

Northern Ireland River Basin Management Plans
Mechanisms for Action
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1. Introduction

Article 4 of the Water Framework Directive sets out the environmental objectives 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.

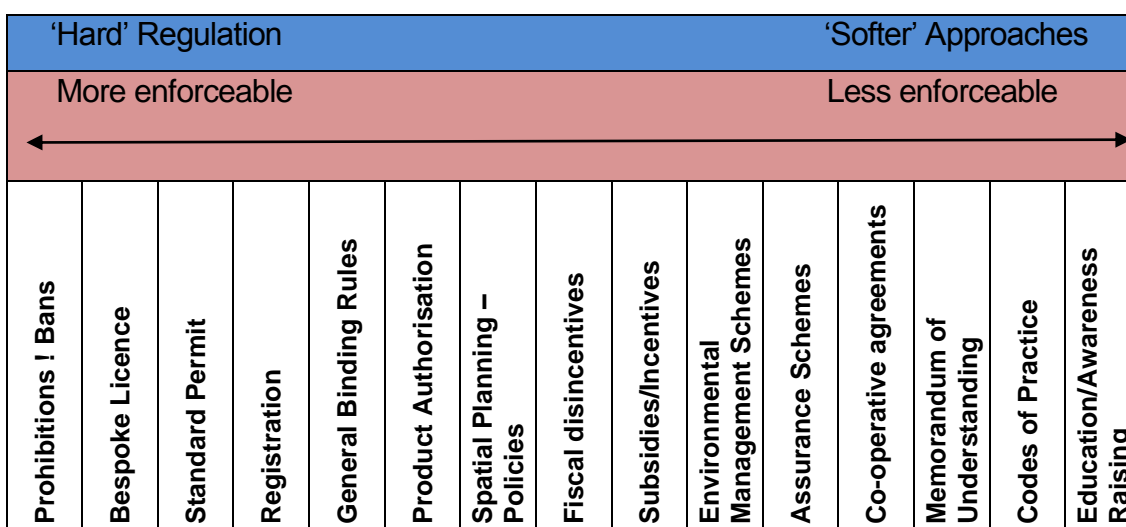


Figure 1: Range of mechanisms that can be used to implement actions.

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 River Basin Management Plans (which will be available from the following link www.doeni.gov.uk/topics/water/river-basin-management).

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. 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 fulfill requirements under a number of key European Directives/Regulations which are listed in Annex VI of the WFD. A number of these Directives have subsequently been amended following the adoption of the Water Framework Directive. These Directives/Regulations are listed below:-

- (i) The Bathing Water Directive (2006/7/EC);
- (ii) The Birds Directive (79/409/EEC) as amended by Directive (2009/147/EC);
- (iii) The Drinking Water Directive (80/778/EEC) as amended by Directive (98/83/EC);
- (iv) The Major Accidents (Serveso) Directive (96/82/EC) as amended by Directive (2012/18/EU);
- (v) The Environmental Impact Assessment Directive (2011/92/EU) as amended by Directive (2014/52/EU);
- (vi) The Sewage Sludge Directive (86/278/EEC);
- (vii) The Urban Waste-water Treatment Directive (91/271/EEC) as amended by Directive 98/15/EC;
- (viii) Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market;
- (ix) The Nitrates Directive (91/676/EEC);
- (x) The Habitats Directive (92/43/EEC); and
- (xi) The Industrial Emissions Directive (2010/75/EU)

Table 1 shows how these European Directives and Regulations 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 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.

Note: The information supplied in this document is current at the time of publication and subject to updates and amendments.

Table 1: An outline of the relevant legislation transposing the 11 Directives/Regulations listed in Annex VI of the WFD in Northern Ireland.

