



shannon  
river basin district



# Shannon River Basin District Management System

## Policy And Legislation Report

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### **Foreword**

This report is prepared to satisfy the requirements of Task No. 1 in the Consultants Brief for the Shannon River Basin District Monitoring & Management System. Task No. 1 requires the Consultants to prepare a report on background information relating to all relevant legislation at national and EU level, including the Framework Directive.

**TABLE OF CONTENTS**

	<b>Page</b>
<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 INTRODUCTION</b>	<b>2</b>
1.1 General Introduction .....	2
<b>2.0 LEGISLATIVE STRUCTURE</b>	<b>3</b>
2.1. European Law .....	3
2.2 National Law.....	3
<b>3.0 EUROPEAN LEGISLATION</b>	<b>5</b>
3.1. General Introduction .....	5
3.2 Combined Approach .....	7
3.3 Water Quality Oriented Legislation .....	16
3.4 Emission Control Oriented Legislation .....	19
3.5 Related Water Sector Legislation .....	22
<b>4.0 NATIONAL LEGISLATION</b>	<b>26</b>
4.1 General.....	26
4.2 Water Quality Oriented Legislation .....	27
4.3 Emission Control Legislation .....	32
4.4 Related Water Sector Legislation .....	39
<b>5.0 IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE</b>	<b>46</b>
5.1 Requirements and Responsible Bodies .....	46
5.2 Establishment of River Basin Districts .....	46
5.3 Programme of Measures .....	46
5.4 Administration and Implementation .....	47
<b>REFERENCES</b>	<b>71</b>
<b>BIBLIOGRAPHY</b>	<b>72</b>
<b>APPENDIX A COMMON IMPLEMENTATION STRATEGY–OVERALL WORK PROGRAMME</b>	<b>71</b>
<b>APPENDIX B DESIGNATIONS AND STANDARDS AS SET THROUGH IRISH LEGISLATION</b>	<b>73</b>
(i) Drinking Water .....	73
(ii) Salmonid Water .....	76
(iii) Shellfish Water .....	78
(iv) Bathing Water .....	79
(v) Dangerous Substances .....	80
(vi) Phosphorus Standards .....	81
(vii) Urban Waste Water.....	82
(viii) Conservation of Wild Birds (79/409/EEC).....	83
<b>APPENDIX C LOCAL AUTHORITY RESPONSIBILITIES</b>	<b>83</b>
Part 1 Water Quality Oriented Legislation.....	83
(i) Bathing Water .....	83
(ii) Drinking Water .....	83
(iii) Surface Water .....	84
(iv) Salmonid Water .....	85
(v) Shellfish Water .....	85

Part 2 - Emission Control Legislation ..... 85

(i) Water Pollution ..... 85

(ii) Urban Waste Water ..... 88

(iii) Groundwater ..... 89

Part 3 Water Sector Related Legislation ..... 91

(ii) Waste ..... 92

(iii) Sea Pollution ..... 93

(iv) Planning & Development ..... 93

(v) Local Government ..... 94

**APPENDIX D ORGANISATIONS AND THEIR FUNCTIONS 95**

**APPENDIX E ORGANISATIONS AND THEIR ASSOCIATED ROLE/FUNCTION IN  
RELATION TO THE WFD. 97**

**APPENDIX F ORGANISATIONS AND THE ASSOCIATED REQUIREMENTS OF THE WFD 99**

### *Executive Summary*

- This report describes the existing legislation European and National, which is pertinent to the Water Framework Directive and its implementation.
- The Principal Acts which empower the Minister to introduce regulations to implement the requirements of EU Directives relating to water bodies are:
  - European Communities Act, 1972
  - Water Pollution Act, 1977
  - Environmental Protection Act, 1992
  - Waste Management Act, 1996
- The Water Framework Directive requires that individual Member States must introduce by 22<sup>nd</sup> December 2003 laws, regulations and administrative provisions necessary to comply with the Water Framework Directive.
- Primary Legislation, in the form of a new Act, will most likely be required to put in place competent authorities and to provide a combined approach for the implementation of the Water Framework Directive.
- Existing National Legislation is in place to bring into effect most EU Directives concerning the management of water. The most notable exception being the Directive (91/676/EEC) concerning the protection of waters against pollution caused by nitrates from agricultural sources. Discussions are on-going within Government and with stakeholders concerning the designation of the whole Country as a Nitrate Vulnerable Zone.
- Existing legislation provides for the designation of certain waters that must comply with specific statutory environmental quality standards as a consequence of their particular beneficial uses. Within the Shannon River Basin District these include:

➤ **Designated Bathing Waters**

***County Clare***

Fanore  
Whitestransand, Milltown Malbay  
Whitestransand, Doonbeg  
Mountshannon  
Ballycuggeran, Killaloe  
Cappagh Pier  
Beach at Kilrush  
Spanish Point  
Ballyallia Lake, Ennis  
Kilkee  
Seafield, Quilty  
Lahinch

***County Kerry***

Ballyheigue  
Ballybunion South  
Ballybunion North  
Banna Strand  
Maharbeg, Castlegregory  
Fenit  
Castlegregory

***County Leitrim***

Keeldra Lake

***County Galway***

Portumna

***County Westmeath***

The Cut, Lough Lene  
Portnashangan, Lough Owel  
Lilliput, Lough Ennel

➤ **Blue Flag Beaches and Marinas (2002) (Blue Flag.org)**

**Clare**

Kilrush Creek Marina  
Mountshannon Marina  
Ballycuggeran (Killaloe)  
Cappagh Pier (Kilrush)  
Fanore  
Kilkee  
Lahinch  
Mountshannon  
White Strand Doonbeg  
White Strand Miltown Malbay

**Kerry**

Fenit Marina  
Ballybunion North  
Ballybunion South  
Ballyheigue  
Banna  
Fenit  
Maherbeg

**Westmeath**

The Cut, Lough Lene

- |  |   |
|--|---|
| <p>➤ <b>Salmonid Waters</b><br/>River Feale<br/>River Fergus</p> <p>➤ <b>Sensitive Waters (Part I)</b><br/><i>Stretches of the River:</i> Camlin, Longford<br/>Tullamore, Offaly<br/>Nenagh, Tipperary</p> <p>➤ <b>Sensitive Waters (Part II)</b><br/><i>Stretches of the River:</i> Hind, Roscommon<br/>Brosna, Westmeath<br/>Little Brosna, Offaly</p> <p><i>Lakes:</i> Ennel, Westmeath</p> | <p>➤ <b>Shellfish Waters</b><br/>Inner Bay, Magharees, Co. Kerry</p> <p><i>Lakes:</i> Lough Derg<br/>Lough Ree</p> <p><i>Stretches of the Estuary:</i> Upper Feale Estuary<br/>Cashen/Feale Estuary<br/>Upper Lee Estuary</p> |
|--|---|

In addition the following wildlife areas have been designated:

- **Wildlife Designations**  
30 Special Protection Areas  
64 Special Areas of Conservation
- Legislation is in place to implement many of the requirements of the Water Framework Directive with respect to monitoring, controlling discharges and measures. Powers are available to statutory authorities to further implement the directive by way of new conditions attached to licences and permissions and the introduction of bye-laws.

## **1.0. INTRODUCTION**

### **1.1 General Introduction**

The Water Framework Directive (2000/60/EEC) is the most significant piece of legislation in the field of Water Policy to date. This Directive entered into force on its publication in the Official Journal of the European Communities on 22nd December 2000. There is a requirement to transpose it into Irish law by December 2003.

Previous water related legislation in Ireland and Europe has been fragmented and has either been emission control or water quality related. A new and more co-ordinated approach was needed and a major review of EU water policy was undertaken finally resulting in the Water Framework Directive. This 'Umbrella' directive ties together existing legislation while repealing other directives on a phased basis.

The Water Framework Directive establishes a management structure for future European water policy, with the following main objectives:

- Expanding the Scope of water protection to all waters, Rivers, lakes, transitional and coastal waters and groundwater.
- Achieving "Good Status" in all waters by 2015 and maintaining "High Status" where it exists
- Water management based on river basins
- "Combined approach" of emission limit values and quality standards
- Getting the prices right:- Charges for water and waste water reflecting the true costs
- Getting citizens involved more closely in the water management process
- Streamlining legislation

The purpose of this report is to give an overview of European and National legislation relevant to the objective of the project giving particular emphasis to the Water Framework Directive (WFD). It also identifies the requirements of the WFD directive and the responsible authorities.

Chapter 2 of the report describes EU and Irish legislative structure and explains how EU directives are subsequently transposed into Irish law. Chapter 3 gives a detailed introduction to EU Water Policy with particular importance given to the Water Framework Directive. This chapter also provides an overview of 'water sector' and 'water related' European Legislation. Chapter 4 describes National policy and legislation in the field of water. A brief synopsis of the legislation is given and the competent Authorities identified. Chapter 5 defines the requirements of the WFD and allocates lead authorities to fulfil each requirement. Gaps in existing Irish legislation are also identified in the context of WFD requirements.

Appendix A sets out the overall work programme under the Common Implementation Strategy. Appendix B sets out the standards for compliance with existing Irish legislation and Appendix C lists Local Authority responsibilities as defined by existing Irish regulations in the water sector. Appendix D, E and F, adapted from Irvine *et. al.* (2002), identifies organisations and their functions in relation to the Water Framework Directive.



## 2.0 **LEGISLATIVE STRUCTURE**

### 2.1. **European Law**

Treaties are the primary source of European Union law. Treaties set out the fundamental laws of the Union which must be agreed and ratified by the Member states. The European Commission, the Council of the European Union and the European Parliament has shared power to make legislation – the secondary source of European Law. There are four types of secondary legislation:

- **Regulations** apply to all Member States. Once brought into force regulations immediately become part of national law – new Irish legislation is not required to enforce a EU regulation.
- **Directives** are requirements on the Member States to introduce national legislation in order to achieve a specific result. The individual member states identify the form and method of legislation for implementing the Directive. Usually a deadline is set for implementation of the legislation. The means of achieving the results are largely left to the Member States/Competent Authority in accordance with the Subsidiarity Principle.
- **Decisions** are usually to address to a limited defined group of persons or member states. They also may be used to set limits or values for parameters for a directive, e.g., setting the list of priority substances for the WFD.
- **Recommendations** and opinions are not binding.

EU legislation comes into effect on the date on which it is published in the Official Journal of the Community. EU legislation is superior to all national legislation therefore Irish legislation must set equal or more stringent requirements, in accordance with the Subsidiarity Principle.

### 2.2 **National Law**

In Irish legislation the procedural vehicles to transpose the various EC directives into Irish law are, Acts of the Oireachtas and secondary or delegated legislation in the form of Statutory Regulations (see Figure 2.1. for EU and National legislative structure).

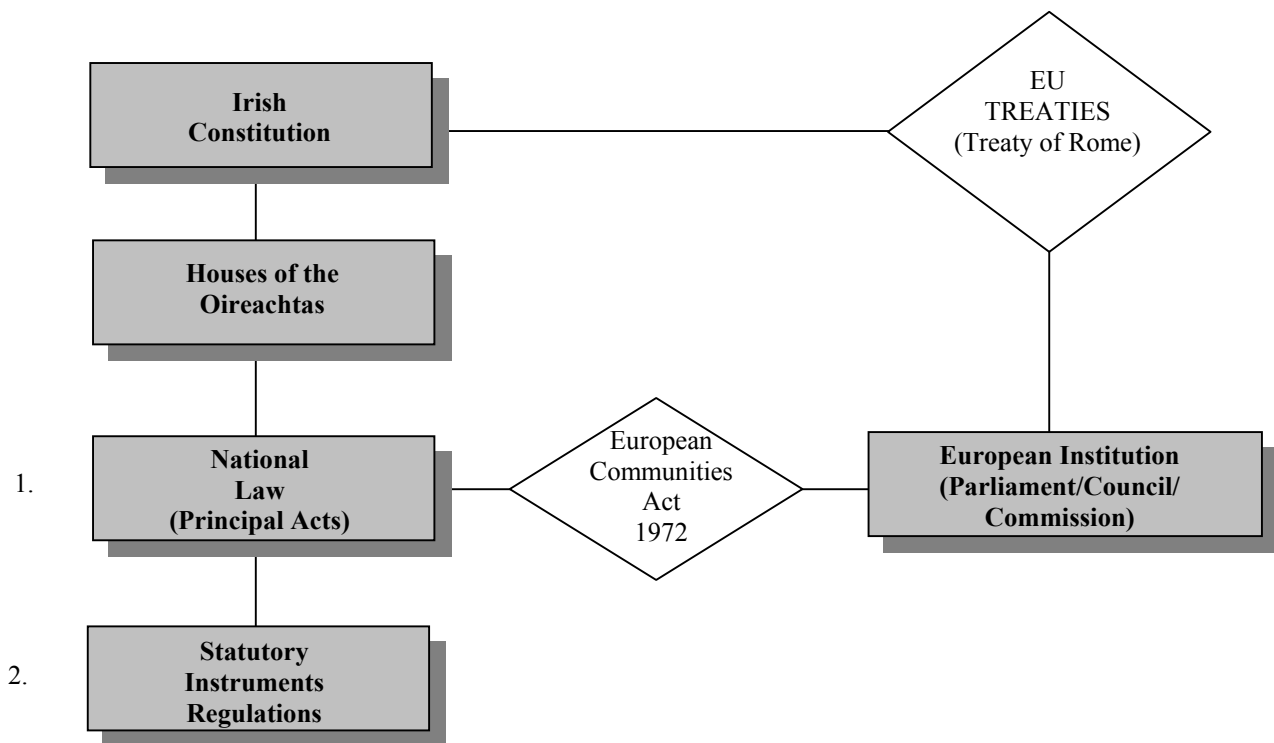
The sole and exclusive power of making laws for the State is vested in the **Oireachtas** subject to the obligations of the European Union (the issuing of Directives to Member States) as provided in the Constitution of Ireland. All primary legislation i.e. **Acts of the Oireachtas** start life as Bills which are proposals for legislation.

Before a **Bill** is initiated in the Dáil or Seanad, its contents will have been approved by the Government. A process of consultation with Government Departments and groups likely to be affected by the Bill will have taken place beforehand. The Government may publish a Green Paper, which will be a discussion document in which it sets out its ideas and invites comment and views from individuals and relevant organisations.

Once both Houses (Dáil & Seanad) have passed a Bill, the Taoiseach presents a copy of the Bill, prepared in the Office of the Houses of the Oireachtas, to the President for signature and promulgation of the Act as a law. The signed text is then enrolled for record in the Office of the Registrar of the Supreme Court.

Secondary legislation, in the form of **Statutory Instruments**, is governed by the Statutory Instruments Act 1947. There are five main types of statutory instruments - orders, regulations, rules, bye-laws and schemes. Statutory instruments have a wide variety of functions. They are not enacted by the Oireachtas but allow persons or bodies to whom legislative power has been delegated by statute to legislate in relation to detailed day-to-day matters arising from the operation of the relevant primary legislation. Statutory instruments are used, for example, to implement European Council Directives, designate bathing waters, salmonid waters, protected areas, etc. Specified Government Ministers and other agencies and bodies are authorised to make Statutory Instruments.

**Figure 2.1. EU and National legislative structure**



**Notes:**

1. The Principal Acts concerning the Water Framework Directive and Water Management include:
  - European Communities Act, 1972  
(Section 2 empowers the Minister to make regulations to give full effect to the Act which includes bringing into force in Irish Law, laws made by the European Parliament).
  - Water Pollution Act, 1977 (as amended in 1990)  
(Section 30 of the Act empowers the Minister to make regulations in relation to any matter referred to in the act).
  - Environmental Protection Agency Act, 1992  
(Sections 6 and 59 of the Act empowers the Minister to make regulations).
  - Waste Management Act, 1996  
(Section 7 of the Waste Management Act empowers the Minister to make regulations).
2. The Minister makes regulations under the powers given to him under the Principal Acts.

### **3.0**                    ***EUROPEAN LEGISLATION***

#### **3.1.                    General Introduction**

The ‘first wave’ of European Legislation relating to Water occurred in the mid seventies and early eighties. This “first wave” of legislation introduced quality standards for specific types or uses of waters, including the Bathing Water, Freshwater Fish and Shellfish Water Directives. Emission limit control oriented Directives for specific water uses like the Dangerous Substance and Groundwater Directive were also introduced at this time. The “second wave” of legislation came in the early 90’s and included further emission control directives including the Urban Waste Water Directive and the Nitrates Directive.

All these specific Directives were considered inadequate in the context of providing overall protection to water (EU, 2000a). Prior to the Water Framework Directive, the approaches adopted to deal with water pollution had been either based on a Water Quality Objectives (WQO) approach or an Emission Limit Value (ELV)/emission control approach. Both approaches had potential flaws in achieving the overall targets of ensuring the sustainable management of all waters throughout the Community. The Water Framework Directive (WFD) was therefore developed with the objective of achieving “good status” for all waters through the adoption of a combined approach looking both at quality objectives and setting limits on emission values (EU, 2000b). A summary of European Legislation in the Water Protection Sector is given in Table 3.1.

