Controls on other activities impacting on water status	
	<p>There are a number of mechanisms in place to control invasive alien species in Northern Ireland, they include:</p> <ul style="list-style-type: none"> • The Wildlife Order (NI) 1985. The Order contains measures for preventing the establishment of species not native to Northern Ireland which may be detrimental to native wildlife. It is an offence under Article 15 of the Wildlife Order to “release or cause to escape into the wild” any animal that is not ordinarily resident in or is not a regular visitor to Northern Ireland in a wild state; • The Fisheries Act (NI) 1966. Section 13 of this Act is specifically relevant to the control of non-native fish species. Under the Act an order can be made prohibiting the introduction of live fish or eggs of specific species; and • The Prohibition of Introduction of Fish Order (NI) 1979. This prohibits the introduction of specified species of fish into inland waters.
Controls to avoid increase in pollution of marine waters	
	<p>The Water Framework Directive covers transitional and coastal waters out to 1 nautical mile from baseline (low water mark on the open coast, and bay closing lines over the end of sea loughs). Many of the mechanisms already in place, like Part II of the Food and Environment Protection Act and the Marine Mineral Extraction Licensing system cover all of Northern Ireland’s territorial waters. New national measures are being introduced by a UK Marine Bill and specific new legislation for Northern Ireland. The impending Marine Bill is expected to deliver a better system for delivering sustainable development of the marine and coastal environments It will include spatial planning, a new licensing system, a new fisheries management system and new nature conservation legislation. The Marine Bill will corral existing legislations and measures and remove any ambiguity about roles and responsibility.</p> <p>The Merchant Shipping (Port Waste Reception Facilities) Regulations 2003 (S.R. 2003/1809) require harbour authorities in the UK to prepare a waste management plan with respect to the provision and use of facilities for the management of prescribed wastes from ships using the port. This encourages the regular disposal of vessel generated wastes in an environmentally correct manner.</p> <p>In addition, the EC has introduced a Marine Strategy Directive which will apply to European marine waters not covered by the Water Framework Directive. The principles of the Directive are similar to WFD, where Member States must aim to meet good environmental status by 2021.</p>