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
Bathing Water Directive 2006/7/EC		
<p>The revised Bathing Waters Directive, 2006/7/EC, repealed the previous Directive, 76/160 EEC, in 2013.</p> <p>The revised Bathing Waters Directive requires the Department to annually identify bathing waters, monitor, assess and classify bathing water quality, develop a system of bathing water profiles and encourage public participation. In addition, both the Department and the bathing water operators are required to undertake management measures in the event of pollution incidents and provide appropriate and timely information to the public on bathing water quality.</p>	<p>The Quality of Bathing Water Regulations (Northern Ireland) 2008 (S.R. 2008/231).</p> <p>The Quality of Bathing Water (Amendment) Regulations (Northern Ireland) 2012 (S.R. 2012/218).</p> <p>The Quality of Bathing Water (Amendment) Regulations (Northern Ireland) 2013 (S.R. 2013/151).</p>	<p>The revised Bathing Waters Directive was transposed in Northern Ireland through The Quality of Bathing Water Regulations (Northern Ireland) 2008 (S.R. 2008/231) (as amended in 2012 and 2013). These Regulations were introduced in phases and were fully implemented in Northern Ireland on 30 September 2015. They revoked The Quality of Bathing Water Regulations (Northern Ireland) 1993 (S.R. 1993/205).</p> <p>The bathing season in Northern Ireland runs from 1st June through to 15th 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:- www.nidirect.gov.uk/bathing-water-quality and are in general displayed by local authorities on colour-coded posters on each beach.</p>
Birds Directive 79/409/EEC		
<p>This Directive aims to provide for the long term protection and conservation of all bird species, their nests and habitats, naturally living and occurring in the wild throughout Europe.</p>	<p>The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (S.R.1995/380) as amended by S.R. 2004/435, S.R. 2007/345, S.R. 2009/8, S.R. 2011/216, S.R. 2012/368 and S.R. 2015/182.</p> <p>The Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 (S.R. 2001/1754) as amended by S.R. 2007/77.</p> <p>The Offshore Marine Conservation (Natural Habitats etc.) Regulations 2007 (S.R. 2007/1842) as amended</p>	<p>These 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 bylaws 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>These 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>These Regulations apply to England, Scotland, Wales and Northern Ireland. They implement the Birds Directive with regard to offshore marine areas, offshore marine installations and certain ships and aircraft.</p>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
	S.R. 2009/7, S.R. 2010/491 and S.R. 2012/1928.	
Drinking Water Directive 98/83/EC		
The objective of this Directive is to protect human health from adverse effects resulting from the contamination of water intended for human consumption. It sets standards for water intended for drinking, cooking, food preparation or other domestic purposes, regardless of origin and whether it is supplied from a distribution network, from a tanker, or in bottles or containers. The standards also apply to commercial premises and to water used in food production unless it cannot affect the wholesomeness of the food stuff in its finished form.	The Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (S.R. 2007/147) as amended by S.R. 2009/246, S.R. 2010/128 and S.R. 2015/363.	These Regulations (as amended) transpose the Directive into domestic legislation in respect of public water supplies.
	The Private Water Supplies Regulations (Northern Ireland) 2009 as amended by S.R. 2010/131 and S.R. 2015/366.	These Regulations (as amended) transpose the Directive into domestic legislation in respect of private water supplies.
	The Water Supply (Domestic Distribution Systems) Regulations (Northern Ireland) 2010 (S.R. 2010/157).	These Regulations transpose the Directive in respect of Domestic Distribution Systems within public buildings.
Major Accidents (Seveso III) Directive 2012/18/EU		
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.	The Control of Major Accident Hazards Regulations (Northern Ireland) 2015 (S.R. 2015/325).	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.
	The Planning (Hazardous Substances) (No. 2) Regulations (Northern Ireland) 2015 (S.R. 2015/344).	These Regulations implement the land-use planning requirements of the Seveso III 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.
Directive 2011/92/EU (as amended by 2014/52/EU) on the assessment of the effects of certain public and private projects on the environment		
Directive 2011/92/EU of the European Parliament and of the Council harmonised the principles for the environmental impact	The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015 (S.R. 2015/74).	These Regulations revoke and replace The Planning (Environmental Impact Assessment) Regulations (NI) 2012 (S.R. 2012/59) which transposed Directive 85/337/EC (“the EIA Directive”) before it was repealed. The Regulations ensure