**Table 3.1. European Legislation in the Water Protection Sector**

<b>REF. SECTIO N</b>	<b>Legislation</b>
<b>3.2</b>	<b><i>Combined approach</i></b>
3.2.1	• Water Framework Directive (2000/60/EEC)
3.2.2	• Decision on list of priority substances in the field of water policy and amending directive 2000/60/EC
<b>3.3</b>	<b><i>Water Quality Objective oriented:</i></b>
3.3.1	• Bathing Water Directive (76/160/EEC).
3.3.2	• Directive on Surface Water for Drinking Water Abstraction (75/440/EEC as amended by Directives 79/869/EEC and 91/692/EEC).
3.3.3	• Directive relating to the quality of water intended for human consumption (80/778/EEC)
3.3.4	• Drinking Water Directive (98/83/EC).
3.3.5	• Freshwater Fish Directive (78/659/EEC) as amended by Directive 91/692/EEC).
3.3.6	• Shellfish Water Directive (79/923/EEC as amended by Directive 91/692/EEC).
<b>3.4</b>	<b><i>Emission-Control oriented:</i></b>
3.4.1	• Urban Waste Water Treatment Directive (91/271/EEC, as amended by Directive 98/15/EC) and related decision 93/481/EEC.
3.4.2	• Nitrates Directive (91/676/EEC) <sup>1</sup> .
3.4.3	• Ground Water Directive (80/68/EEC as amended by Directive 91/692/EEC).
3.4.4	• Dangerous Substances Directive (76/464/EEC) <sup>2</sup> and daughter directives; <ul style="list-style-type: none"> <li>i) Directive on Discharges of Mercury from the chlor-alkali electrolysis industry (82/176/EEC).</li> <li>ii) Directive on Discharges of Cadmium (83/513/EEC).</li> <li>iii) Directive on Discharges of Mercury from other sources (84/156/EEC).</li> <li>iv) Directive on Discharges of Hexachlorocyclohexane (84/491/EEC).</li> <li>v) Directive on Discharge of List I Substances (Directive 86/280/EEC as amended by Directives 88/347/EEC and 90/415/EEC).</li> </ul>

<sup>1</sup> The Nitrates Directive (91/676/EEC) also contains the water quality objective where the criteria for designation of vulnerable zones includes for groundwaters containing more than 50 mg/l nitrates .

<sup>2</sup> The Dangerous Substances Directive 76/464/EEC and its Daughter Directives on mercury, cadmium, hexachlorocyclohexane and List 1 substances provide as a rule an emission control approach. However, as an alternative they allow, under certain circumstances, a water quality objective approach.

## 3.2 Combined Approach

Previous Directives tended to focus on either of two different approaches. The Water Quality Objective (WQO) approach establishes the minimum quality requirements of water to limit the cumulative impact of emissions, both from point sources and diffuse sources. The Emission Limit Value (ELV) approach focuses on the maximum allowed quantities of pollutants that may be discharged from a particular source in to the aquatic environment. With the Combined Approach the Member States set down through the programme of measures both limit values and control emissions with a focus on achieving good (ecological) water quality.

### 3.2.1 Water Framework Directive

*Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy*

#### 3.2.1.1. Introduction

The ever increasing demands being placed by society on water has led to the need for an overhaul of the way in which water is managed in Europe. The Water Framework Directive (WFD), which entered into force on the 22<sup>nd</sup> December 2000, reforms EU water legislation by introducing a new and innovative model for water management. The essence of the WFD is an approach to water management that focuses on both quality and quantitative status consistent with a healthy ecosystem. The Directive recognises that water is more than a commercial resource but, rather, a heritage, which must be protected, defended and maintained in a high or good status.

The purpose of this Directive is to establish a framework for the protection of all waters (inland surface waters, transitional waters, coastal waters and groundwater), in order to prevent and reduce pollution, protect the aquatic environment, improve the status of aquatic ecosystems; promote sustainable water use and mitigate the effects of floods and droughts. The directive sets out to achieve its aims through the following main objectives:

- expanding the scope of water protection to **all waters**, surface waters and groundwater;
- achieving “**Good status**” for all waters by a certain deadline and maintaining “**High Status**” where it exists;
- water management based on river basins, with a **combined approach** of emission limit values and quality standards;
- getting the price of water right;
- getting the citizen more closely involved; and
- streamlining legislation.

Overall, the WFD aims to achieve good status, with the exception of derogations, for all rivers lakes, transitional and coastal waters and groundwater that are currently failing to reach this status and good ecological potential for the corresponding Artificial or Heavily Modified water bodies by 2015. As with all EU Directives, the Water Framework Directive will not allow deterioration in those waters that are currently in a state higher than good status.

#### 3.2.1.2 Key Tasks of Water Framework Directive

The Directive, through its various articles, sets out key tasks which Member States must follow in order to implement the framework. The main tasks are outlined in Table 3.2 below and described in more detail in the text that follows.

**Table 3.2. Key tasks and related article of Water Framework Directive**

<b>Date</b>	<b>WFD Articles</b>	<b>Key tasks</b>
2003	Article 24	<i><b>IMPLEMENTATION OF THE WFD ON A NATIONAL LEVEL</b></i>
2003	Article 3	Establishing of <b>River Basin Districts</b> as the fundamental unit for applying and co-ordinating the Directive's provisions
2004	Articles 4, 5, and 6	<b>Characterisation</b> of water bodies and agreeing key water management issues
2006	Article 8	Establishing and maintaining appropriate <b>Monitoring Programme</b> - Such monitoring must cover both surface and groundwater.
2009	Article 11	Designing <b>Programmes of Measures</b> and <i>DEVELOPING RIVER BASIN MANAGEMENT PLANS</i> for their implementation
2010	Article 9	<b>Water pricing policies</b> that take into account the principle of 'cost recovery' for water services
ongoing	Article 14	<b>Public Information and consultation</b>

### 3.2.1.3

#### Implementation

The individual Member states must introduce laws, regulations and administrative provisions necessary to comply with this Directive by the 22<sup>nd</sup> December 2003. The practical implementation of the Directive raises challenges that are widely shared by all Member states. These include an extremely demanding timetable (Refer to Table 3.4). There is a particular need for elaboration of the technical and scientific basis of a number of fundamental aspects of Annex II and Annex V of the Directive, in order to make the successful transition from principles and general definitions to practical implementation.

Over the life span of the Directive a number of existing water quality directives will be repealed as follows:-

Seven years after the entry into force of the Directive, the following legislation will be repealed:

- Directive 75/440/EEC Surface Water Drinking Water Abstraction
- Decision 77/795/EEC Common Procedure for the exchange of information on the quality of Surface Water
- Directive 79/869/EEC Methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water.

Thirteen years after the entry into force of the Directive, the following legislation will be repealed:

- Directive 78/659/EEC Freshwater Fish
- Directive 79/923/EEC Shellfish Water
- Directive 80/68/EEC Ground Water
- Directive 76/464/EEC Dangerous Substances, with the exception of Article 6, repealed on the date of entry into force of this Directive.

The repeal of these Directives will be phased to ensure that at least the same level of protection is afforded to waters at all times.

### *Common Implementation Strategy*

To assist in continuity of implementation of the WFD the Member States, on the 2<sup>nd</sup> May 2001, agreed a strategic document for a Common Strategy on the Implementation of the Water Framework Directive.

The aim of the Common Strategy is to assist in a coherent and harmonious implementation of the Directive. The focus is on the development of informal and non-legally binding documents with the aim of clarifying and developing technical and scientific information required for practical implementation of the Directive. Four key activities are:

- Information sharing
- Developing guidance on technical issues
- Information and data management
- Application, testing and validation

The Water Framework Directive stipulates the need for new Community law for specific areas such as priority substances and pollution control, groundwater and on report requirements. Expert Advisory Fora, consisting of Member States participants, stakeholders, NGO's and experts have been established in parallel with the key activities. The Commission shall consult the Fora with a view to examining and as appropriate further developing Community Water Policy. The following Expert Advisory Fora have been established:

- Expert Advisory Forum on Priority Substances and Pollution Control
- Expert Advisory Forum on Groundwater
- Expert Advisory Forum on Reporting

Working Groups were created for the different key activities and projects. The schedule of the key activities and the working groups established to carry out these activities is given in Appendix A. Each of the Key activities aims to produce practical outputs which shall assist the WFD implementation. Table 3.3 below provides an overview of the working groups and their final outputs. Following finalisation of the documents produced by each working group, the groups were replaced by four new groups. These are:

- 2a Ecological Status
- 2b Integrated River Basin Planning
- 2c Groundwater
- 2d Reporting

A testing of the guidance documents is envisaged in the so-called "pilot river basins". The objective is to gain practical experiences and apply several documents together in order to test their consistency and coherency. Following the testing phase, the final aim of the joint strategy is to produce a "Manual for Integrated River Basin Management" in 2004/2005. This manual shall be used to prepare river basin management plans under the Water Framework Directive. The Shannon River Basin District has been designated as the "Pilot River Basin" in the Ireland and Northern Ireland ecoregion, 17, as designated in the WFD. Also involved in the complementary stages of the Water Framework Directive in Ecoregion 17 are the North-South Technical Advisory Group and its associated subgroups on rivers and lakes.

National Working Groups have been established covering the following areas in parallel with the EU Working Groups:

- Typology/Characterisation/Reference Conditions
- Groundwater
- Pressures and Impacts
- Economic Analysis
- Fish Stock Assessment
- GIS, IT Compatibility
- Public Consultation, Participation
- Hydrology

**Table 3.3 Overview of Activities under the Common Implementation Strategy**

Group	Acronym	Name	Output 2002	Document
2.1	IMPRESS	Analysis of pressures and impacts	Guidance document	Guidance for the analysis of Pressures and Impacts In accordance with the Water Framework Directive.
2.2	HMWB	Heavily Modified Water Bodies	Guidance document	Identification and Designation of Heavily Modified and Artificial Water Bodies
2.3	REFCOND	Reference conditions for rivers and lakes	Guidance document	Guidance on establishing reference conditions and ecological status class boundaries for inland surface waters
2.4	COAST	Typology, classification and references conditions for transitional and coastal waters	Guidance document	Guidance on typology, reference conditions and classification systems FOR transitional and coastal waters
2.5	IC	Intercalibration	Guidance document	Towards a guidance on establishment of the Intercalibration network and on the process of the Intercalibration exercise
2.6	WATECO	Economic analysis	Guidance document	Economics and the Environment: The Implementation Challenge of the Water Framework Directive
2.7	MON	Monitoring	Guidance document	Guidance on Monitoring for the Water Framework Directive
2.8	GW	Groundwater - tools for assessment and classification	Report and software tools	"The EU Water Framework Directive: Statistical aspects of the identification of groundwater pollution trends, and aggregation of monitoring results"
2.9	PROCLAN	Best practices in river basin planning	1) Report on identification of river basin districts	Work Package 1 Identification of River Basin Districts in Member States Overview, criteria and current state of play
			2) Guidance on public participation	Guidance on Public Participation in relation to the Water Framework Directive Active: involvement, Consultation, and Public access to information.
			3) Guidance on planning process	Expected finalisation mid-2003
3.1	GIS	Geographic information systems	Guidance document	Guidance Document onImplementing the GIS Elements of the WFD
4.1	PRB	Integrated testing in pilot river basins	Establish pilot river basin network	Pilot River Basin Network, Summary and Fact Sheet
COM	-	Special drafting group on the identification of water bodies	Horizontal guidance	Identification of water bodies
Drafting Group	New working activity	Wetlands	Horizontal Guidance	Work just started; expected finalisation mid-2003

<sup>1</sup>WFD CIRCA is a European Information Exchange Platform website, available at: <http://europa.eu.int/comm/environment/water/water-framework/information.html>



### 3.2.1.4 River Basin Districts

A key feature to the WFD is the adoption of **River Basin Districts (RBD)** as the model for future management of water in the EU. This approach recognises that water does not respect political or administrative boundaries and therefore can only be managed sustainably when looked at in its natural physical and hydrological boundaries.

At the core of the Directive is the requirement to produce a management plan for each RBD setting out how the environmental objectives are to be met. This **river basin district management plan** must be based on a detailed analysis of the pressures on water bodies within the river basin and an assessment of their impact. Information gathered allows a comprehensive **programme of measures** to be drawn up, tailored to the circumstances in each river basin district and in particular to target improvements and monitoring effort on those water bodies most at risk of failing to meet their targets.

The WFD, and therefore each river basin management plan, seeks the co-ordination of objectives to achieve at least **'good status'** for all waters by 2015. Good status exists when both the ecological and chemical status are at least good. Table 3.4 details the key milestones for the implementation of the WFD in each of the Member States.

**Table 3.4 A summary of the key milestones for implementation of the WFD**

<b>Year</b>	<b>Milestone</b>
2000 Dec	Directive enters into force
2003 Dec	Transposition into national law Identification, location and boundaries of River Basin Districts Identification of Competent Authorities Draft Register of Intercalibration Sites
2004 Dec	Characterisation of River Basins Identification of pressures and impacts Economic analysis of water use Identification of location and boundaries of water bodies Definition of reference conditions for good ecological status of water bodies Register of Protected Areas Register of sites for use in intercalibration network to test the definition of high, good and moderate status
2006 Dec	Monitoring programmes operational Production of timetable and work programme of the River Basin Management Plans, including consultation measures.
2008 Dec	Draft River Basin Management Plans to be made Public
2009 Dec	Production of River Basin Management Plans and Programme of Measures
2012 Dec	Implementation of Programme of Measures
2015 Dec	Good water status to be achieved for all surface waters, artificial and heavily modified waters and ground waters

3.2.1.5 Characterisation

Each Member State is required to provide for each RBD:

- an analysis of its characteristics,
  - a review of the impact of human activity on the status of surface waters and on groundwater, and
  - an economic analysis of water use
- in accordance with the technical specifications set out in Annexes II and III of the WFD.

Characterisation of water bodies and determination of typology and setting of type-specific reference conditions are fundamental to the operation of the WFD. The analysis of characteristics requires the identification of the location and boundaries of the surface water bodies. All **surface waters** shall be identified as falling within either one of the following surface water **categories** - rivers, lakes, transitional waters or coastal waters - or as artificial surface water bodies or heavily modified surface water bodies. In this context:-

“**Surface water**” means inland waters, except groundwater; transitional waters and coastal waters, except in respect of chemical status for which it shall include territorial waters”

“**Transitional Waters**” are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater.”

For each surface water category, **the relevant** (indicating not all rivers or lakes must be typed) surface water bodies within the river basin district shall be differentiated according to **type**. Typologies separate the water bodies according to their hydromorphological characteristics. Typologies can be defined using either of two systems outlined in Annex II. There is general consensus throughout Europe that System B (see table 3.5) is preferred as it allows further flexibility to the designation of typologies, than is capable with System A (Irvine *et. al.* 2002 & Clabby K. 2002). Reference conditions, representing generally undisturbed conditions must be established for each water body type. The reference conditions will provide a ‘yardstick’ against which water status is determined.

**Table 3.5 Characterisation of Rivers under System B**

Alternative characterisation	<i>PHYSICAL AND CHEMICAL FACTORS THAT DETERMINE THE CHARACTERISTICS OF THE RIVER OR PART OF THE RIVER AND HENCE THE BIOLOGICAL POPULATION STRUCTURE AND COMPOSITION</i>
Obligatory factors	altitude
	latitude
	longitude
	geology
	size
Optional factors	distance from river source
	energy of flow (function of flow and slope)
	mean water width
	mean water depth
	mean water slope
	form and shape of main river bed
	river discharge (flow) category
	valley shape
	transport of solids
	acid neutralising capacity
	mean substratum composition
	chloride
	air temperature range
	mean air temperature
precipitation	

For characterisation of **groundwaters**, a similar task needs to be carried out. The main elements for characterisation are:

- the location of boundaries,
- identification of anthropogenic pressures (pollution/ abstraction/ artificial recharge),
- the general character of the overlying strata in the catchment area from which the groundwater body receives its recharge
- the identification of directly dependent surface water ecosystems or terrestrial ecosystems

There are also methodologies being adopted for the characterisation of Coastal and Transitional waters.

#### 3.2.1.6 Monitoring

Member States shall ensure the establishment of programmes for the monitoring of ecological and chemical status in order to establish a coherent and comprehensive overview of ecological and chemical status within each river basin district. The objectives of such monitoring programmes are as follows:

- provide comprehensive data on the ecological and chemical status (quantitative status must also be covered for groundwaters)
- permit the classification of status of water bodies
- design based on the characterisation and impact assessment carried out for the RBD

The WFD requires an extensive monitoring system of water quality and quantity. The monitoring is divided into three categories:

- surveillance monitoring
- operational monitoring
- investigative monitoring

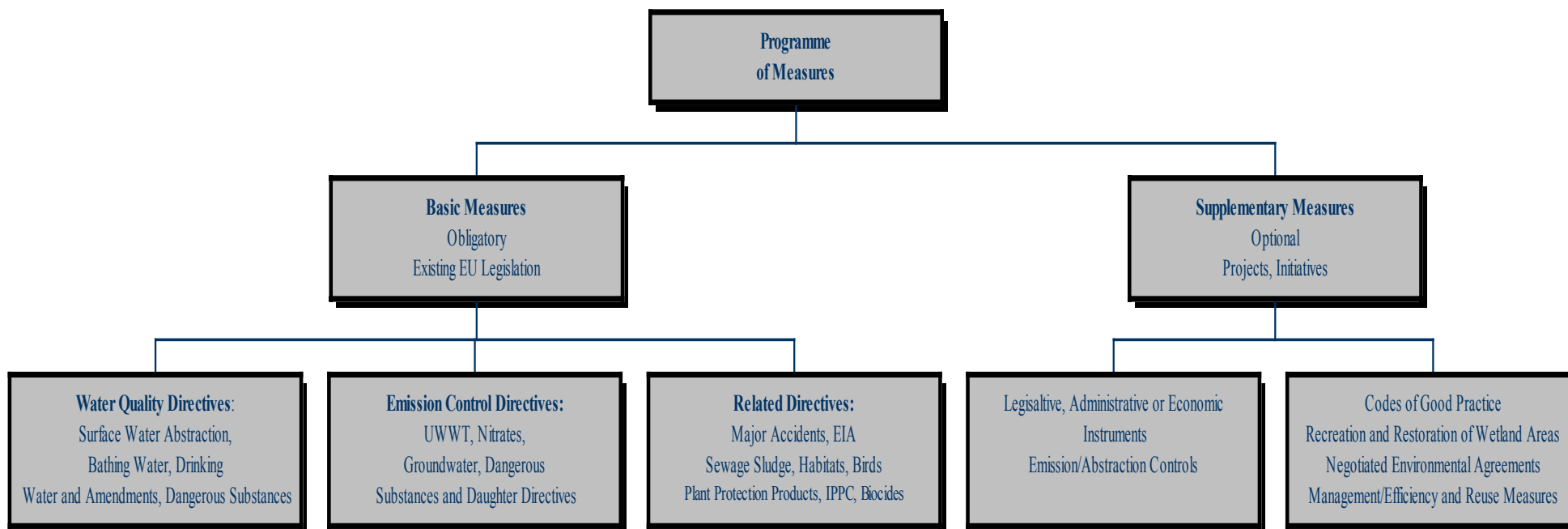
There is a need for clarification on which elements and parameters are required to be monitored (See Monitoring Guidance Document), and the development of sampling methodologies and classification systems for the monitoring of most if not all biotic elements. Further research is needed to identify and quantify parameters indicative of the quality of elements described in the WFD and to establish robust typologies and reference conditions required. Working Groups have been established at European and National level to establish methodologies for the implementation of the Water Framework Directive (see Table 3.3).

#### 3.2.1.7 Programme of Measures

Central to each river basin management plan will be the **programme of measures**. The programme of measures must take account of the results and analysis from the characterisation of the river basin in order to achieve the overall environmental objectives (Article 4) of the WFD, that is to achieve “good water status” for the entire RBD. The measures will be composed of **basic and supplementary measures**. The required **basic measures** are derived from existing legislation listed in Part A of Annex VI. **Supplementary measures** provide for additional protection or improvement of waters in order to achieve the required environmental objectives. The WFD outlines a non-exclusive list of supplementary measures in Part B of Annex VI. Outlined Supplementary measures include;

- legislative instruments,
- administrative or economic instruments,
- codes of good practice,
- recreation, rehabilitation or restoration projects,
- educational projects, etc.

Figure 3.1 below summarises the programme of measures.



**Figure 3.1. Requirements for the Programme of Measures** (adapted from Introduction Paper of WFD, Environment and Heritage Service, N. Ireland)

#### 3.2.1.8 Water pricing policies

Member States are required to take account of the principle of **recovery of costs** (Article 9) of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance in particular with the polluter pays principle.

The aim of water pricing is to encourage more sustainable use of water. The water pricing systems are to be developed in a manner that is sensitive to the physical, social, institutional and political setting as well as the geographic and climatic conditions in each RBD.

#### 3.2.1.9 Public Information and consultation

The Directive (Article 14) encourages all with an interest to actively participate in water management activities, in particular in the production, review and updating of the river basin management plans. It is a requirement that, the timetable and work programme, interim overview of significant management issue and draft river basin district management plans, are published and made available for comment by the public.

#### 3.2.2 List of Priority Substances

*Decision No 2455/2001/EC of the European Parliament and of the council of 20 November 2001 establishing the list of priority substances in the field of water policy and amending directive 2000/60/EC.*

The Decision adopts the list of priority substances including substances identified as priority hazardous substances. The list appears in the Annex to this Decision and is intended to be added to the Water Framework Directive as Annex X.

The list of priority substances established by this Decision shall replace the Commission Communication to the Council in June 1982 (OJ C 176, 14.7.1982) which identified 129 (subsequently amended to 132) candidate List I substances. It should be noted that the Dangerous Substances Directive 76/464/EEC applies up to 2013 with the exception of Article 6. The five “daughter” Dangerous Substances Directives have regulated 18 of the candidate List I substances. The Commission and the Member States shall ensure that the substance and exposure-related data needed for the implementation of the Combined Monitoring-based and Modelling based Priority Setting (COMMPS) procedure are made available to both the Commission and the Expert Advisory Forum on Priority Substances.

### **3.3. Water Quality Oriented Legislation**

#### **3.3.1 Bathing Water**

(i) ***Council Directive of 8 December 1975 concerning the Quality of Bathing Water (76/160/EC)***

This Directive sets standards to ensure the quality of bathing water, both for fresh water and for coastal water bathing areas, in order to protect the environment and public health. Member States have the responsibility to designate bathing water areas and shall take all necessary measures to ensure that the quality of bathing water conforms to the limit values set in accordance with the Directive.

Irish regulations which give effect to this Directive are the Quality of Bathing Waters Regulations, S.I. No. 155 of 1992 as amended by S.I. No. 230 of 1996 & S.I. No. 293 of 1998. Irish water quality standards for bathing waters and designated bathing waters in the Shannon River Basin District (SRBD) are listed in Appendix B.

The requirements of this Directive must be included in the basic measures under the programme of measures in the WFD.

A new Bathing Water Directive is currently being developed. The Commission Communication (COM (2000)860) outlined the skeleton of the future Directive. The new Bathing Water Directive will clearly not only be a ‘results’ directive, but rather an ‘effort and results’ directive. It will look not only at monitoring water quality but also at actively tackling pollution sources, in particular wastewater discharges and agricultural runoff. These sources will also have to be marked and addressed in the river basin management plans foreseen in the Water Framework Directive.

#### **3.3.2. Drinking Water**

##### **General**

Early European water legislation began in a “first wave”, with standards for those rivers and lakes used for drinking water abstraction (75/440/EEC), and culminated in 1980 in setting binding quality targets for drinking water (80/778/EEC). This Directive was re-examined and revised to focus on compliance with essential quality and health parameters (98/83/EC). The increasing use of water resources for the abstraction of drinking water for human consumption necessitates a reduction in the pollution of water and its protection against subsequent deterioration. Quality standards as set by the subsequent Irish legislation to implement the above Directives for drinking water are listed in Appendix B.

(i) ***Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States (75/440/EEC)***

This Directive aims to protect public health by ensuring that surface water abstracted for use as drinking water reaches certain quality standards before it is supplied to the public. The Directive divides surface water into three quality categories, A1, A2 and A3. Annex I defines the appropriate treatment required for each category. Member States are required to take all necessary measures to ensure that surface water conforms to the values laid down in Annex II of the Directive and that Member States shall take the necessary measures to ensure continuing improvement of the environment.

Pertinent regulations introduced to bring the Directive into force in Irish law include – European Communities (Quality of Water Intended for Human Consumption) S.I. No. 81 of 1988, S.I. No. 350 of 1999, S.I. No. 177 of 2000 and S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000.

Directive, 75/40/EEC, will be integrated into the Water Framework Directive, and will thus be repealed, seven years after entry into force of the WFD, on the 22<sup>nd</sup> December 2007.

**(ii) *Council Directive of 15 July 1980 relating to the quality of water intended for human consumption (80/778/EEC)***

This Directive sets the standards for water intended for human consumption. Member States are required to apply the values for the toxic and microbiological parameters listed in Annex I and the values for the other parameters which are likely to affect the wholesomeness of the foodstuff in its finished form. The values to be fixed by the Member States must be less than or the same as the values set for "Maximum Admissible Concentration."

Pertinent regulations introduced to give effect to the Directives in Irish law include – European Communities (Quality of Water Intended for Human Consumption) S.I. No. 81 of 1988, S.I. No. 350 of 1999, S.I. No. 177 of 2000, and S.I. No. 439 of 2000. European Communities (Drinking water) Regulations, 2000.

Directive 80/778/EEC will be repealed as of the 22<sup>nd</sup> December 2003, and will be replaced by Council Directive 98/83/EC on the quality of water intended for human consumption.

**(iii) *Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption***

This Directive is intended to replace Directive 80/778/EEC and will come into force five years after its publication.

The objective of this Directive is intended to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. Member States shall ensure that the measures taken to implement this Directive have no adverse effect of allowing, directly or indirectly, any deterioration of the present quality of water intended for human consumption. Member States shall ensure that all measures necessary to ensure that regular monitoring of the quality of water is carried out. Annex I sets the parameters applicable to water intended for human consumption, the quality standards adopted by Irish legislation (S.I. No. 439 of 2000) are set out in Appendix B.

Even though Directive 80/778/EEC will not be repealed until 22<sup>nd</sup> December 2003, Member States are obliged to implement Directive 98/83/EC in its place as soon as they have brought into force the legislation necessary to comply with the later Directive.

Irish legislation introduced – S.I. No. 350 of 1999 EC (Quality of Water Intended for Human Consumption) (Amendment) Regulations 1999, S.I. No. 177 of 2000 EC (Quality of Water Intended for Human Consumption) (Amendment) Regulations 2000 and S.I. No. 439 of 2000 EC (Drinking Water) Regulations 2000.

**(iv) *Council Directive of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States (79/869/EEC) as amended by Directive 81/855/EEC***

This Directive concerns the reference methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water, for the parameters listed in Annex II to Directive 75/440/EEC

Pertinent Irish legislation which gives effect to the directive is – European Communities (Quality of Surface Water for Abstraction of Drinking Water) Regulations, 1989. S.I. No. 294 of 1989.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, seven years after entry into force of the WFD, on the 22<sup>nd</sup> December 2007.

**3.3.3. Fresh waters for fish life**

**(i) *Council Directive of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life. (78/659/EEC)***

The aim of this Directive is to protect or improve the quality of those running or standing fresh waters which support or which, if pollution were reduced or eliminated, would become capable

of supporting fish. The Directive requires Member States to designate waters and to set standards for parameters stated in the annexes to the Directive.

Regulations were introduced in 1998 to give effect to this Directive – European Communities (Quality of Salmonid Waters) Regulations, S.I. No. 293 of 1988. Water quality standards required under the Regulations and the areas designated as Salmonid waters within the Shannon River Basin District are included in Appendix B.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, thirteen years after entry into force of the WFD, on the 22<sup>nd</sup> December 2013.

### **3.3.4 Shellfish waters**

**(i) *Council Directive of 30 October 1979 on the quality required of shellfish waters (79/923/EEC)***

This Directive concerns the quality of shellfish waters and applies to those coastal and brackish waters designated by the Member States as needing protection or improvement in order to support shellfish life and growth. The Directive requires Member States to designate waters and to set standards for parameters stated in the Annexes to the Directive.

Irish regulations were introduced in 1994 to give effect to this Directive – Quality of Shellfish Waters Regulations S.I. No. 200 of 1994 as amended by 2001 S.I. No. 459 of 2001. Quality standards, as set in the Irish regulations for shellfish waters are listed in Appendix B.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, thirteen years after entry into force of the WFD, on the 22<sup>nd</sup> December 2013.



### **3.4 Emission Control Oriented Legislation**

#### **3.4.1. Urban Waste Water**

**(i) *Council Directive of 21 May 1991 concerning Urban Waste Water Treatment. (91/271/EEC)***

The Council Directive concerning urban wastewater treatment was brought into force by the Council of the European Communities on 21<sup>st</sup> May, 1991. Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30<sup>th</sup> June, 1993.

The aim of the Directive is to protect the environment from any adverse effects due to discharge of urban wastewater. The Directive concerns the collection, treatment and discharge of urban wastewater and the treatment and discharge of wastewater from certain industrial sectors. The Articles of the Directive include for the following:-

- Provision by Member States of collection systems for urban wastewater by specified dates for various sizes of agglomerations.
- Provision by Member States of secondary treatment of wastewater entering collection systems by specified dates for various sizes of agglomerations.
- Identification of sensitive areas which shall receive more stringent treatment.
- Discharges of industrial wastewater into collection systems required to obtain prior authorisation.
- The re-use of treated wastewater where possible.
- The control of discharges to waters from specified industrial sectors.
- Phasing out of the dumping of sludge at sea by 31<sup>st</sup> December, 1998.

Quality standards are prescribed where secondary treatment is required and more stringent standards are set out where waters are designated as sensitive. Annex II sets out the criteria for the identification of sensitive and less sensitive areas. It is up to Member States to designate waters as sensitive. Requirements are also set out pertaining to the frequency of sampling.

The Environmental Protection Agency Act, 1992 (Urban Wastewater Treatment) Regulations, S.I. No. 419 of 1994, came into force on 14<sup>th</sup> December, 1994. These regulations were executed by the Minister under the powers conferred on him by Section 59 of the Environmental Protection Agency Act and were for the purposes of giving initial effect to the Urban Wastewater Directive. (S.I. No. 419 of 1994 has since been revoked by S.I. No. 254 of 2001).

**(ii) *Commission Directive 98/15/EC of 27 February 1998 amending Council Directive 91/271/EEC with respect to certain requirements established in Annex I thereof***

This Directive makes amendments to Annex I of Directive 91/271/EEC in order to clarify the minimum percentage reduction required for Total Phosphorous and Total Nitrogen from discharges of urban wastewaters.

The most recent regulations issued to give effect to Directive 91/271/EEC and amending Directive 98/15/EC are the Urban Waste Water Regulations, S.I. No. 245 of 2001. Water quality standards required under this Directive as set in the Irish regulations, are included in Appendix B. This Directive must be implemented as an integrated part of the basic measures in the WFD.

### 3.4.2 Nitrates

(i) ***Council Directive of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. (91/676/EEC)***

This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution. Member States are required to identify and designate waters affected by pollution and waters which could be affected by pollution if action is not taken. Member States are also required to designate as vulnerable zones areas of land draining into such waters. Other requirements of the Directive include; the establishment of codes of good agricultural practice to be implemented by farmers on a voluntary basis and the establishment of action programmes, including a programme of measures, in respect of vulnerable zones.

The Directive set a deadline of 20<sup>th</sup> December 1993 for the transposition into National Law. As of yet, no areas have been designated as vulnerable zones but a voluntary Code of Good Agricultural Practice (DAFF & DOE 1996) has been adopted. The Government has indicated their preference for a “whole country” approach i.e. applying an action programme to all areas rather than to designated vulnerable zones (DOELG 2002). This directive must be implemented as an integral part of the basic measures in the WFD. The “vulnerable zones” are included in the “protected areas” under Annex IV of the WFD.

### 3.4.3 Groundwater

(i) ***Council Directive of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances (80/68/EEC)***

The purpose of this Directive is to prevent the pollution of groundwater by certain substances (List I – Organophosphates, Organotin, Mercury compounds, Organohalogen, Hydrocarbons, Cyanide and Cadmium compounds or List II – heavy metals etc.) and as far as possible to check or eliminate the consequences of pollution which has already occurred. Member States must prevent the introduction of substances in List I and limit the introduction of substances in List II so as to avoid pollution. A distinction is drawn between direct discharges of dangerous substances into groundwater and actions likely to result in indirect discharges. This Directive also recommends the introduction of special rules governing the artificial recharge of groundwater intended for public water supplies.

Regulations introduced to give effect to this Directive include the Protection of Groundwater Regulations S.I. No. 41 of 1999.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, thirteen years after entry into force of the WFD, on the 22<sup>nd</sup> December 2013.

### 3.4.4 Dangerous Substances

(i) ***Council Directive of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (76/464/EEC)***

The aim of the Directive is to eliminate, or to reduce, pollution of water by certain dangerous substances listed in the Annexes of the Directive. The Directive requires that Member States shall take the appropriate steps to eliminate pollution to inland surface water, territorial waters, internal coastal waters, ground water by the dangerous substances in List I of the Annex and to reduce pollution of the said waters by the dangerous substances in List II of the Annex.

Article 1 of the Directive requires Member States to take steps to eliminate pollution of waters by List I substances and to reduce pollution of waters by List II substances. Inorganic compounds of phosphorus and elemental phosphorus are included amongst the families and groups of substances described as List II dangerous substances.

Article 7 of the Directive sets out the provisions for reducing pollution from List II substances. This Article requires Member States to establish programmes for implementation within defined deadlines. These programmes must contain provisions for:-

- Prior authorisation of discharge to waters
- Emission Limit Values for discharges based on quality objectives for water in accordance with existing Directives.

This Article also requires that summaries of the programmes and the results of their implementation be communicated to the commission.

Selected substances are regulated further by ‘daughter directives’, which establish emission limit values and water quality objectives for List I substances. These Daughter Directives include:

- Directive on Discharges of Mercury from the chlor-alkali electrolysis industry (82/176/EEC).
- Directive on Discharges of Cadmium (83/513/EEC).
- Directive on Discharges of Mercury from other sources (84/156/EEC).
- Directive on Discharges of Hexachlorocyclohexane (84/491/EEC).
- Directive on Discharge of List I Substances (Directive 86/280/EEC as amended by Directives 88/347/EEC and 90/415/EEC).

Irish legislation which gives effect to the Directive are the Local Government (Water Pollution) Act 1977, Local Government (Water Pollution) (Amendment) Act, 1990, S.I. No. 258 of 1998 (Water Quality Standards for phosphorus) Regulations, and the Water Quality (Dangerous Substances) Regulation, S.I. No. 12 of 2001. Irish regulations giving effect to the ‘daughter directives’ are described in section 4.3.5.