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
<p>assessment of projects by introducing minimum requirements, with regard to the type of projects subject to assessment, the main obligations of developers, the content of the assessment and the participation of the competent authorities and the public, and it contributes to a high level of protection of the environment and human health. This Directive repealed the original EIA Directive 85/337/EEC.</p>		<p>that a planning authority giving consent for a project makes its decision with the full knowledge of any likely significant effects on the environment by setting out a procedure known as environmental impact assessment to assess such effects.</p> <p>Since 1 April 2015 District Councils and the Department are the planning authorities in Northern Ireland.</p>
	<p>The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (S.I. 2011/1824) as amended by S.R. 2015/660.</p>	<p>These Regulations apply in relation to England only, except for Regulation 57 which relates to projects serving national defence purposes and inserts provisions that apply in relation to Northern Ireland.</p>
	<p>The Roads (Environmental Impact Assessment) Regulations (Northern Ireland) 2007 (S.R. 2007/346).</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>
	<p>The Environmental Impact Assessment (Fish Farming in Marine Waters) Regulations (Northern Ireland) 2007 (S.R. 2007/23).</p>	<p>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.</p>
	<p>The Harbour Works (Environmental Impact Assessment) Regulations (Northern Ireland) 2003 (S.R. 2003/136) as amended by S.R. 2007/312.</p>	<p>Most harbour works fall under The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015 (S.R. 2015/74). 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.</p>
	<p>Drainage (Environmental Impact Assessment) Regulations (Northern Ireland) 2006 (S.R. 2006/34).</p>	<p>These Regulations prohibit the carrying out of drainage works, marina works, drainage schemes or canal schemes unless certain conditions are met.</p>
	<p>The Environmental Impact Assessment (Agriculture) Regulations (Northern Ireland) 2007 (S.R. 2007/421) as amended by S.R. 2008/278.</p>	<p>These 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>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
	Environmental Impact Assessment (Forestry) Regulations (Northern Ireland) 2006 (S.R. 2006/518) as amended by S.R. 2007/355.	These Regulations make provisions for the carrying out of Environmental Impact Assessments on forestry projects relating to for example, afforestation, deforestation, forest road works and forest quarries.
	The Water Resources (Environmental Impact Assessment) Regulations (Northern Ireland) 2005 (S.R. 2005/32) as amended by S.R. 2006/483.	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.
	The Offshore Electricity Development (Environmental Impact Assessment) Regulations (Northern Ireland) 2008 (S.R. 2008/55).	These Regulations set out the procedures for developers proposing to apply for a consent under The Electricity (Northern Ireland) Order 1992 (S.R. 1992/231 (N.I. 1)). 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.
	The Marine Works (Environmental Impact Assessment) Regulations 2007 (S.I. 2007/1518) as amended by S.I. 2011/735 and S.I. 2015/446.	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.
	The Offshore Petroleum Production and Pipe lines (Assessment of Environmental Effects) Regulations 1999 (S.R. 1999/360) as amended by S.R. 2007/933.	These Regulations apply to England, Scotland, Wales and Northern Ireland and relate to the environmental effects of certain offshore oil and gas projects.
Sewage Sludge Directive 86/278/EEC		
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 on agricultural land including that used for stock-rearing.	Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990 (S.R. 1990/245).	These Regulations apply only to the application of sewage sludge and septic tank sludge to agricultural land, including that used 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.

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
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>This Directive was amended by Directive 98/15/EC on urban waste water treatment in order to clarify the requirements of the Directive in relation to discharges from urban waste water treatment plants to sensitive areas which are subject to eutrophication.</p>	<p>The Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (S.R. 2007/187).</p>	<p>These Regulations revoked and replaced the Urban Waste Water Treatment Regulations (NI) 1995 (S.R. 1995/12), to reflect the arrangements for the delivery of sewerage services set out in the Water and Sewerage Services (Northern Ireland) Order 2006 (S.I. 2006/3336 (N.I. 21)).</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 also 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, such as disinfection of the effluent using ultra violet light.</p>
Regulation (EC) 1107/2009 concerning the placing of plant protection products on the market		
<p>Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market.</p> <p>The Regulation lays down harmonised rules for the approval of active substances and the placing on the market of plant protection products and its main purpose is to ensure a high level of protection of both human and animal health and the environment.</p>	<p>The Plant Protection Products Regulations (Northern Ireland) 2011 (S.R. 2011/295) as amended by S.R. 2012/12.</p>	<p>These Regulations revoked and replaced the Plant Protection Products Regulations (Northern Ireland) 2005 (S.R. 2005/526). These Regulations, in respect of Northern Ireland, provide for the enforcement of Regulation (EC) No. 1107/2009 concerning the placing of plant protection products on the market.</p> <p>Requirements are that:-</p> <ul style="list-style-type: none"> • only approved pesticides may be used; and • pesticides must be used in accordance with the conditions attached to the approval and they must also be used in accordance with the information specified on the product label.