The Water Pollution Act (Refer to Section 4.3.1) makes provisions for prior authorisation by way of licensing of discharges by Local Authorities. S.I. No. 258 of 1998 has given effect to the requirements of this Directive with respect to phosphorus.

Article 6 of Directive 76/464/EEC, was repealed on the 22<sup>nd</sup> of December 2000, the date of entry into force of the WFD. The remainder of the Directive shall not be repealed until 13 years after the date of entry into force of the WFD.

### 3.5 Related Water Sector Legislation

#### General

Several other EU Directives are linked to the Water Sector. Water related legislation, which requires measures that may impact on water, are listed and summarised in Table 3.5. The Wild Birds, Habitats, Sewage Sludge, and Integrated Pollution Control Directives are described in more detail in this section in view of their particular relevance to the WFD.

**Table 3.5 Related EU Legislation to the Water Sector**

<b>Legislation</b>	<b>Relevance</b>
<b><i>Horizontal Sector</i></b>	
Environmental Impact Assessment Directive (85/337/EEC)	Requires an EIA for new projects which are judged to have a significant impact on the environment. The results must be made public and views of the public taken into account in decisions. (The impact on water quality is an important and relevant issue to consider in an EIA).
Access to Environmental Information Directive (90/313/EEC)	Requires environmental information held by public bodies to be made available to the general public on request. Most of the water directives specify the collection of water quality information or information concerning permits. (As a rule any such information held by public bodies would be covered by this directive).
Reporting Directive (91/692/EEC) and Water Questionnaires (92/446/EEC and 95/337/EEC)	Sets out provisions on the transmission of information and reports concerning certain EC directives from Member States to the Commission. The reporting requirements specified in many water protection directives are modified by this directive.
<b><i>Waste Sector</i></b>	
Waste Framework Directive (75/442/EEC and amending by 91/156/EEC, 91/692/EEC, 96/350/EC, 96/59/EC)	Requires the adoption of waste management plans. Within the plans the siting and operation of waste sites must be such as to avoid water pollution, and the possibility of water pollution occurring must be an issue to be taken into account in the plan.
Hazardous Waste Directive (91/689/EEC as amended by 94/31/EC)	Requires the adoption of hazardous waste management plans, which include provisions to prevent water pollution, e.g. through the permitting arrangements.
Sewage Sludge Directive (86/278/EEC)	Regulates the use of sewage sludge in agriculture in such a way that contamination of soil and pollution of water does not occur from metal contaminants, nitrates and phosphates.
Landfill Directive (99/31/EC)	Regulates operational and technical requirements on waste facilities and landfills, to provide for measures, procedures to prevent or reduce as far as possible the negative effects on the environment particularly the pollution of surface water and groundwaters. Annex I requires that landfills are designed so as to meet the necessary condition to prevent the pollution of soil, surface water or groundwater.
Incineration Directives (89/429/EEC, 89/369/EEC, 94/67/EEC)	Requires the reducing as far as possible negative effects on the environment, in particular the pollution of air, soil, surface and groundwater, and the resulting risks to human health, from the incineration of hazardous waste and, to establish emission limit values for hazardous waste incineration plants.
Titanium Dioxide Directives (78/176/EEC, 82/883/EEC and 92/112/EEC)	Aims to reduce and eliminate pollution of water caused by discharges from the titanium dioxide production industry.

<b>Legislation</b>	<b>Relevance</b>
<b><i>Nature Protection Sector</i></b>	
Conservation of Wild Birds (79/409/EEC)	Aims to provide long-term protection and conservation of all bird species naturally living in the wild within the EU through the conservation, maintenance or restoration of the biotopes and habitats. Satisfactory water quality is an essential factor in such areas.
Habitats Directive (92/43/EEC)	Aims to protect a network of habitats throughout Europe and the flora and fauna they support. Satisfactory water quality is an essential factor in such areas.
<b><i>Industrial Pollution Control and Risk Management Sector</i></b>	
IPPC Directive (96/61/EC)	Implements integrated measures for the prevention and control of pollution. Requires permits for prescribed activities which set conditions, including emission limits to water, using the principles of BATNEEC. The WFD specifically requires that measures in River Basin Management Plans must include those which give full effect to the provision of the IPPC Directive in relation to industries and activities specified in Annex I to the Directive. However, consideration of economic factors (NEEC) has been omitted in the WFD in favour of best available technology (BAT)
Risks of Existing Substances Regulation (793/93) and related Directives 67/548/EEC, Directive 1999/45/EC, 76/769/EEC	Regulation 793/93 applies to existing substances and places obligations on manufacturers and importers to provide data and on Member States to carry out risk assessments. Article 16 of the WFD specifically requires that, in drawing up strategies to deal with water pollution, the Commission must take into account risk assessments of pollutants carried out under the Regulation. 67/548/EEC requires the testing and assessment of substances in relation to their risks to human health and the environment before marketing in volumes greater than 10Kg. 1999/45/EC relates to the classifying, packaging and labelling of dangerous preparations. 76/769/EEC provides the rules and procedures relating to restrictions on marketing and use of certain dangerous substances and preparations.
Seveso II Directive (96/82/EC)	This Directive aims to prevent major accidents which involve dangerous substances. It requires operators to develop major-accident prevention policies and to provide safety reports outlining how they intend to manage and handle dangerous substances.
Plant Protection Products Directive (91/414/EEC)	Regulates plant protection products in commercial form and the placing on the market and control within the Community of active substances intended for use for the protection of plants or plant products against all harmful organisms and to destroy undesired plants. Member States shall not authorise a plant protection product if it has any unacceptable influence on the environment particularly contamination of water including drinking water and groundwater.
Biocides Directive (98/8/EC)	Regulates biocidal products within the Member States and the establishment a positive list of active substances which may be used in biocidal products. Member states must ensure that the biocidal products have no unacceptable effects itself or as a result of its residues, amongst other things, on surface water and groundwater.

### **3.5.1. Wild Birds**

#### ***Council Directive of 2 April 1979 on the Conservation of Wild Birds (79/409/EEC)***

This directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the member states to which the treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation. Member states are required to take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds.

The National Regulations introduced in 1985 to give effect to this Directive is the Conservation of Wild Birds Regulations (S.I. No. 291 of 1985). Areas designated under the Wild Birds Directive are to be identified as protected areas under the WFD.

### **3.5.2. Habitats**

#### ***Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora***

The aim of this Directive shall be to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.

A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. The Natura 2000 network shall include the special protection areas classified by the Member States pursuant to Directive 79/409/EEC.

Regulation was introduced in 1997 to give effect to this Directive – European Communities (Natural Habitats) Regulations, 1997. Measures required under the Habitats Directive are to be included within the programme of Measures for the WFD. As with the Wild Birds Directive areas designated under the Habitats Directive must be identified as protected areas in the WFD.

### **3.5.3. Sewage Sludge**

#### ***Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture***

The purpose of this Directive is to regulate the use of sewage sludge in agriculture in such a way as to prevent harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sewage sludge.

The Directive sets values for concentrations of heavy metals in soil to which sludge is applied, concentrations of heavy metals in sludge and the maximum annual quantities of such heavy metals which may be introduced into soil intended for agriculture are given in the directive.

Regulations were introduced in 1991 to give effect to this Directive – European Communities (Use of Sewage Sludge in Agriculture) Regulation's 1991. This is replaced by the Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998, as amended by Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 2001.

Measures required by the Directive concerning sewage sludge are required to be included within the basic programme of measures for the RBD.

### **3.5.4. Integrated Pollution prevention and control**

#### ***Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control***

Different approaches to controlling emissions to the air, water or soil separately can encourage the shifting of pollution between the various environmental media rather than protecting the environment as a whole. Therefore this Directive was introduced with the aim of achieving

integrated pollution prevention and control arising from a number of different activities. The Directive requires Member States to establish an integrated system of permits that contain specific conditions, including emission limit values and the application of Best Available Techniques. It provides a general framework for the prevention or where that is not practicable, the reduction of emissions to the air, water and land in order to achieve a high level of environmental protection. Activities regulated by this Directive include Energy installations, Metal processing industries, Mineral industries, Chemical industries and Waste Management installations.

The Council Directive 96/61/EC is in the process of being transposed into Irish law. Currently IPC licensing is the responsibility of the EPA under Part 4 of the EPA Act 1992. Changes to existing legislation will be required in order to give full effect to the Directive.

The Water Framework Directive specifically requires that measures required under the IPPC Directive be included in the Programme of measures for the WFD.

#### **4.0**            ***NATIONAL LEGISLATION***

##### **4.1**            **General**

Water quality standards utilised in Ireland are mainly derived from various Directives issued by the EU. The Directives establish water quality required for different beneficial uses of waters. Water quality parameters are set in the national legislation.

The primary responsibility for monitoring of surface waters for compliance with beneficial use standards is devolved to Local Authorities, as established by the Local Government (Water Pollution) Act, 1977-1990. The Environmental Protection Agency assist the Local Authorities in relation to laboratory facilities for sampling and analysis in some areas and co-ordinate the reporting of monitoring results on a national basis. Monitoring in connection with beneficial uses, including statutory compliance monitoring, remains with the Local Authorities (Refer to Appendix C).

The legislation discussed in this chapter has been divided into three main sections:

- Water Quality oriented legislation.
- Emission control oriented legislation
- Water Related Legislation.

The latter includes legislation whose purposes may be set out for other environmental factors such as, waster management, protection of soils etc, but must also have regard towards the protection of water.



## 4.2. Water Quality Oriented Legislation

Table 4.1 below provides a summary of relevant National Water Quality Orientated legislation discussed in this section. Quality standards required under this legislation are provided in Appendix B.

**Table 4.1. Synopsis of Water Quality Oriented Legislation**

<b>Ref. Section</b>	<b>Legislation</b>
<b>4.2.1</b>	<p><b><i>Bathing Water</i></b></p> <p>S.I. No. 84 of 1988. European Communities (Quality of Bathing Waters) Regulations, 1988  S.I. No. 99 of 1989. European Communities (Quality of Bathing Waters (Amendment) Regulations, 1989  S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992  S.I. No. 145 of 1994. Quality of Bathing Waters (Amendment) Regulations, 1994  S.I. No. 230 of 1996. Quality of Bathing Waters (Amendment) Regulations, 1996  S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998  S.I. No. 22 of 2001. Quality of Bathing Waters (Amendment) Regulations, 2001</p>
<b>4.2.2</b>	<p><b><i>Drinking Water</i></b></p> <p>S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000  S.I. No. 81 of 1988. European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988  S.I. No. 350 of 1999. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 1999  S.I. No. 177 of 2000. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000  S.I. No 294 of 1989. European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1989</p>
<b>4.2.3</b>	<p><b><i>Salmonid Waters and Fisheries</i></b></p> <p>S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations, 1988.  Act 14 of 1959 Fisheries (Consolidation) Act, 1959.  Act 23 of 1997 Fisheries (Amendment) Act, 1997.</p>
<b>4.2.4</b>	<p><b><i>Shellfish Waters</i></b></p> <p>S.I. No. 200 of 1994. Quality of Shellfish Waters Regulations, 1994  S.I. No. 459 of 2001. Quality of Shellfish Waters (Amendment) Regulations, 2001</p>
<b>4.2.5</b>	<p><b><i>Phosphorus Regulations</i></b></p> <p>S.I. No. 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) regulations, 1998.</p> <p><b><i>Bye-laws implemented to tackle Phosphate levels in surface waters</i></b></p> <ul style="list-style-type: none"> <li>• Cavan County Council (Water Pollution) (Agriculture) Bye-Laws 2000.</li> <li>• Cork County Council (Regulation of Agricultural Practice in the Catchments of the River Lee the River Gradogue and the River Funshion) Bye-Laws 1999</li> <li>• Tipperary (North Riding) County Council (Water Pollution) (Agriculture) Bye-Laws 2000</li> <li>• Westmeath County Council (Water Pollution) (Agriculture) Bye-Laws 2000</li> <li>• Offaly County Council (Water Pollution) (Agriculture) Bye-Laws 2001</li> <li>• Roscommon County Council Bye Laws for the Control of Agricultural Waste, 2001</li> </ul>
<b>4.2.6</b>	<p><b><i>Dangerous Substances Regulations</i></b></p> <p>S.I. No. 12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.</p>

#### 4.2.1 Quality of Bathing Waters

- (i) ***S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992, as amended by S.I. No. 145 of 1994. Quality of Bathing Waters (Amendment) Regulations, 1994, S.I. No. 230 of 1996. Quality of Bathing Waters (Amendment) Regulations, 1996, S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998.***

These regulations are intended to give effect to Council Directive 76/160/EEC concerning the Quality of Bathing Waters.

Specific beaches in the RBD have been designated as bathing areas under various Bathing Waters Statutory Instruments. There are twenty-four (24) designated bathing waters in the Shannon RBD (Refer to Appendix B). Local Authorities must monitor the water quality of the bathing water regularly at the point where the daily density of bathers is greatest. A register of the results of the monitoring is kept and subject to review. The designation of the Bathing water is subject to the quality of the water over the monitoring season (May-September). Waters in which bathing is practised at the bathing areas specified shall meet the quality standards specified on the basis of and subject to the conditions so specified in these regulations (Refer to Appendix B for Quality Standards). In determining conformity with these Regulations deviations from the standards shall not be taken into consideration where the deviations are the result of floods, other natural disasters or abnormal weather conditions.

- (ii) ***S.I. No. 22 of 2001. Quality of Bathing Water (Amendment) Regulations, 2001.***

Amends the list of bathing waters designated by S.I. No. 177 of 1998. These Regulations also assign to the Environmental Protection Agency the function of granting departures under article 5 (Duty of Local Authority to Ensure Compliance with Standards) of the 1992 Regulations.

#### 4.2.2 Drinking Water

- (i) ***S.I. No. 294 of 1989. European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1989.***

A sanitary authority is required to classify surface water in their area in accordance with the quality standards specified in the regulations into three categories, A1, A2, A3, which correspond to the standard methods of treatment specified in Part I of the Schedule. Where surface waters have been classified it shall be the duty of the sanitary authority to take the necessary measures to ensure that each of the waters concerned meets the quality standards appropriate to its category, except where a departure is granted. Water that does not meet at least the quality standards specified in Part II of the Schedule in respect of category A3 water may not be used for the abstraction of drinking water (Refer to Appendix B).

- (ii) ***S.I. No. 81 of 1988. European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988.***

Water intended for human consumption shall meet the quality standards specified in the regulations.

- (iii) ***S.I. No. 350 of 1999. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 1999.***

These Regulations amend the European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988. They provide for remedial measures to be taken in relation to certain private drinking water schemes which are deficient in quality. Local Authorities shall:

- Warn users of the water supply
- Prepare an action programme
- Notify or serve notice on the person responsible for the supply

(iv) ***S.I. No. 177 of 2000. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000.***

These regulations amend article 8 of the European Communities (Quality of Water intended for Human Consumption) Regulations, 1988. Article 8 relates to the remedial measures to be taken in relation to certain private drinking water schemes that are deficient in quality.

(v) ***S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000.***

These regulations shall come into force on 1<sup>st</sup> January 2004. It shall be the duty of the sanitary authority to take the necessary measures to ensure that water intended for human consumption is wholesome and clean and meets the requirements of these Regulations, except where a departure is granted. Water will be regarded as wholesome and clean if

- it is free from micro-organisms and from any substances which in numbers or concentrations, constitutes a potential danger to public health and
- it meets the quality standards specified in these regulations (Refer to Appendix B).

#### 4.2.3 **Salmonid Water and Fisheries**

In Ireland, specified rivers and lakes have been designated as salmonid fisheries. However, in many water quality management plans the objective is of compliance with salmonid water quality conditions. Specific legislation relating to the protection and ultimately the improvement of salmonid water is in force under the European Communities (Quality of Salmonid Waters) Regulations (S.I. No. 293 of 1988). Sampling regimes are also implemented under these regulations.

In the Shannon River Basin District, three rivers are designated as salmonid waters. The main channels of the River Corroy/Corra (Hydrometric area 25), River Feale (Hydrometric area 23) and the River Fergus (Hydrometric area 27) have all been designated as salmonid waters under European Communities (Quality of Salmonid Waters) Regulations (S.I. No. 293 of 1988).

(i) ***S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations, 1988.***

The fresh waters specified in these regulations capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*), are designated as salmonid waters for the purposes of these Regulations. Salmonid waters shall meet the quality standards specified in these regulations on the basis of and subject to the conditions so specified (refer to Appendix B). Deviations from the standard shall not be taken into consideration in determining conformity with these Regulations where the deviations are the result of floods or other natural disasters.

(ii) ***Act 14 of 1959. Fisheries (Consolidation) Act, 1959.***

Important measures relating to water quality control are also contained in the Fisheries (Consolidation) Acts 1959-97. The 1959 Act provides that it is an offence to deposit "deleterious matter" in "waters". The definition of "deleterious matter" is narrower than the subject of the Water Pollution Acts; being any substance (including any explosive, liquid or gas) the entry or discharge of which into any waters is liable to render those or any other waters poisonous or injurious to fish, spawning grounds or the food of any fish or to injure in their value as human food, or to impair the usefulness of the bed and soil of any waters as spawning grounds or their capacity to produce the food of fish. This Act applies to any river, lake, watercourse, estuary or any part of the sea.