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
Nitrates Directive 91/676/EEC		
<p>This 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" which are areas with waters affected by pollution or areas which drain into such waters and which contribute to pollution.</p>	<p>The Nitrates Action Programme Regulations (Northern Ireland) 2014 (S.R. 2014/307), as amended by S.R. 2015/369.</p>	<p>The Nitrates Action Programme Regulations aim to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. The first action programme to apply to the whole of Northern Ireland came into effect on the 1st January 2007. The action programme is reviewed every four years and the current action programme covers 2015-2018. 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; nitrogen fertiliser application limits and the inclusion of nitrogen efficiency measures.</p> <p>As per the requirements of the Directive, good agricultural codes of practice have been established and implemented by farmers.</p>
Habitats Directive 92/43/EEC		
<p>This 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>The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (S.R. 1995/380) as amended by S.R. 2003/46, S.R. 2004/435, S.R. 2007/345, S.R. 2009/8, S.R. 2011/216, S.R. 2012/368 and S.R. 2015/182.</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 bylaws 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>The Environmental Impact Assessment (Agriculture) Regulations (Northern Ireland) 2007 (S.R. 2007/421) as amended by S.R. 2008/278.</p>	<p>These 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>The Offshore Petroleum Activities (Conservation of Habitats) Regulations (S.R. 2001/1754) as amended by S.R. 2007/77.</p>	<p>These 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>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
	The Offshore Marine Conservation (Natural Habitats etc.) Regulations 2007 (S.I. 2007/1842) as amended by S.I. 2009/7, S.I. 2010/491 and S.I. 2012/1928.	These 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.
Industrial Emissions Directive (2010/75/EU)		
This 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.	The Pollution Prevention and Control (industrial Emissions) Regulations (Northern Ireland) 2013 (S.R. 2013/160) as amended by S.R. 2014/304.	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.
	The Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013 (S.I. 2013/971).	These Regulations control the operation of offshore combustion installations, through establishment of a pollution control regime.

Table 2: An outline of the relevant legislation transposing a number of other Directives and Regulations relevant to water protection.

Directive/EU Regulation	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>The Biocidal Products Regulations (Northern Ireland) 2001 (S.R. 2001/422) as amended by S.R. 2002/302, S.R. 2007/190 and S.R. 2010/163.</p>	<p>These 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>
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>The Water Environment (Floods Directive) Regulations (Northern Ireland) 2009 (S.R. 2009/376).</p>	<p>The Floods Directive came into force on 26 November, 2007. The Water Environment (Floods Directive) Regulations (NI) 2009 (S.R. 2009/376) has been produced to implement the Directive in Northern Ireland and came into force in December 2009. Flood risk and flood hazard maps have been produced for Northern Ireland, and the first Flood Risk Management Plan for Northern Ireland will be published by 22 December 2015.</p>
Groundwater Daughter Directive 2006/118/EC		
<p>The objective of this Directive is to prevent the (direct or indirect) introduction of high priority pollutants into groundwater and to limit the introduction into groundwater of other pollutants so as to avoid pollution of groundwater by these substances.</p>	<p>The Waste Management Licensing Regulations (Northern Ireland) 2003 (S.R. 2003/493) as amended by S.R. 2009/76, S.R. 2011/403, S.R. 2014/137, S.R. 2014/253 and S.R. 2015/301.</p>	<p>These Regulations make provision to bring into operation a waste management licensing system; they implement the Waste Framework Directive (2006/12/EC) and the Groundwater Daughter Directive 2006/118/EC.</p>
	<p>The Groundwater Regulations (Northern Ireland) 2009 (S.R. 2009/254) as amended by S.R. 2009/359, S.R. 2011/211 and S.R. 2014/208.</p>	<p>These Regulations transpose the Groundwater Daughter Directive and aim to prevent the entry into groundwater of hazardous substances and pollution of groundwater by non-hazardous pollutants.</p>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
Strategic Environmental Assessment Directive 2001/42/EC		
<p>This 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>The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (S.R. 2004/280).</p>	<p>These 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 are strategically assessed and the results of these assessments can be found in Environmental Reports which can be found on the Department's website.</p>
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>It was amended by Directive 2008/98/EC. This Directive sets out measures to minimise the negative effects of the generation and management of waste on human health and the environment and aims to reduce the use of resources.</p> <p>It was also amended by Directive 2009/31/EC on the geological storage of carbon dioxide.</p>	<p>The Waste Management Licensing Regulations (Northern Ireland) 2003 (S.R. 2003/493) as amended by S.R. 2009/76, S.R. 2011/403, S.R. 2014/137, S.R. 2014/253 and S.R. 2015/301.</p> <p>The Waste and Contaminated Land (Northern Ireland) Order 1997 (S.I. 1997/2778 (N.I. 19)).</p> <p>The Waste Management Strategy Regulations (Northern Ireland) 2009 (S.R.2009/178).</p> <p>The Environmental Protection (Restriction on Use of Lead Shot) Regulations (Northern Ireland) (S.R. 2009/168).</p>	<p>These Regulations make provision to bring into operation a waste management licensing system. The Northern Ireland Environment Agency (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> <p>The aim of the Waste and Contaminated Land (Northern Ireland) Order 1997 is to set out provisions relating to waste on land, the collection and disposal of waste, land contamination by pollution, the controlled use, supply or storage of prescribed substances and articles and the obtaining of information on potentially hazardous substances.</p> <p>These Regulations amend the provisions relating to waste management strategies in the Waste and Contaminated Land (Northern Ireland) Order (S.I. 1997/2778), which requires the Department of the Environment for Northern Ireland (DoE NI) to have a strategy containing its policies in relation to the recovery and disposal of waste in Northern Ireland.</p> <p>These Regulations prohibit the use of lead shot for shooting with a shot gun on or over wetlands.</p>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
Landfill Directive 1999/31/EC		
<p>The aim of this Directive is to provide for measures, procedures and guidance to prevent or reduce as far as possible the negative effects on the environment from landfill waste.</p>	<p>The Landfill Regulations (Northern Ireland) 2003 (S.R. 2003/496) as amended by S.R. 2004/297, S.R. 2007/179, S.R. 2007/258, S.R. 2011/101 and</p>	<p>These Regulations deal with issuing permits to create and operate a landfill and set out a control regime.</p>
Marine Strategy Framework 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.</p>	<p>The Marine Strategy Regulations 2010 (S.R. 2010/1627).</p>	<p>These Regulations apply to UK coastal and marine waters and impose a duty on the Secretary of State to develop a marine strategy to implement the Directive. The Regulations set out the elements and timeframes for the Marine Strategy. These are: an assessment of marine waters, the determination of the characteristics of GES, and establishment of targets and indicators (all completed in 2012); the establishment of a monitoring programme in 2014; the development of a programme of measures in 2015; implementation of the programme of actions from 2016; and taking the necessary measures to achieve or maintain good environmental status in the marine environment in 2020.</p> <p>The Regulations make provision for a six-year review cycle of each element of the Marine Strategy.</p> <p>The Regulations also set out how the Secretary of State and devolved administrations will work together to implement the Marine Strategy. They place a general duty on bodies in Northern Ireland which exercise functions in the marine area, to exercise their functions to secure compliance with the Directive.</p>
Priority Substance Directive 2008/105/EC as amended by Directive 2013/39/EU		
<p>This Directive sets environmental quality standards (EQS) for priority substances and certain other pollutants in accordance with the Water Framework Directive.</p>	<p>The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015 (S.R. 2015/351).</p>	<p>The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015 (S.R. 2015/351) transpose the two Priority Substances Directives while also setting out the WFD classification schemes and contain a microbiological guideline flesh standard in respect of shellfish waters following the repeal of the</p>

Directive/EU Regulation	Legislation implementing the Directive in Northern Ireland	Details
<p>This Directive sets environmental quality standards (EQS) for priority substances and certain other pollutants in accordance with the Water Framework Directive. The aim is to ensure good chemical surface water status in relation to the priority substances, in accordance with the provisions and objectives of the Water Framework Directive.</p>		<p>Shellfish Waters Directive in 2013.</p>
<p>Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides</p>		
<p>The Directive includes a number of provisions aimed at achieving the sustainable use of pesticides by reducing risks and impacts on human health and the environment. These include: the establishment of National Action Plans; compulsory testing of application equipment; provision of training for, and arrangements for the certification of, operators, advisors and distributors; a ban (subject to limited exceptions) on aerial spraying; provisions to protect water, public spaces and conservation areas; the minimisation of risks from handling, storage and disposal; and the promotion of low input regimes (including Integrated Pest Management (IPM)). Progress is to be measured through the use of 'risk indicators'.</p> <p>The Directive applies to pesticides that are plant protection products as defined in Regulation (EC) No 1107/2009.</p>	<p>The Plant Protection Products (Sustainable Use) Regulations 2012 (S.I. 2012/1657).</p>	<p>These Regulations transpose Directive 2009/128/EC.</p>

3. Implementation of 'other' controls to protect water in Northern Ireland

As mentioned previously, in addition to controls under the key Directives/Regulations 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 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: Outline of controls to address the 10 water protection topics outlined in the Water Framework Directive.