(iii) ***Act 23 of 1997. Fisheries (Amendment) Act, 1997.***

This Act amends and extends the laws relating to fisheries, prohibiting persons from engaging in aquaculture except with and in accordance with a licence. The Act establishes a procedure for the granting, renewal, amendment and revocation of licences, to allow for appeals against decision relating to licenses, and for continued purposes.

#### 4.2.4 Shellfish Waters

- (i) ***S.I. No. 200 of 1994. Quality of Shellfish Waters Regulations, 1994 as amended by S.I. No. 459 of 2001. Quality of Shellfish Waters (Amendment) Regulations, 2001.***

These regulations prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards. The designated shellfish waters are listed in the first schedule of the regulations, which are made by the Minister for the Environment and Local Government following consultation with the Minister of Communications, Marine & Natural Resources.

Within the Shannon River Basin District, only the Inner Bay at Magharees in Co. Kerry has been designated as shellfish water.

Designated Shellfish waters shall conform to the quality standards specified on the basis of, and subject to, the conditions specified (Refer to Appendix B), not later than the 31st day of December, 1999. Where sampling frequency is reduced, the quality standard concerned shall be conformed to by all samples. Deviations from the quality standards specified shall not be taken into consideration in determining conformity with these Regulations when such deviations are the result of a disaster.

The Amendment Regulations of the Quality of Shellfish Waters Regulations, 1994 (S.I. No. 459 of 2001) require the preparation and implementation of action programmes in respect of all designated shellfish waters.

#### 4.2.5 Water Quality Standards for Phosphorus

- (i) ***S.I. No. 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998.***

These regulations provide for specified improvements in water quality conditions in rivers and lakes based on phosphorus concentrations or related water quality classifications and provide for periodic reporting in relation to progress in implementing the requirements of the regulations. The Regulations give effect to certain requirements arising under the Dangerous Substances Directive 76/464/EEC in relation to pollution caused by dangerous substances discharged into the aquatic environment of the Community.

Article 3 of the Regulations requires that the existing biological quality rating for any part of a river and the existing trophic status for any part of a lake shall be maintained. Existing biological quality ratings and existing trophic status are defined as the rating or status assigned by the Environmental Protection Agency based on monitoring during the period 1995-1997. Where monitoring has not been carried out during that period the rating or status shall be that first assigned by the Agency post 1997.

Article 3 also requires that the existing quality rating or trophic status shall be improved in certain circumstances. The required quality standards are set out in the Third Schedule of the Regulations (see Appendix B). Improvements must be made where the quality standards stipulated in the Third Schedule require higher standards than existing standards.

Rating of water quality for any part of a river is based principally on the composition of macro-invertebrate communities/faunal groups present and their general sensitivity to organic pollution, as used by the Environmental Protection Agency and described in the First Schedule of the Regulations. Median concentrations for Molybdate-Reactive Phosphate (MRP) are referenced to the corresponding target biological water quality rating. Annual median levels of MRP (expressed as µg P/l) are defined for each Q rating. The maximum allowable value corresponding with a minimum Q rating of 3 (moderately polluted) is 70 µg P/l, with 50 µg P/l corresponding to Q3-4 and 30 µg P/l corresponding to Q4.

In relation to lakes two parameters have been set as follows:-

- Trophic Status: based on Annual Maximum Chlorophyll concentrations as determined by the EPA.

- Annual Average Concentration of Total Phosphorus.

Where water quality is satisfactory at present (Q rating 5, 4-5 and 4), the objective is conservation and maintenance of that rating. Where the waters are slightly, moderately or seriously polluted, the objective is an improvement in the Q rating (Refer to Appendix B).

In accordance with the requirements of Article 7 of the original Council Directive, the timescale for the implementation of these improvements is stipulated in the Regulations. Where existing quality ratings or trophic status have been assigned, improvements must be met by 31<sup>st</sup> December 2007. Where quality ratings or trophic status have not been assigned the improvements must be implemented not later than 10 years after the EPA first assigns a rating or status.

The Regulations make allowance for an extension to the period stipulated for compliance with the Regulations. This extension is only allowable under certain defined circumstances and shall not exceed six years.

Under Article 4 of the Regulations, Local Authorities are charged with responsibility to take appropriate steps under the Principal Act (i.e. Water Pollution Act) to secure compliance with the required quality standards. Likewise the Environmental Protection Agency is similarly charged to take appropriate steps to secure compliance under the Environmental Protection Agency Act.

Article 4 of the Regulation also requires Local Authorities and the EPA to carry out certain reporting functions. Local Authorities must submit a report to the EPA setting out the measures that it proposes to take to comply with the Regulations. The deadline for submission of this report was 31<sup>st</sup> July 1999. Every two years the Local Authorities must submit progress reports to the Agency. The first of these was due by 31<sup>st</sup> July 2000.

For its part, the EPA must prepare and publish reports on the implementation of the Regulations within 9 months of the deadlines given to Local Authorities.

The reporting provisions of the Regulations are intended to comply with the reporting requirements of the Directive.

The Environmental Protection Agency has produced a “Guidance Note to Local Authorities on Preparation and Submission of Measuring Report”. This guidance note provides information on the measures available to Local Authorities for the implementation of the Regulations.

#### **4.2.6 Dangerous Substances**

##### ***S.I. No. 12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.***

These Regulations give further effect to the EU Council Directive 76/464/EC (Dangerous Substances Directive) and give effect to certain provisions of the Water Framework Directive (2000/60/EC).

The regulations require that, where the existing condition of a water body does not meet a specified standard in relation to a substance, there shall be no disimprovement in the condition of the water body in relation to that substance. Standards are prescribed for dangerous substances in waters (excluding groundwater) which must be complied with not later than the 31<sup>st</sup> of December 2010 (Standards are given in Appendix B). A local authority must report to the EPA setting out the measures to be taken to achieve compliance. The Local Authority must also issue reports on progress in implementing measures to achieve compliance at prescribed deadlines, the first of which was due on the 31<sup>st</sup> July 2002.

Local Authorities must identify, in consultation with the EPA, water bodies that are so affected by naturally occurring conditions or by past human activity that compliance with the specified standard would not be possible or disproportionately expensive

### 4.3. Emission Control Legislation

Table 4.3 below provides a summary of relevant National Emission Control Oriented Legislation discussed in this section. Quality standards required under this legislation are provided in Appendix B.

**Table 4.3. - Summary of Emission Control Oriented legislation**

Ref. Section	Legislation
4.3.1	<p><b><i>Water Pollution</i></b> Act No. 1, 1977. The Local Government (Water Pollution) Act, 1977 Act No. 21 of 1990. Local Government (Water Pollution) (Amendment) Act, 1990 S.I. No. 184 of 1996. Local Government (Water Pollution) (Amendment) Regulations. S.I. No. 42 of 1999. Local Government (Water Pollution) Amendment Regulations.</p>
4.3.2	<p><b><i>Urban Waste Water Treatment</i></b> <i>S.I. NO 254 OF 2001. URBAN WASTE WATER TREATMENT REGULATIONS, 2001.</i></p>
4.3.3	<p><b><i>Nitrates</i></b> <i>There is no current existing legislation. The following are published guidelines which are in practice but which are not incorporated into existing legislation.</i> <i>- Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates, 1996*.</i> <i>- Good Farming Practice, 2001*.</i> <i>- Protocol on roles and responsibilities for Fisheries Board Staff and Farmers, 2001*.</i></p>
4.3.4	<p><b><i>Groundwater Pollution</i></b> <i>S.I. NO. 41 OF 1999. PROTECTION OF GROUNDWATER REGULATIONS, 1999.</i> S.I. No. 42 of 1999. Local Government (Water Pollution) (Amendment) Regulations, 1999.</p>
4.3.5	<p><b><i>Dangerous Substances</i></b> S.I. No. 31 of 1990. European Communities (Control of Water Pollution by Asbestos) Regulations, 1990. S.I. No. 245 of 1994. Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994. S.I. No. 43 of 1994. Local Government (Water Pollution) Acts 1977 and 1990 (Control of Carbon Tetrachloride, DDT, and Pentachlorophenol Discharges) Regulations, 1994 S.I. No. 348 of 1993 Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl<sub>3</sub> Discharges) Regulations, 1994. S.I. No. 55 of 1986. Local Government (Water Pollution) Act 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations, 1986 S.I. No. 294 of 1985. Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations, 1985.</p>
4.3.6	<p><b><i>Waste Management</i></b> Act 10 of 1996. Waste Management Act, 1996. S.I. No. 165 of 1998. Waste Management (Permit) Regulations <i>S.I. No. 185 of 2000. Waste Management Licensing Regulations.</i> S.I. No. 148 of 1998. Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 S.I. No. 267 of 2001. Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001</p>

\* *Voluntary Measures – not legally enforceable*

**4.3.1. Water Pollution**

**(i) *The Local Government (Water Pollution) Act, 1977***

The Local Government (Water Pollution) Act, 1977, describes itself as “an Act to provide for the control of water pollution and for other matters connected with water pollution”.

Under this Act, Local Authorities have been assigned the primary responsibility for the control of pollution to waters. The provisions of the act also extend to the planning and implementation of measures for the protection and improvement of water quality.

In the first instance, Section 3 of the Act provides that “a person shall not cause or permit any polluting matter to enter waters”.

Local Authorities are assigned responsibility to issue licences for the discharge of trade effluent or sewage effluent. Section 4 of the Act provides that a person shall not discharge or cause or permit the discharge of any trade effluent or sewage to any waters, except under and in accordance with a licence under the section. A similar wording is used in respect of discharges to sewer, which are provided for in Section 16 of the Act. Sections 4 and 16 requiring the licensing of discharges to waters and sewers came into effect on 1<sup>st</sup> October, 1978, and 1<sup>st</sup> January, 1979 respectively (S.I. No. 16 of 1978).

Section 15 of the Act provides for the preparation of Water Quality Management plans. Local Authorities may make such plans or shall make such plans if directed to do so by the Minister. Water Quality Management plans shall contain objectives for the prevention and abatement of pollution to waters.

Provisions are included in the Act for the monitoring, recording and enforcement by Local Authorities relating to licences issued under Section 4 and 16 of the Act.

Section 26 of the Act provides powers to the Minister to prescribe quality standards for waters, trade effluent and sewage effluent and standards in relation to methods of treatment of such effluents. Also, Section 30 empowers the Minister to make regulations generally with regard to any matter referred to in the Act. It is in accordance with the powers conferred on the Minister by Section 26 and 30 of the Act that many of the subsequent regulations on water pollution and related matters have been introduced.

**(ii) *Local Government (Water Pollution) (Amendment) Act, 1990***

This Act contains provisions for pollution caused by agricultural effluents. The Water Pollution Act prohibits the pollution of waters through the disposal of agricultural inputs and waste products, including chemical fertilisers, animal slurries, manures, silage effluent or other organic fertilisers. It also enables local authorities to issue bye-laws which prohibit, restrict, control and regulate the manner in which certain functions are carried out, including:

- the collection, storage, treatment, and disposal of any polluting matter used in connection with, or arising from any operation, activity, practice or use of land or other premises carried on for the purposes of agriculture, horticulture or forestry;
- any activity that involves the application to land or to growing crops, or the injection into land, of any silage effluent, animal slurry, manure, fertiliser, pesticide or other polluting matter; and
- any other operation, activity, practice or use of land or other premises for the purposes of agriculture, horticulture or forestry.

Local authorities may regulate or restrict any activity involving the holding of polluting matter where there is a risk of water pollution, e.g. silage making and slurry spreading. This Act amends and extends the Local Government (Water Pollution) (Amendment) Act, 1977, and (in so far as it relates to water pollution) the Fisheries (Consolidation) Act, 1959.

**(iii) *Local Government (Water Pollution) Regulations Amendment 1996*  
**S.I. 184 of 1996****

These Regulations amend provisions of the Local Government (Water Pollution) Regulations, 1978 (S.I. No. 108 of 1978), concerning the application of the standard two month period allowed for the determination of license applications for effluent discharges to sewers in circumstances where discharges are made to combined drains declared to be sewers for the purposes of the Local Government (Water Pollution) Acts 1977 and 1992. The Regulations also amend provisions of the Local Government (Water Pollution) Regulations, 1992 (S.I. No. 271 of 1992), on the control of discharges to aquifers in situations where harmful substances are present in discharges, materials being disposed, etc. in such small quantities as to pose no risk to the quality of groundwaters.

(iv) **Local Government (Water Pollution) (Amendment) Regulations 1992  
S.I. 42 of 1999**

These Regulations amend Part VI of the Local Government (Water Pollution) Regulations, 1992. The purpose is to extend the application of certain water quality standards under those Regulations to a wider range of functions performed by local authorities, the Environmental Protection Agency and An Bord Pleanála under the Local Government (Water Pollution) Acts, the Environmental Protection Agency Act, 1992 and the Waste Management Act, 1996.

**4.3.2. Urban Waste Water Treatment**

***S.I. No. 254 of 2001. Urban Waste Water Treatment Regulations, 2001.***

These regulations are intended to give effect to the Water Framework Directive 2000/60/EC, but principally to give effect to the Urban Wastewater Directive (91/271/EEC).

The 2001 Urban Waste Water Treatment Regulations are the most current regulations giving effect to the Urban Waste Water Directive. Previous regulations, S.I. No. 419 of 1994 and previous amendment regulations S.I. No. 208 of 1999 were revoked by these regulations.

The main requirements of these regulations include:-

- Provision of collection and treatment of urban waste water by specified dates depending upon the population equivalent of agglomerations
- Requirements for secondary treatment where this is required by the regulations. (Second Schedule –Part 1).
- Requirements for more stringent treatment where waters have be designated as sensitive. (Second Schedule – Part 2)
- Minimum requirement in respect of monitoring of discharges. (Fifth Schedule).

Sensitive waters are designated in Parts 1 and 2 of the Third Schedule. Discharges to Sensitive Waters listed in Part 1 must receive more stringent treatment on the commencement of the regulations. Discharges to Sensitive Waters listed in Part 2 must receive more stringent treatment by 31<sup>st</sup> May 2008.

The requirements for secondary treatment and for treatment of discharges to sensitive waters are provided in Appendix B. The waters in the Shannon RBD which have been designated as sensitive in Parts I & II of the Third Schedule are also listed in Appendix B.

These regulations introduce new provisions which were not included in previous regulations. Article 4(4)(b) permits that, the reduction of nutrients in discharges to estuaries, bays or coastal waters need not apply where the sanitary authority is satisfied that such a reduction will have no effect on the level of eutrophication in the receiving waters.

**4.3.3. Nitrates**

The Nitrates Directive has generally been implemented in Ireland in terms of monitoring of waters, the establishment of a code of Good Agricultural Practice and the implementation of a range of measures to protect water from pollution by agriculture. However, to date no designation of vulnerable zones or programme of measures have been adopted.



Voluntary measures include the REPS and the Farm Waste Management Scheme (previously the control of Farmyard Pollution Scheme). Guidelines for Good Agricultural Practice have been established with the agreement of the main farming organisations. The established guidelines include-

- The Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates (CGAP). This Code was issued in 1996 jointly by the Department of the Environment and Local Government (DELG) and the Department of Agriculture, Food and Rural Development (DAFRD)
- Booklet on Good Farming Practice issued by the DAFRD in 2001 in the context of the CAP Rural Development Plan and Direct Aid Schemes.
- A Protocol on Roles and Responsibilities of Fisheries Board Staff and Farmers was established in 2001.

Compliance with these guidelines would effectively prevent water pollution and other adverse effects on the environment. Compliance is not legally enforceable and non-compliance is not an offence. However, where a farmer does not comply with mandatory legislative or regulatory requirements, and is penalised by the courts or by the responsible authority (such as a local authority, a health board or a Government Department), the DAFRD is also required to apply a penalty under all of the Schemes covered by Good Farming Practice (DAFRD, 2001).

The Code of Good Agricultural Practice (CGAP) is designed to protect the quality of all surface waters and groundwater. It contains advice and recommendations on farm practices in relation to:

- the storage of organic fertilisers;
- standards and specifications for the construction of storage facilities;
- when to apply organic and chemical fertilisers to land;
- the appropriate rates of application; and
- precautions to be taken to avoid causing water pollution.

Although the provisions contained in the Code of Good Agricultural Practice are voluntary, they may evolve as standards of conduct. For example, in cases where pollution has occurred and the cause is examined, the CGAP may provide persuasive authority as to whether the polluter exercised reasonable care. Further, the Code (CGAP) warns that extensive monitoring of nitrate levels in surface waters and groundwater is intended. In cases where nitrate levels exceed acceptable levels, farmers may be required by local authorities to prepare management plans which may contain more stringent requirements than the Code (CGAP).

The Nitrate Directive requires that action programmes be implemented in relation to the whole territory of a Member State or to areas designated by the Member states as vulnerable zones. Where a Member State opts for the vulnerable zones approach the zones must be designated by reference to

- Waters which are, or may become, eutrophic due to enrichment by nitrogen compounds or
- Waters which contain, or could contain, more than 50mg/l nitrates unless appropriate action programmes are implemented.

By reference to these criteria areas in the Shannon region would warrant designation as vulnerable zones. There are compelling reasons for adopting a whole territory approach in preference to a vulnerable zones approach.

Obligatory measures include Local Authority bye-laws and IPC licensing of intensive pig and poultry rearing units. The DAFRD rules of Good Farming Practice are binding on Farmers who are claiming aid under the direct payments scheme. Advisory measures include farm advisory services and nutrient management advice (Teagasc). There is a need to formalise and extend these measures in the context of an action programme under the Nitrates Directive and to complement them with enforceable rules (Regulations). No such Regulations have yet been made.