Measure	Implementation in Northern Ireland
<p>Cost recovery for water use and promotion of efficient and sustainable water use.</p>	<p>Water pricing arrangements for the agriculture and industrial sectors have been in place for many years. The majority of these customers are metered and charged according to usage. This is in line with the Directive's requirement for users to use water resources efficiently and promotes the 'polluter pays principle'. The bulk of non-essential or discriminatory water use is by non-domestic water users who account for around 30% of the total water consumed in Northern Ireland. The continued roll out of metering in that sector will incentivise efficient use of water resources and help achieve the aims of the Directive. Water and sewerage charges were extended to all non-domestic customers on 1 April 2008.</p> <p>It is considered that households make a contribution towards the costs of water and sewerage services through contributions paid through the domestic regional rate. It is estimated that this contribution equated to about half of the level of funding required to provide services to domestic customers in 2008/09. In the absence of specific additional household water and sewerage contributions, the Northern Ireland Executive, through the Department for Regional Development (DRD), provides Northern Ireland Water (NIW) with monthly payments (on behalf of domestic customers), raised through central Government taxes to cover the remaining cost for its services. Currently non-domestic customers are charged for water consumption and sewerage and trade effluent discharge by NIW. The Northern Ireland Executive is currently considering charging methodologies to introduce charging for domestic users.</p> <p>A key priority for NIW is to improve water efficiency and conservation. Some of the measures adopted to achieve this include:-</p> <ul style="list-style-type: none"> • continuing to invest in reducing water mains leakage: in 2014/15 the leakage was at 166 MI/d; • reducing the total water put into the NIW network from 632 MI/d in 2008/9 to 565 MI/d in 2014/15; • attending major public exhibitions, hosting events at its Silent Valley Education Centre and organising educational visits to schools and communities; • travelling throughout the River Basin areas using its Waterbus (mobile classroom) to teach pupils about issues such as water efficiency; • publishing education leaflets for customers on water topics such as using water wisely; • running campaigns designed to increase awareness of the need for water conservation and more environmentally friendly lifestyle choices and behaviours; • implementing and enforcing the requirements of the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 which include an offence of installing or failing to maintain a fitting which wastes or misuses water supplied by NIW; • by adding to the monitoring network in Northern Ireland to more accurately measure the volumes abstracted from each of the surface and groundwater sources currently operated by NIW; more detailed monitoring may identify reductions in volume or sources in the future; • delivering catchment scale projects with support from NIEA officials to monitor and identify mitigation works which may be required under the Directive to ensure compliance; and • preparing a Water Resource and Supply Resilience plan.
<p>Protection of drinking water sources</p>	<p>Guidance on the protection of drinking water sources, entitle 'The contribution of drinking water quality regulations to the implementation of the Water Framework Directive (WFD) in Northern Ireland.' was published jointly by the Drinking Water Inspectorate (DWI) and Water Management Unit (WMU) in July 2013. The guidance can be found at:- www.doeni.gov.uk/niea/wfd_dwd_guidance_july_2013.pdf.</p> <p>This guidance details the working relationship between NIW and WMU in the establishment of Drinking Water Protected Areas (DWPAs). These areas have now been established and work is ongoing between NIW and WMU to quantify the risks within these areas through collating the information available from NIW's Drinking Water Safety Plans (DWSPs), catchment studies and monitoring programmes, along with the monitoring</p>

Measure	Implementation in Northern Ireland
	data and information held by WMU, for each DWPA. Following this exercise consideration will be given to the potential establishment of safeguard zones and any additional monitoring which may be required.
Abstraction and impoundment control	The Department of the Environment introduced The Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 (S.R. 2006/482) in 2006 (as amended by S.R. 2007/122). The regulations came into effect in February 2007 and involve licensing and charging for all applications above abstracting volumes above 20 m ³ 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.
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 (Industrial Emissions) Regulations (Northern Ireland) 2013 (S.R. 2013/160) as amended by S.R. 2014/304 • Regulation of non-mains sewage under The Water Order (Northern Ireland) 1999 (S.I. 1999/662); • The Nitrates Action Programme Regulations (Northern Ireland) 2014 (S.R. 2014 No. 307) as amended by S.R. 2015/369; • The Phosphorus use in Agriculture Regulations (Northern Ireland) 2014 (S.R. 2014/308); • The Control of 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 (N.I. 19)), as amended by S.R. 2011/312 (c. 23) and S.R. 2013/34 (c. 3). • Control of discharges to groundwater under The Groundwater Regulations (Northern Ireland) 2009 (S.R. 2009/254), as amended by S.R. 2009/359, S.R. 2011/211 and S.R. 2014/208; • The Surface Water (Shellfish) (Classification) Regulations (Northern Ireland) 1997 (S.R. 1997/489), as amended by S.R. 2009/61; and • The Quality of Bathing Water Regulations (Northern Ireland) 2008 (S.R. 2008/231) as amended by S.R. 2012/218 and S.R. 2013/151. <p>For a comprehensive list of point and diffuse source discharge controls please refer to the Programme of Measures in the Northern Ireland River Basin Management Plans.</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 Act (Northern Ireland) 2011 (2001 c.25) and supporting legislation, planning policy and guidance; • Control of culverting through consent or approval under Schedule 6 of The Drainage (Northern Ireland) Order 1973 (S.I. 1973/69 (N.I. 1)) as amended by S.I. 2005/1453 (N.I. 8) and S.I. 2006/281. Planning permission is also required for most culverts; • Regulation of the removal of material from river beds under the Fisheries Act (Northern Ireland) 1966 (1966 c.17) as amended by 1968 (c. 31) and 2001 (c. 4); • Control of any physical modification in designated areas under The Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007 (S.R. 2007/345); and • Sections 46 of the Foyle Fisheries Act (Northern Ireland) 1952 (1952 c. 5) as amended by 1962 (c. 5) permits the removal of river bed material from the freshwater portion of any river in the Loughs Agency's area. Loughs Agency, Foyle, Carlingford and Irish Lights Commission (FCILC) may, by permit in writing, and subject to any conditions specified in the permit, authorise any named person to do such things as may be

Measure	Implementation in Northern Ireland
	<p>specified in the permit.</p> <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 the Marine and Coastal Access Act, 2009 (2009 (c. 23)); • Control of works in harbours through The Harbour Works (Environmental Impact Assessment) Regulations (Northern Ireland) 2003 (S.R. 2003/136) as amended by S.R. 2007/312; 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>Prevention or reduction of the impact of accidental pollution incidents</p>	<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 which 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 which are aimed at mitigating and reducing the impact of pollution incidents; • Marine Environment Division's Standing Environment Group arranges to provide environmental and public health advice in the event of a major marine pollution incident (this is part of the UK National Contingency Plan); • 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 (Northern Ireland) Order 1999 (S.I. 1999/662 (N.I. 6) 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.
<p>Authorisation of discharges to groundwater</p>	<p>The Department of the Environment introduced the Groundwater Regulations (Northern Ireland) 2009 (S.R. 2009/254) in 2009 (as amended by S.R. 2009/359, S.R. 2011/211 and S.R. 2014/208). These Regulations, along with the Water (Northern Ireland) Order 1999 (S.I. 1999/662 (N.I. 6), require the Department of the Environment to control pollution by preventing the input of hazardous substances and limit the input of non-hazardous substances to groundwater.</p>
<p>Priority substances control</p>	<p>Thirty three Priority Substances were originally identified at European level in 2008 and a further twelve substances were added by Directive 2013/39/EU in 2013. The Directives set out standards for these substances which must be met in order to meet good status under the Water Framework Directive. Under the Directives, NIEA is required to establish and update inventories of emissions, discharges and losses of these priority substances. An updated Emissions Inventory will be included with the publication of the second cycle river basin management plans in December 2015. NIEA will continue to monitor priority and priority hazardous substances during RBMP cycle two (2015-21) and the implementation of programmes of measures will be part of the mechanism to demonstrate and facilitate reduction and phase out.</p> <p>Registration, Evaluation, Authorisation and restriction of chemicals. REACH (EC) 1907/2006 is a European Union regulation that affects the supply and use of substances. It came into force on the 1 June 2007, and replaced a number of European Directives and Regulations with a single system. NIEA takes enforcement action relating to the offence of breaching marketing and use restrictions contained in Annex XVII – where the</p>