Past pollution control measures have relied upon preventative remedies, including financial incentives to upgrade existing waste collection and storage areas, provided by the Rural Environment Protection Scheme (REPS) and the Operational Programme for the Control of Farmyard Pollution, 1989-1993, the Operational Programme for Agriculture, Rural

Development and Forestry, 1994-1999 and Partnership 2000. Provisions contained in recent legislation may lead to a more aggressive enforcement of control measures. The Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 (S.I. No. 148 of 1998) as amended by S.I. No. 267 of 2001 state that a Local Authority must ensure sludge is used and supplied in accordance with the regulations and with regard to nutrient needs, landuse, soil analysis, etc. Notice may be served under Section 56 of the Waste Management Act (10 of 1996) (Refer to Appendix C).

#### **4.3.4. Groundwater**

**(i) *S.I. No. 41 of 1999. Protection of Groundwater Regulations, 1999.***

These Regulations are intended to give further effect to the EU Council Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances. The Regulations require that a sanitary authority shall not cause or permit the direct discharge by or on behalf of the sanitary authority to an aquifer of an element which contains a harmful substance save under and in accordance with a licence issued by the Environmental Protection Agency. The Agency shall not grant a licence in relation to the discharge of an effluent which contains a harmful substance specified in the First Schedule.

Any application for a licence to discharge sewage or trade effluents containing harmful substances must be accompanied by the results of a prior investigation into the alternative methods of disposal of the harmful substance and an examination of the aquifer to determine the quality and volume of water present and any risk to the aquifer as a result of the entry of the substance.

The EPA is required to carry out or cause to be carried out monitoring in relation to the effects on groundwaters of a discharge.

**(ii) *S.I. No. 42 of 1999. Local Government (Water Pollution) (Amendment) Regulations, 1999***

These Regulations are intended to give further effect to the EU Council Directive 80/68/EEC, on the protection of groundwater against pollution caused by certain dangerous substances.

These regulations concern the licensing by a local authority in respect of sewage effluent or trade effluent containing a harmful substance which is discharged to an aquifer. The regulations require a quality standard of zero milligrams per litre for sewage effluent and trade effluent discharged to an aquifer in respect of a harmful substance specified in the First Schedule. A local authority is required to carry out or cause to be carried out monitoring to determine the effects of a discharge on water in an aquifer.

#### **4.3.5 Dangerous Substances**

**(i) *S.I. No. 31 of 1990. European Communities (Control of Water Pollution by Asbestos) Regulations, 1990.***

These Regulations give effect to the water pollution control provisions of Council Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos. The Regulations impose a general obligation to prevent the entry of asbestos to waters and specify the measures applied to certain industrial plant using asbestos. They also provide for the monitoring of effluent discharges from industrial plant.

**(ii) *S.I. No. 245 of 1994. Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994***

The Regulations give effect to Council Directive 90/415/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing EDC, TRI, PER, and TBC to waters or to sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

**(iii) *S.I. No. 43 of 1994. Local Government (Water Pollution) Acts 1977 and 1990 (Control of Carbon Tetrachloride, DDT, and Pentachlorophenol Discharges) Regulations, 1994***

The Regulations give effect to Council Directive No. 86/280/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing carbon tetrachloride (CCl<sub>4</sub>), DDT and pentachlorophenol to waters or to sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

**(iv) *S.I. No. 348 of 1993 Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl<sub>3</sub> Discharges) Regulations, 1994***

The Regulations give effect to Council Directive 88/347/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluent containing aldrin, dieldrin, endrin, isodrin, HCB, HCBd, and CHCl<sub>3</sub> to waters or sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

**(v) *S.I. No. 55 of 1986. Local Government (Water Pollution) Act 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations, 1986***

The Regulations give effect to Council Directive No. 84/5491/EEC on mercury discharges by sectors other than the chlor-alkali electrolysis industry. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing hexachlorocyclohexane or mercury to waters and to sewers under Section 4 of the Local Government (Water Pollution) Act, 1977.

**(vi) *S.I. No. 294 of 1985. Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations, 1985***

The Regulations give effect to Council Directive No. 83/513/EEC on cadmium discharges to the aquatic environment. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing cadmium to waters and to sewers under Section 4 of the Local Government (Water Pollution) Act, 1977.

#### **4.3.6 Waste Management**

**(i) Act 10 of 1996. Waste Management Act, 1996**

The Waste Management Act was enacted to give effect to 16 stated EU Directives pertaining principally to waste materials including liquid and solid wastes.

The Act provides a framework for the prevention, management and control of waste. It prohibits the holding, transport, recovery or disposal of waste in a manner that causes or is likely to cause environmental pollution. The definition of "waste" is very broad and specifically includes, most importantly in terms of water quality control, sludge and agricultural waste. The Act applies to any (or any part of any) river, stream, lake, canal, reservoir, aquifer, pond, watercourse or other inland waters, whether natural or artificial; any tidal waters, and any beach, river bank, and salt marsh or other area which is contiguous to the above which is for the time being dry, but does not include a sewer.

The Act is centred on the production of management plans, and the licensing, monitoring and enforcement of waste licences for holders, transporters, and disposers of waste. The Act distinguishes between hazardous and non-hazardous waste, the former to be managed by the EPA. Toxic waste inventories will be established and administered by the EPA. The EPA must assemble a national hazardous waste management plan. A list of hazardous substances is provided in the Second Schedule. Included in the Schedule are many of the substances which are the subject of several EU Directives relating to water quality standards, including cadmium,

mercury and asbestos. The appropriate authorities must implement any relevant recommendations contained in the national plan.

The Act is important in terms of water quality control because it contains a framework for regulating the recovery of non-hazardous agricultural waste, including manure and slurry spreading. The recovery of sewage and water treatment sludge and specified agricultural waste, waste disposal or recovery activities are not required to be licensed, however, they are subject to alternative controls to be issued.

Section 7 of the Act empowers the Minister to make regulations for the purposes of giving full effect to the Act. Sections 55, 56 and 59 relate to the powers of a Local Authority in relation to holding, recovery and disposal of waste, measures which they can take to prevent or limit environmental pollution and functions of the Local Authority with regard to waste. Section 64 empowers the Minister to make regulations requiring the provision of information in relation to certain specified substances. Section 66 of the Act also amends Section 26 of the Local Government (Water Pollution) Act 1977, to prohibit the production, use, storage of any specified substance. Section 3 of the 1977 Act is also amended to allow that it is a defence for a defendant to show that any pollution was a result of activities carried out in accordance with a Nutrient Management Plan. Section 21 of the Local Government (Water Pollution) (Amendment) Act 1990 is amended to allow Local Authority to serve notice requiring the submission of a NMP to prevent pollution of waters.

**(ii) *S.I. No. 165 of 1998. Waste Management (Permit) Regulations, 1998***

These regulations provide for the granting of waste permits by Local Authorities in respect of specified waste disposal and recovery activities in lieu of a licence by the Environmental Protection Agency under Section 39 (1) of the Waste Management Act. The regulations also provide for the registration by the EPA of certain waste recovery activities carried out by local authorities.

Waste permits are required for activities described in the First Schedule of the regulations which include the disposal of waste, other than hazardous waste, where the annual intake does not exceed 5,000 tonnes per annum. Local Authorities are required to attach conditions to a waste permit issued under the regulations to ensure compliance with stated EU Directives including Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances.

**(iii) *S.I. No. 185 of 2000. Waste Management (Licensing) Regulations***

These regulations provide for the licensing by the Environmental Protection Agency of waste recovery and disposal activities under Part V of the Waste Management Act, 1996.

The regulations provide requirements for waste licences for activities listed in the First Schedule of the regulations. The EPA are required to attach conditions to a licence issued under the regulations to ensure compliance with stated EU Directives including Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances.

**(iv) *S.I. No. 148 of 1998. Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998***

These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations give effect to Directive 86/278/EEC on the protection of the environment, and in particular of the soil when sewage sludge is used in agriculture. These Regulations revoke S.I. No 183 of 1991.

**(v) *S.I. No. 267 of 2001. Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001***

These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations also require that sludge is used in accordance with a Nutrient Management Plan and sets limits on the amount of matter added to soil with limits based on absolute quantities of specified heavy metals. These Regulations amend S.I. No. 148 of 1998 Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 by including additional technical parameters to be entered in the sludge register provided for in the 1998 Regulations

#### 4.4 Related Water Sector Legislation

Table 4.4 below provides a summary of Related Water Sector Legislation. Quality standards required under this legislation are provided in Appendix B.

**Table 4.4. Synopsise of Related Water Sector Legislation**

Ref. Section	Legislation	Relevance
<b>4.4.1</b>	<b>Industrial Pollution Control</b>	
	<p><i>ACT 7 OF 1992. ENVIRONMENTAL PROTECTION AGENCY ACT, 1992</i>                      S.I. No. 79 of 1996. Environmental Protection Agency (Licensing) (Amendment) Regulations, 1996.                      S.I. No. 240 of 1996. Environmental Protection Agency (Licensing) (Amendment) (No. 2) Regulations, 1996.                      S.I. No. 59 of 1995. Environmental Protection Agency (Licensing) (Amendment) Regulations, 1995.</p>	
<b>4.4.2</b>	<b>Sewage Sludge</b>	
	<p>S.I. No. 148 of 1998. Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998.  <i>S.I. NO. 267 OF 2001. WASTE MANAGEMENT (USE OF SEWAGE SLUDGE IN AGRICULTURE) (AMENDMENT) REGULATIONS, 2001.</i></p>	<p>These Regulations prescribe standards for the use of sewage sludge in agriculture and require that sludge is used in accordance with a Nutrient Management Plan and sets limits on the amount of matter added to soil, including technical parameters to be entered in the sludge register.</p>

Ref. Section	Legislation	Relevance
<b>4.4.3</b>	<b>Habitats Directive - Regulations</b>	
	<p>S.I. No 94 of 1997. European Communities (Natural Habitats) Regulations, 1997.</p> <p>S.I. No. 233 of 1998. European Communities (Amendment) Regulations, 1998.</p> <p>Act 39 of 1976. Wildlife Act, 1976.</p> <p>S.I. No. 254 of 1986. European Communities (Wildlife Act, 1976) (Amendment) Regulations.</p> <p>S.I. No. 397 of 1985. European Communities (Wildlife Act, 1976) (Amendment) Regulations.</p> <p>S.I. 271 of 2001. Wildlife Amendment Act, 2001.</p> <p>S.I. No. 94 of 1999 Flora Protection Order.</p> <p>S.I. No. 274 of 1987. Flora Protection Order.</p> <p>S.I. No. 338. Flora Protection Order.</p>	<p>The Minister shall identify sites of Community importance based on the criteria set out in Annex III (Stage I) to the Habitats Directive and relevant scientific information. And shall prepare a list of sites indicating in respect of each such site the natural habitat type in Annex I to the Habitats Directive which the site hosts, and the species in Annex II to the Habitats Directive that are native to the State which the site hosts.</p>
<b>4.4.4</b>	<b><i>OTHERS</i></b>	
	<p>Act 27 of 1991. Sea Pollution Act, 1991</p> <p>Act 18 of 1999. Sea Pollution (Amendment) Act, 1999.</p> <p>Act 37 of 2001. Local Government Act.</p> <p>Act 8 of 1994. Local Government Act.</p> <p>Act 30 of 2000. Local Government (Planning and Development) Act, 2000</p>	
<b>4.4.5</b>	<b><i>Shannon Region-Related Legislation</i></b>	
	<p>Act 20 of 1990 Shannon Navigation Act</p> <p>S.I. 80 of 1992 Shannon Navigation Bye-laws, 1992</p> <p>S.I. 66 of 1994 Shannon Navigation (Amendment) Bye-laws, 1994</p> <p>S.I. 79 of 1992 Shannon Navigation (Construction of Vessels) Bye-laws, 1992</p> <p>S.I. 421 of 1994 Shannon Navigation (Construction of Vessels)</p> <p>Act 26 of 1925 Shannon Electricity Act</p> <p>Act 27 of 1927 Electricity (Supply) Act 1927</p> <p>S.I. 314 of 1994 Shannon Navigation (Extension of Limits of Navigation) Bye-Laws, 1994</p> <p>S.I. 175 of 1998 Shannon Navigation (Extension of Limits of Navigation) Bye-laws, 1998</p>	<p>Legislation which relates specifically to the Shannon Navigation and Fisheries.</p>

#### **4.4.1 Environmental Protection Agency**

##### **(i) The Environmental Protection Agency Act, 1992**

The Environmental Protection Agency Act, 1992, was enacted on 23 April, 1992, and under this legislation the Agency was formally established on 26<sup>th</sup> July, 1993.

The establishment of the Environmental Protection Agency under the Act of 1992 created an additional tier of responsibility with regard to Environmental Protection. The general functions of the EPA are described in Section 52 of Part III of the Act.

The Agency has a wide range of statutory duties and powers under the Act. The main responsibilities of the Agency include the following:

- The licensing and regulation of large/complex industrial and other processes with significant polluting potential, on the basis of integrated pollution control (IPC) and the application of Best Available Technologies Not Entailing Excessive Cost (BATNEEC);
- The monitoring of environmental quality, including the establishment of databases to which the public will have access, and the publication of periodic reports on the state of the environment;
- Advising public authorities in respect of environmental functions and assisting local authorities in the performance of their environmental protection functions;
- The promotion of environmentally sound practices through, for example, the encouragement of the use of environmental audits, the setting of environmental quality objectives and the issuing of codes of practice on matters affecting the environment;
- The promotion and co-ordination of environmental research;
- The licensing and regulation of all significant waste disposal and recovery activities, including landfills and the preparation and periodic updating of a national hazardous waste management plan for implementation by other bodies;
- Preparation and implementation of a national hydrometric programme for the collection, analysis and publication of information on the levels, volumes and flows of water in rivers, lakes and groundwaters, and
- Generally overseeing the performance by local authorities of their statutory environmental protection functions

Section 100 of Part V of the Act refers to the powers of the Minister to make orders to extend any of the provisions of the Local Government (Water Pollution) Act, 1977, to the Agency. In particular, such orders may provide that a function conferred on a local authority or Sanitary Authority may be exercised by the Agency in addition to or in lieu of that authority.

The EPA Act of 1992 also makes specific reference to water quality management plans and the setting of quality standards. Section 102 of the Act refers to the powers of the Minister to require the EPA to prepare a water quality management plan under Section 15 of the Water Pollution Act. Section 103 refers to the Agency's role in making recommendations to the Minister in respect of prescribing quality standards for waters, trade effluents and sewage effluents and standards in relation to methods of treatment of such effluents under Section 26 of the Water Pollution Act, 1977.

Under the Act, the EPA may prepare and publish Environmental Quality Objectives (EQOs) with respect to any medium. These objectives must be taken into account in formulating policy, establishing standards, or exercising any of their responsibilities.

Transposition of the Council Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) into Irish law will entail amendment of the EPA Act. While the general principles of the IPPC Directive are broadly in line with the IPC licensing system currently

operated under the EPA Act changes are required to give full effect to the Directive. The changes to national legislation will include an extension of the range of activities to be licensed and a greater emphasis on energy efficiency, residual management and reducing natural resource consumption (EPA 2002).

#### **4.4.2. Natural Habitats**

##### ***S.I. No. 94 of 1997. European Communities (Natural Habitats) Regulations, 1997***

These Regulations bring Council Directive 92/43/EEC (Habitats Directive) into force in Irish Law. Programmes for wildlife protection are provided in EU Directives, most notably Council Directive No. 79/409/EEC, which provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. Also, Council Directive 92/43/EEC (Habitats Directive) provides for the conservation of natural habitats and of wild fauna and flora, through the designation of Special Areas of Conservation. There are 30 areas designated as Special Protected Areas and 64 Special Areas of Conservation within the Shannon. The Special Protected Areas are listed in Appendix B. Designated species and habitats must be monitored, and reports made regularly by Member States to the EU.

The Minister shall, for the purpose of identifying as sites of Community importance and based on the criteria set out in Annex III (Stage I) to the Habitats Directive and relevant scientific information, prepare a list of sites indicating in respect of each such site either or both—

- the natural habitat type or types in Annex I to the Habitats Directive which the site hosts, and
- the species in Annex II to the Habitats Directive that are native to the State which the site hosts.

#### **4.4.3 Sea Pollution**

##### ***Act 27 of 1991. Sea Pollution Act, 1991 as amended by No. 18 of 1999. Sea Pollution (Amendment) Act, 1999***

This Act makes provision for the prevention of pollution of the sea by oil and other substances, and to give effect to the international convention for the prevention of pollution from ships, and to provide for the repeal of the Oil Pollution of the Sea Acts, 1956 to 1973.

The main objective of the Amendment Act is to prevent or limit the damage caused as a result of an oil pollution incident. Each harbour authority, operator or local authority must submit an oil pollution emergency plan to the Minister for Communications, Marine and Natural Resources if requested to do so. Failure to devise such a plan or have it in place is considered to be an offence.

#### **4.4.4 Planning and Development**

##### **(i) *Act 30 of 2000. Local Government (Planning and Development) Act, 2000***

Provisions contained in this Act are utilised to control the location of potential sources of water pollution, including the discharge of domestic and industrial effluent. Planning authorities may refuse, or permit subject to conditions, the location of developments likely to cause pollution. Conditions likely to be imposed on all developments by planning authorities are those providing for the treatment and/or disposal of domestic effluent.

The relevance of these conditions is particularly important in unserved areas where discharges of domestic effluent from single homes are generally not required to be licensed. Discharges into an aquifer from septic tanks or other disposal systems of a certain maximum value are exempt from the provisions of the Water Pollution Acts. The standard recommendations for septic tank drainage arrangements are contained in the IIRS Recommendations for Septic Tank Drainage Systems Suitable for Single Homes (S.R. 6:1991).



Under Section 199 of this Act a local authority can make bye-laws in relation to the use, operation, protection, regulation or management of any lands, services, or any other matter provided by or under the control or management of the local authority (refer to Appendix C).

(ii) ***Act 37 of 2001. Local Government Act, 2001***

Under Section 199 of this Act a Local Authority can make a bye-law for or in relation to the use, operation, protection, regulation or management of any land, services or any other matter provided by or under the control or management of the Local Authority whether within or without its functional area. This Act confers power on Local Authorities to amend or revoke bye-laws made by it. The Act includes the power to make bye-laws in relation to the foreshore and coastal waters adjoining the functional area (refer to Appendix C).

**4.4.5 Shannon Region-Related Legislation**

(i) ***Shannon Navigation Act, 1990***

An Act to make further and better provision in relation to the Shannon Navigation, to transfer the Ballinamore and Ballyconnell navigation to the Commissioners of Public Works in Ireland, to provide for its restoration and maintenance by those Commissioners and for the maintenance of the associated drainage works by the councils of the counties of Cavan and Leitrim, to confer on those Commissioners certain functions in relations to the Erne and Lough Oughter Navigation and to provide for related matters.

Under Section 3 of this Act, the Commissioners of Public Works have the power to make bye-laws for the care, conservation, management, control and maintenance and the regulation of the use of the Shannon. This includes the alteration of water levels in the navigation channel and regulation or use or abstraction of water from the navigation channel.

(ii) ***Minister for Arts, Heritage, Gaeltacht and the Islands (Powers and Functions) Act 1998***

An Act to confer on the Minister for Arts, Heritage Gaeltacht and the Islands certain ancillary functions in relation to property, to clarify and extends the Minister's functions in relation to certain inland waterways, ferry services and other matters, to amend the Heritage Act, 1995 and to provide for related matters.

Under Section 3 of this Act, it shall be and be deemed always to have been a function of the Minister to develop and manage the inland waterways, thereby transferring function from the Commissioners of Public Works to the Minister for Arts, Heritage, Gaeltacht and the Islands.

(iii) ***British-Irish Agreement Act 1999***

An Act to make provision in relation to the North/South Ministerial Council, the implementation bodies and the British-Irish Council, established under and in furtherance of the Agreement between the Government of Ireland and the Government of the United Kingdom of Great Britain and Northern Ireland and done at Belfast on the 10<sup>th</sup> day of April 1998, To make Provision for the Purposes of the International Agreement establishing the Implementation bodies and to provide for related matters

Under Part II, section 11 of this Act, the powers and functions assigned to the Minister of Arts, Heritage Gaeltacht and the Islands under the Minister for Arts, Heritage, Gaeltacht and the Islands (Powers and Functions) Act 1998 are transferred to the North-South body, Waterways Ireland, with the exception of the Power granted under section 2 of the Minister for Arts, Heritage, Gaeltacht and the Islands (Powers and Functions) Act, 1998, in so far as it relates to waterways.

iv) ***Shannon Navigation Bye-Laws 1992***

S.I. 80 of 1992

The Shannon Navigation Bye-laws, 1992 contain the detailed provisions prescribed by the Commissioners for the care, conservation, management, control and maintenance and the regulation of the use of the Shannon Navigation and in relation to the restoration, repair, improvement, extension and development thereof.

Under Section 13 (2) (a) of the Shannon Navigation bye-laws, speed restrictions apply to vessels travelling in the navigation such that:

*“The propellers of a vessel or boat shall not be turned at such a speed as to cause damage to any part of the navigation ... “*

Under Section 28 (1) (h) of the bye-laws, it is prohibited to discharge any water into the navigation (other than water used for the purpose of cooling the engines of vessels or boats or from sinks, wash-hand basins, showers or except under and in accordance with a licence under paragraph (2) of the same bye-laws.

- (v) ***Shannon Navigation (Construction of Vessels) (Amendment) Bye-laws, 1994***  
S.I. 421 of 1994  
The Shannon Navigation (Construction of Vessels) Bye-laws, 1992 contain the detailed provisions prescribed by the Commissioners in relation to the construction of vessels using the navigation. The Shannon Navigation (Construction of Vessels) (Amendment) Bye-laws, 1994 contain additional provisions in relation to the fitting of toilets on vessels.  
"14. A toilet fitted to a vessel shall be so constructed and fitted as to prevent polluting matter from being discharged or passing into the navigation."
- (vi) ***Shannon Navigation (Extension of Limits of navigation) Bye-laws, 1994.***  
S.I. 314 of 1994  
This Bye-law extends the limits of the Navigation along a tributary of the Boyle River from a point 420 metres downstream of Drum Bridge to a point 200 metres east of the National Primary Route N4 at Deerpark and so brings this section of the river within the scope of Shannon legislation.
- (vii) ***Shannon Navigation (Extension of Limits of Navigation) Bye-Laws, 1998***  
S.I. 175 of 1998  
This bye-law extends the Southern limits of Navigation of the River Shannon (including the branch thereof known as the River Abbey in the City of Limerick), to the upstream face of Mallow Street Bridge in the City of Limerick, and so brings this section of the River within the scope of Shannon legislation
- (viii) ***Shannon Electricity Act, 1925***  
An Act to authorise and provide for the production, by the State, of Electricity generated by means of Hydraulic Power derived from the waters of the River Shannon .  
  
Under Section 16 of this Act, in the event that works are being constructed, the Minister for Public Enterprise or any contractor shall not be required to comply with the Fisheries Acts 1842 to 1997. However, following consultation with the Minister for Communications, Marine and Natural Resources, the Minister for Public Enterprise shall take and make, or, if the works are being carried out for him by a contractor, shall procure that the contractor shall take and make such precautions and provisions as he shall consider adequate for the protection of, and avoidance of, injury to fisheries during or as a result of the construction of any works under this Act, unless he is satisfied that such protection cannot be afforded, or such injury cannot be avoided without substantial detriment to the works or substantial hindrance to the construction.
- (ix) ***Electricity (Supply) Act 1927***  
Under Section 109 (1) of the Electricity (Supply) Act, it shall be an offence for a person to deposit, discharge or allow to escape, directly or indirectly, from any premises, place or vessel, into the River Shannon, or any canal or any other artificial waterway constructed under the Electricity Act 1925, any chemical or other substance (whether solid or liquid) of a nature calculated to damage the Shannon Works.  
  
While this section does not make pollution of water an offence in its own right, the fact that it is an offence to allow discharge of any matter which might cause damage to the Shannon works, indirectly affects water quality of the Shannon.
- (x) ***Shannon Fisheries Act, 1935***  
An Act to make provision for the management of the fisheries of the River Shannon by the Electricity Supply Board and for that purpose to provide for the payment in respect of such fisheries of the River Shannon by said Board and to make provision for other matters relating to such management or to such fisheries.
- (xi) ***Shannon Fisheries Act 1938***  
This Act makes makes further and better provision in relation to the fisheries of the River Shannon in such miscellaneous matters as compensation for transferred fisheries and fishing

rights, acquisition of an oyster fishery by the Electricity Supply Board and the power of the Board to construct a weir at Thomond Bridge.

(xii) ***Fisheries Regions Order, 1980***

S.I. 324 of 1980

The main effect of this Order is to create seven fisheries regions and specify the geographical area and the name of each region.

Under the First Schedule, (4) of this order the geographical extent of the Shannon Fisheries region is set out.

While the ESB remains the fishery owner, many aspects of its management duties have been delegated to the Shannon regional Fisheries Board, through the Central Fisheries Board

(xiii) ***Fisheries Regions (Alteration of Boundaries) Order, 1994***

The effect of this order is to alter the boundaries of the Shannon and Eastern Fisheries Regions by the inclusion of Lough Lene in the Eastern Regional Fisheries Board region and by its exclusion from the Shannon Regional Fisheries Board region.

## **5.0 IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE**

### **5.1 Requirements and Responsible Bodies**

It is likely that a new principal Act will be required to fully implement the Water Framework Directive. However several pieces of legislation are presently in place to carry out the requirements of some of the articles. Table 5.1 below sets out the requirements of each article, identifies the bodies currently responsible for these functions and the legislation appropriate to same. Possible gaps in legislation are identified.

The River Basin District Boundaries were first proposed in the document *Managing Our Shared Waters*, a joint North/South consultation paper on International River Basin Districts and administrative arrangements for implementation of the EC Water Framework Directive (2000/60/EC). The identification of relevant organisations and responsible bodies; their functions and planned activities; were substantially addressed in Appendices to a document produced by Irvine *et al.* (2002) for the Environmental Protection Agency entitled “Review of Monitoring and research to meet the needs of the EU Water Framework Directive”. These appendices have been substantially adapted and reproduced here, with some amendments, as Appendices to this document (refer to Appendices D - Organisations and their Functions, E - Organisations and their associated Role/Function in Relation to the WFD and F - Organisations and the associated requirements of the WFD).

### **5.2 Establishment of River Basin Districts**

The Department of the Environment and Local Government are currently funding the establishment of River Basin management projects in Ireland. These projects are the key step towards implementing the Water Framework Directive in Ireland. Projects are established on the basis of areas called River Basin Districts.

‘**River Basin District**’ (RBD) means the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is identified under Article 3 (1) as the main unit for management of river basins. (Definitions Article 2 of the WFD)

River Basin Districts are to be established, some of which are to be Cross Border River Basin Districts. The overall objective of these projects is to develop a River Basin Management System, which will include a programme of measures to achieve the environmental objectives defined in the Water Framework Directive. Local Authorities will have the primary role in implementing these projects.

Five of the River Basin Districts proposed to date and their lead authorities, with responsibility for establishing the river basin management systems, have been identified as follows:

- Shannon RBD (Limerick County Council)
- Eastern RBD (Dublin City Council)
- Western RBD (Galway County Council)
- South Eastern RBD (Carlow County Council)
- South Western RBD (Cork County Council)

For the Shannon River Basin District, Limerick County Council has been designated as the lead authority. This river basin district includes substantially all of Counties Longford, Roscommon, Limerick and Clare. Significant portions of counties Leitrim, Westmeath, Offaly, Tipperary, Kerry and Galway are also included. Counties which encroach along the Shannon River Basin District boundary are Cork, Cavan, Meath, Laois, Mayo and Sligo.

### **5.3 Programme of Measures**

The Water Framework Directive (WFD) requires a River Basin Management Plan (RBMP) to be produced for each River Basin District. A key element to this plan is the **Programme of Measures**, which is the main mechanism for achieving the Directive’s environmental objectives (Ref Article 4). Article 11, identifies both Basic Measures and Supplementary

Measures. The Basic Measures are the minimum requirements to be complied with and include the measures required under existing water related EU Directives as follows:

- Bathing Water Directive (76/160/EEC)
- The Birds Directive (79/409/EEC)
- The Drinking Water Directive (80/778/EEC)
- The Major Accidents (Seveso) Directive (96/82/EC)
- The Environmental Impact Assessment Directive (85/337/EEC)
- The Sewage Sludge Directive (86/278/EEC)
- The Urban Waste-water Treatment Directive (91/271/EEC)
- The Plant Protection Directive (91/414/EEC)
- The Nitrates Directive (91/676/EEC)
- The Habitats Directive (92/43/EEC)
- The Integrated Pollution Control Directive (96/61/EC)

Article 11 in Table 5.1 of this section identifies the Irish legislation in force to implement the EU directives referred to above to provide for the Basic Measures. Appendix B defines the measures that Local Authorities should currently be implementing to comply with the existing Irish Legislation. Measures identified in Appendix B will be included in the Programme of Measures for the River Basin projects in Ireland.

Supplementary measures are those needed in addition to basic measures if the environmental objectives (Good Status) of the WFD are to be achieved. The type of supplementary measures that may be adopted as part of the Programme of Measures, are stated in Article 11 and Annex VI of the Directive and include the following:-

- Legislative Instruments
- Administrative Instruments
- Economic or Fiscal Instruments
- Negotiated Environmental Agreements
- Emission Controls
- Codes of Good Practice
- Recreation and Restoration of Wetlands Areas
- Abstraction Controls
- Demand Management Measures
- Efficiency and Reuse Measures

Legislation which is in-place to implement the supplementary measures identified in Annex VI is given in Table 5.1 – Article 11.

#### **5.4 Administration and Implementation**

The administration and implementation of the River Basin District will require the input from both governmental organisation and non-governmental organisations (NGO's). As noted in comments in Table 5.1 – Article 3, the formalisation of a competent authority to administer the RBD has yet to be completed and will likely require additional legislation. Views have been expressed that this will be delegated to Local Authorities and, as such, Limerick County Council and the other principal authorities will likely maintain the major interest in the administration and implementation of the Shannon RBD.

Non-governmental organisations will be required to participate in development of the management system for the Shannon RBD and in the implementation of the Programme of Measures. The functions, roles and activities of these organisations are identified in Appendices D, E, F taken from Irvine *et. al.* (2002).

**Table 5.1 Implementation of the Water Framework Directive**

<b>ARTICLE 3 - CO-ORDINATION OF ADMINISTRATION ARRANGEMENTS WITHIN RIVER BASIN DISTRICTS</b>		
<b><i>Requirement</i></b>	<b><i>Lead Authority</i></b>	<b><i>Existing National Legislation</i></b>
<ul style="list-style-type: none"> <li>➤ Establish River Basin Districts. (RBDs)</li> <li>➤ Identify individual river basins and assign them to individual RBDs. Assign groundwaters and coastal waters to the appropriate RBDs.</li> <li>➤ Identify Competent River Basin Authorities by 2003 and provide the commission with a list (ref Annex I) of competent authorities by 22<sup>nd</sup> June 2004. Inform the commission within three months if information on the list changes.</li> <li>➤ Assign International River Basin Districts and ensure appropriate administration arrangements including identification of an appropriate competent authority.</li> <li>➤ Ensure that the requirements of the Water Framework Directive e.g. Environmental Objectives, Programme of Measures are coordinated for the whole of the RBD.</li> </ul>	National Government	The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.
<p><u>Comment</u> Irvine et al (2002) offers an opinion that the nomination of competent authorities and the identification of RBDs and matters of principle may require the enactment of primary legislation. Ireland is free to determine competent authorities and to this end may empower administrative departments at regional and municipal level to implement the Directive. However, the Member States continue to bear the responsibility for proper and effective implementation of a Directive. County Councils, a single competent authority such as the EPA or combination of stakeholders may be identified as the competent authority.</p>		

<b>ARTICLE 4 – ENVIRONMENTAL OBJECTIVES</b>		
<b>Requirements</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
<p><b>FOR SURFACE WATERS</b></p> <ul style="list-style-type: none"> <li>➤ Implement measures to prevent deterioration of the status of all bodies of surface waters</li> <li>➤ Protect, Enhance and restore all bodies of surface waters with the aim of achieving ‘<i>Good Surface Water Status</i>’ by 2015.</li> <li>➤ Aim to reduce pollution from Priority Substances and phase out discharges of Priority Hazardous Substances.</li> </ul>	<ul style="list-style-type: none"> <li>• National Government through the RBD Competent Authority.</li> </ul>	<p>The EPA Act of 1992, requires that a Minister of the Government shall have regard to information, advice or recommendations given to the Minister by the EPA under Sections 55 and 75 of Part 3 of the Act.</p>
	<p>-----</p> <ul style="list-style-type: none"> <li>• Local Authorities</li> </ul>	<p>LA’s are required to implement measures under the Phosphorus Regulations (S.I. No. 258 of 1998) concerning the improving of water quality.</p> <p>LA’s have powers under Sections 4 and 16 of the Water Pollution Act 1977, to issue licences in respect of discharges to waters and to sewers. These powers can be used to reduce or phase out discharges of Priority Substances.</p> <p>S.I. No. 294 of 1989 requires LA’s to take measures to ensure the quality of surface water intended for the abstraction of drinking water.</p>
	<p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act, 1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO’s) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act 1992, prepare and publish Codes of Practice for the purposes of environmental protection and to approve codes of practice drawn up by any other body.</p> <p>The EPA has powers under Part IV of the EPA Act to issue IPC licences in respect of certain activities. These powers can be used to reduce or phase out discharges of Priority Substances.</p>
	<p>-----</p> <ul style="list-style-type: none"> <li>• Any other body</li> </ul>	<p>Any other body may draw up Codes of Practice and submit to the EPA for approval under Section 76 of Part 3 the</p>