Measure	Implementation in Northern Ireland
	<p>chemical in question poses threat to the environment. NIEA will also support the Competent Authority - HSE/HSENI by checking for offences relating to using an Annex XIV chemical without proper authorisation, or failure to follow the conditions of an authorisation. Further information on REACH can be accessed at www.doeni.gov.uk/articles/reach-regulation.</p>
<p>Controls on other activities impacting on water status</p>	<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 (Northern Ireland) 1985 (S.I. 1985/171 (N.I. 2) as amended by (S.I. 1995/761 (N.I. 6). 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 (Northern Ireland) 1966 (1966 c. 17) as amended by 1968 (c. 31) and 2001 (c. 4). 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, or young, of specific species; • The Alien and Locally Absent Species in Aquaculture Regulations (Northern Ireland) 2012 (S.R. 2012/335) which implements Council Regulation (EC) No 708/2007 concerning use of alien and locally absent species in aquaculture; The Molluscan Shellfish (Control of Deposit) Order (Northern Ireland) 1972 (S.R. 1972/9) which prohibits the introduction of live molluscan shellfish into Northern Ireland waters except under the authority of a permit. The Order is amended by The Alien and Locally Absent Species in Aquaculture Regulations (Northern Ireland) 2012 (S.R. 2012/335) disappplies the prohibition on the introduction of any molluscan shellfish or any species of live fish or crayfish which is introduced under the authority of the 2012 Regulations; and • The Prohibition of Introduction of Fish Order (NI) 1979 (S.R. 1979/178) prohibits the introduction of specified species of fish into inland waters and provides (under certain circumstances) for the Department to issue permits under Section 13 of The Fisheries Act (Northern Ireland) 1966 (1966 c. 17) to persons wishing to introduce certain fish. The Order adds Crayfish to the list. The Order is amended by The Alien and Locally Absent Species in Aquaculture Regulations (NI) 2012 (S.R. 2012/35) which disappplies the prohibition on the introduction of any molluscan shellfish or any species of live fish or crayfish which is introduced under the authority of the 2012 Regulations; <p>The Environmental Liability (Prevention and Remediation) Regulations (Northern Ireland) 2009 (S.R. 2009/252) (as amended by S.R. 2009/361) have the objective of making operators of activities which cause environmental damage financially liable for that damage (the ‘polluter pays’ principle). It imposes duties on operators of economic activities to take immediate steps to prevent damage if there is an imminent threat, and to control damage which is occurring so as to limit its effects.</p> <p>The Reservoir Act (Northern Ireland) 2015 (2015 c. 8) also introduces a management and maintenance regime for reservoir safety in Northern Ireland. Through this, the Act aims to protect the public from the risk of flooding as a result of an uncontrolled release of water due to dam failure.</p>
<p>Controls to avoid increase in pollution of marine waters</p>	<p>The Water Framework Directive covers transitional and coastal waters out to one 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 cover all of Northern Ireland’s territorial waters. The Marine and Coastal Access Act 2009 (2009 c.23) and the Marine Act (Northern Ireland) 2013 (2013 c. 10) will deliver a better system for delivering sustainable development of the marine and coastal environments. This legislation covers areas such as spatial planning, a new licensing system and new nature conservation legislation.</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>

Measure	Implementation in Northern Ireland
	<p>In addition, the Marine Strategy Framework Directive applies to European marine waters not covered by the WFD. The principles of the Directive are similar to WFD, where Member States must aim to meet good environmental status by 2021. The Marine Strategy Framework Directive is transposed in the UK through The Marine Strategy Regulations 2010.</p> <p>Northern Ireland is currently developing marine plans for both the inshore and offshore regions, which will be published as a single document entitled the Marine Plan for Northern Ireland. The Marine Plan for Northern Ireland will provide an integrated, spatial planning approach to Northern Ireland's inshore and offshore areas, its resources, and the activities and interactions that take place within these areas.</p> <p>The Maritime Spatial Planning (MSP) Directive, which came into force in 2014, also complements the actions already ongoing in the UK as it is aimed at helping to develop plans to better coordinate the various activities that take place in the marine area, ensuring they are as efficient and sustainable as possible.</p> <p>Shellfish Water Pollution Reduction Programmes are also in place- these can be accessed at:- www.doeni.gov.uk/publications/pollution-reduction-programmes-2015</p>