<b>ARTICLE 4 – ENVIRONMENTAL OBJECTIVES</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
		EPA Act 1992.
<p><b>FOR GROUNDWATER</b></p> <ul style="list-style-type: none"> <li>➤ Implement measures to prevent/limit pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater.</li> <li>➤ Protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge with the aim of achieving Good Groundwater Status by 2015.</li> <li>➤ Implement measures to reverse any significant upward trends in the concentration of any pollutants from human activity in order to progressively reduce pollution to groundwater.</li> </ul>	<ul style="list-style-type: none"> <li>• Local Authorities</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p>S.I. No. 42 of 1999 gives LA's responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LA's and their agents. The EPA may attach conditions to such licences for environmental protection.</p>
<p><b>FOR PROTECTED AREAS</b></p> <ul style="list-style-type: none"> <li>➤ Achieve compliance with any standards/objectives in relation to protected areas by 2015.</li> </ul>	<ul style="list-style-type: none"> <li>• National Government through RBD Competent Authority.</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• Local Authorities</li> </ul>	<p>None</p> <p>-----</p> <p>S.I. No. 254 of 2001 requires LA's to achieve standards for discharges to designated sensitive waters.</p>
<p><b>OTHER BODIES</b></p> <ul style="list-style-type: none"> <li>➤ Designate bodies of surface water as artificial or heavily modified.</li> <li>➤ Include designations in the River Basin Management Plan and review every 6 years.</li> </ul>	<ul style="list-style-type: none"> <li>• National Government through RBD Competent Authority.</li> </ul>	<p>None</p>



<b>ARTICLE 5 – CHARACTERISTICS OF THE RIVER BASIN DISTRICT, REVIEW OF THE ENVIRONMENTAL IMPACT OF HUMAN ACTIVITY AND ECONOMIC ANALYSIS OF WATER USE</b>		
<b>Requirements</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
<p>➤ For each River Basin District (RBD)</p> <ul style="list-style-type: none"> <li>– Provide an analysis of the River Basin District characteristics in accordance with Annex I by 2004.</li> <li>– Review the impact of the human activity on the status of the surface waters and on the ground waters by 2004.</li> <li>– Provide an economic analysis of water use in the RBD in accordance with Annex III of the directive by 2004.</li> </ul>	<ul style="list-style-type: none"> <li>• National Government through RBD Competent Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• Local Authorities</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p>None</p> <p>-----</p> <p><b>See Note 3</b></p> <p>-----</p> <p><b>See Note 3</b></p>
<p>➤ Review and update the above tasks by 2013 and every 6 years thereafter.</p>	<ul style="list-style-type: none"> <li>• National Government through RBD Competent Authority</li> </ul>	<p>None</p>
<p><u>Comments</u></p> <ol style="list-style-type: none"> <li>1. ANNEX 11 OF THE DIRECTIVE PROVIDES TWO OPTIONS FOR THE CHARACTERISATION OF SURFACE WATERS. THESE INVOLVE DIFFERENT APPROACHES TO THE CHARACTERISATION OF WATER BODIES THAN HERETOFORE. CHARACTERISATION WILL REQUIRE INPUTS FROM STATUTORY AGENCIES, GOVERNMENT DEPARTMENTS AND OTHER NON GOVERNMENTAL ORGANISATIONS.</li> <li>2. WORKING GROUPS HAVE BEEN ESTABLISHED TO REPORT ON THE REQUIREMENTS OF THE WFD WITH REGARD TO TYPOLOGY, CHARACTERISATION AND ECONOMIC ANALYSIS.</li> <li>3. AT PRESENT THE EPA AND LAS HAVE LEGISLATIVE REQUIREMENTS CONCERNING THE MONITORING AND REPORTING OF QUANTITATIVE AND QUALITATIVE DATA ON WATER BODIES. THE EXISTING LEGISLATION REQUIRING INFORMATION ON THE CHARACTERISATION OF WATER BODIES IS LISTED IN COLUMN 3 OF THE TABLE REFERRING TO ARTICLE 8. HOWEVER THESE DO NOT FULFIL ALL OF THE REQUIREMENTS OF ANNEX 1.</li> </ol>		

<b>ARTICLE 6 – REGISTER OF PROTECTED AREAS</b>		
<b><i>Requirement</i></b>	<b><i>Lead Authority</i></b>	<b><i>Existing National Legislation</i></b>
➤ Establish a register of Protected Areas within each RBD by 2004. It shall include the following:- (Ref Annex IV)	<ul style="list-style-type: none"> <li>National Government through RBD competent Authority.</li> </ul>	The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act, and Section 6 and 59 of the Environmental Protection Agency Act, 1992 has powers to make regulations to give full effect to EU Directives.
➤ Areas designated for the abstraction of Drinking water.	<ul style="list-style-type: none"> <li>National Government</li> <li>-----</li> <li>Local Authority</li> </ul>	None  ----- Section 9 of the Water Pollution Act, 1977 requires LAs to establish and maintain registers of abstractions.
➤ Areas designated for the protection of economically significant aquatic species.	<ul style="list-style-type: none"> <li>National Government</li> </ul>	The Minister has made regulations which designate salmonid waters (S.I. No. 293 of 1988).  The Minister has made regulations which designate shellfish waters (S.I. No. 2000 of 1994)
➤ Recreational Waters including bathing Waters Directive 76/160/EEC	<ul style="list-style-type: none"> <li>National Government</li> </ul>	The Minister has made regulations which designate Bathing Water (S.I. No. 155 of 1992).
➤ Nutrient-Sensitive Areas including vulnerable zones under Nitrates Directive 91/676/EEC sensitive areas under Urban Waste Water Directive 91/271/EEC	<ul style="list-style-type: none"> <li>National Government</li> </ul>	Nitrate Vulnerable zones have yet to be designated. However, the Minister has power to do so under existing legislation.  The Minister has made regulations which designate sensitive areas. (S.I. No. 254 of 2001).
➤ Areas designated for the Protection of Habitats or species ➤ Directives 92/43/EEC and 79/409/EEC	<ul style="list-style-type: none"> <li>National Government through Dúchas, DAHG and DoELG</li> </ul>	S.I. No. 94 of 1997 refers to the identification by the Minister of a candidate list of European sites to give effect to the Habitats Directive.
➤ Review registers and keep up to date for each RBD	<ul style="list-style-type: none"> <li></li> </ul>	Competent authority are not yet appointed under Irish Legislation

<b>ARTICLE 7– WATER USED FOR THE ABSTRACTION OF DRINKING WATER</b>		
<b><i>Requirements</i></b>	<b><i>Lead Authority</i></b>	<b><i>Existing National Legislation</i></b>
➤ Identify in the RBDs all bodies of water (existing and future) for drinking water abstraction.	<ul style="list-style-type: none"> <li>National Government through RBD Competent Authority.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>Local Authorities</li> </ul>	<p>None</p> <hr/> <p>Section 9 of the Water Pollution Act, 1977 requires LA's to establish and maintain registers of abstraction.</p>
➤ Monitor in accordance with Annex V those bodies providing more than 100 m <sup>3</sup> /day as an average.	<ul style="list-style-type: none"> <li>Local Authorities</li> </ul>	S.I. No. 439 of 2000 requires LAs to take measures to ensure drinking water meets the requirement of Directive 98/83/EC
➤ Ensure Water Quality Meets the Requirements of Directive 80/778/EEC as amended by Directive 98/83/EC.	<ul style="list-style-type: none"> <li>Local Authorities</li> </ul>	S.I. No. 177 of 2000 requires LAs to implement an action programme to ensure compliance with Directive 80/778/EEC
➤ Ensure the necessary protection of identified water bodies	<ul style="list-style-type: none"> <li>Local Authorities.</li> </ul>	LAs have powers under the Planning and Development Act 2001 to refuse development or to attach conditions to the approval of development for the protection of identified water bodies.
<p><b><u>Comment</u></b></p> <p>1. The WFD requires identification of existing and future water bodies for drinking water abstraction. Existing legislation provides for the identification of existing water bodies used for abstraction but not future water bodies.</p>		

<b>ARTICLE 8 – MONITORING OF SURFACE WATER STATUS, GROUNDWATER STATUS AND PROTECTED AREAS</b>		
<b>Requirements</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
➤ Establish Monitoring Programmes for monitoring water status	<ul style="list-style-type: none"> <li>National Government through RBD Competent Authority.</li> </ul>	None
➤ Surface Water programmes shall cover <ul style="list-style-type: none"> <li>- Volume, level/rate of flow</li> <li>- Ecological and chemical status and ecological status</li> </ul>	<ul style="list-style-type: none"> <li>Local Authorities</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>EPA</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>Others</li> </ul>	<p>Under Section 64 of Part 3 of the EPA Act 1992, the EPA may direct a LA to provide, operate and maintain gauges and other equipment for recording hydrometric data.</p> <p>S.I. No. 439 of 2000 and SI 249 of 1989 requires LAs to monitor the quality of water intended for the abstraction of drinking water.</p> <p>S.I. No. 293 of 1998 requires LAs to carry out monitoring with respect to Salmonid waters.</p> <p>S.I. No. 155 of 1992 requires LAs to carry out monitoring with respect to Bathing Waters.</p> <p>S.I. No. 254 of 2001 requires LAs to carry out monitoring of water subject to a discharge from an urban wastewater treatment plant.</p> <p>-----</p> <p>Section 64 of Part 3 of the EPA Act requires the EPA to establish a hydrometric programme for the collection analysis and publication of hydrometric data.</p> <p>-----</p> <p>Under Section 64 of Part 3 of the EPA Act 1992, the EPA may make arrangements with any public authority to provide, operate and maintain gauges and other equipment for recording hydrometric data.</p>
➤ Groundwaters programmes shall cover monitoring of chemical and quantitative status.	<ul style="list-style-type: none"> <li>Local Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>EPA</li> </ul>	<p>S.I. No. 42 of 1999 requires LAs to carry out or cause to be carried out monitoring of effects on groundwater in respect of a licence issued under Part IV of the Water pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 requires the EPA to carry out or cause to be carried out monitoring of the effects on groundwater in respect of a licence issued under these regulations.</p>
➤ Protected Areas programmes shall cover specifications contained in community legislation under which the individual protected areas have been established.	<ul style="list-style-type: none"> <li>National Government through RBD Competent Authority.</li> </ul>	None

<b>ARTICLE 8 – MONITORING OF SURFACE WATER STATUS, GROUNDWATER STATUS AND PROTECTED AREAS</b>		
➤ Programmes shall be operational by 2006 and will be in accordance with Annex V	• National Government through RBD Competent Authority	None
<p><u>Comments</u> In many cases LAs commission the EPA to carry out their statutory obligations with respect to monitoring of surface waters.</p>		

<b>ARTICLE 9 – RECOVERY OF COSTS FOR WATER SERVICES</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<p>➤ Take account of the principle of cost recovery including environmental and resource costs</p> <p>– Ensure that Water Pricing Policies provide adequate incentives to use resources efficiently.</p> <p>– Ensure an adequate distribution of cost recovery</p>	<p><i>NATIONAL GOVERNMENT</i></p>	<p><i>NONE</i></p>
<p><u>COMMENTS</u> <i>NATIONAL GOVERNMENT HAS ADOPTED THE “POLLUTER PAYS PRINCIPLE” AS POLICY IN THE WATER SERVICES INVESTMENT PROGRAMME. NON – DOMESTIC USERS ARE REQUIRED TO PAY THEIR SHARE OF THE COSTS OF WATER AND WASTEWATER INFRASTRUCTURE INCLUDING THE OPERATION AND MAINTENANCE COSTS. NO CHARGES ARE PRESENTLY LEVIED ON DOMESTIC USERS.</i></p>		

<b>ARTICLE 10 – THE COMBINED APPROACH FOR POINT AND DIFFUSE SOURCES</b>		
<b>Requirement</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
<p>➤ Ensure that all discharges to surface waters are controlled</p>	<ul style="list-style-type: none"> <li>• National Government through the RBD Competent Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• Local Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p>None – See Note 1</p> <p>-----</p> <p>None – See Note 1 S.I. No. 117 of 1977 allows LA’s to prepare a water Quality Management Plan</p> <p>-----</p> <p>None – See Note 1 The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO’s) for the purposes of environmental protection.</p>
<p>➤ Establish emission controls based on best available techniques (BAT) or relevant emission limit values or for diffuse impacts controls including best environmental practices set out in the following Directives</p> <p>- Directive 96/61/EC concerning Integrated Pollution Prevention and Control.</p>	<ul style="list-style-type: none"> <li>• National Government</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul> <p>-----</p>	<p>The EPA Act of 1992, requires that a Minister of the Government shall have regard to information, advice or recommendations given to the Minister by the EPA under Sections 55 and 75 of Part 3 of the Act.</p> <p>-----</p> <p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act, 1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO’s) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act, 1992 prepare and publish Codes of Practice for the purposes of environmental protection and to approved codes of practice drawn up by any other body.</p> <p>-----</p> <p>The Environmental Protection Agency Act, 1992 provides for a combined approach by licensing by the EPA of emissions of certain activities by way of an Integrated Pollution Control (IPC) licence.</p> <p>The Waste Management Act, 1996 provides for licensing by the EPA of waste disposal and recovery activities. The waste licence considers all emissions from the activity.</p> <p>-----</p>

<b>ARTICLE 10 – THE COMBINED APPROACH FOR POINT AND DIFFUSE SOURCES</b>		
<b>Requirement</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
- Directive 91/271/EEC concerning Urban Wastewater treatment.	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	S.I. No. 254 of 2001 requires LAs to carry out the requirements of the Urban Waste Water Directive.
- Directive 91/676/EEC concerning the protection of waters against pollution caused by Nitrates and agricultural sources.	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	<p>A voluntary code of good practice is in place with respect to farming practices. “Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates”, July 1996.</p> <p>A code of good practice is in place with respect to “the Use of Biosolids in Agriculture – Guidelines for Local Authorities and Wastewater Treatment Plant Operators”.</p>
- Directives referenced in Article 16	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	
- Directives listed in Annex IX of the WFD	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	
➤ Where stricter conditions than those above are required to achieve quality objectives and standards, more stringent emission controls will be set accordingly.	<ul style="list-style-type: none"> <li>National Government through the RBD Competent Authority</li> </ul>	The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.
<p>Notes:</p> <p>1. Existing legislation deals primarily with point and diffuse sources separately and individually. LAs are responsible for licensing of discharges to waters under Section 4 of the Water Pollution Act. Likewise the EPA have responsibility for licensing of certain activities under Part 4 of the EPA Act. In Column 3 the legislation listed provides for a combined approach to discharges to surface waters, which is the intention of this Article.</p>		

<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
<b>Requirements</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
<p>➤ Establish a programme of Measures for each River Basin District which shall include Basic measures and Supplementary measures where necessary.</p> <p>Required <b>BASIC MEASURES</b> include - The implementation of the following directives that are already in force and listed in Annex VI and the directives listed in Article 10.</p>	<ul style="list-style-type: none"> <li>▪ National Government through RBD Competent Authority</li> </ul>	
Bathing Water Directive (76/160/EEC)	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul>	Bathing Water Regulations and Amendments (S.I. No. 155 of 1992, S.I. No 145 of 1994 and S.I No 22 of 2001) includes for measures to be taken by LAs to enforce the Bathing Water Directive (76/160/EEC).
The Birds Directive (79/409/EEC)	<ul style="list-style-type: none"> <li>• National Government</li> <li>• Local Authority</li> </ul>	The Conservation of Wild Birds Regulations (S.I. No. 291 of 1985)
The Drinking Water Directives (80/778/EEC) and 98/83/EC	<ul style="list-style-type: none"> <li>• National Government</li> </ul>	Quality of Water intended for Human Consumption Regulations S.I. No. 81 of 1988 includes for measures to be taken by LAs to enforce the Drinking Water Directive (98/83/EC). The revised Drinking Water Directive (98/83/EC) comes into force in 2004 and Regulations to enforce this directive (S.I. 439 of 2000) come into force at the same time.
The Major Accidents (Seveso) Directive (96/82/EC)	<ul style="list-style-type: none"> <li>• National Government</li> </ul>	S.I. No. 292 of 1986 and S.I. 476 of 2000 bringing into force the Control of Major Accidents involving dangerous substances
The Environmental Impact Assessment Directive (85/337/EEC)	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul>	Environmental Impact Assessment Regulations 1989 to 1998 (S.I. No. 351 of 1998) bring into force in Irish Law the requirement of the Environmental Impact Assessment Directive (85/337/EEC).
The Sewage Sludge Directive (86/278/EEC)	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul>	Use of Sewage Sludge in Agriculture Regulations (S.I. No. 148 of 1998) as amended by S.I. No. 267 of 2001 include for measures to be taken to enforce the requirements of Council Directive (86/278/EEC).
The Urban Waste water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul>	Urban Waste Water Treatment Regulation (S.I. No. 254 of 2001) includes measures to be taken by LAs concerning the implementation of the Urban Waste Water Directive (91/271/EEC).
The Plant Protection Directive (91/414/EEC)	<ul style="list-style-type: none"> <li>• National Government</li> </ul>	S.I. No. 135 of 1995/ S.I. No 183 of 1995 (Export and Import of certain Dangerous substances)



<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
The Nitrates Directive (91/676/EEC)	<ul style="list-style-type: none"> <li>National Government</li> </ul>	None
<b>BASIC MEASURES CONTINUED</b>  The Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> <li>National Government</li> <li>Local Authority</li> </ul>	National Habitats Regulations (S.I. No. 94 of 1997) include for measures to be carried out to implement the requirement of the Habitats Directive (92/43/EEC).
The Integrated Pollution Control Directive (96/61/EC)	<ul style="list-style-type: none"> <li>EPA</li> </ul>	The Environmental Protection Agency is responsible for Integrated Pollution Control Licensing of Activities listed in the first Schedule of the EPA Act 1992.
Measures deemed appropriate for the purposes of Article 9 (Recovery of Costs for Water Services)	<ul style="list-style-type: none"> <li>National Government</li> </ul>	<i>NONE</i>
Measures to promote efficient and sustainable water use not compromising the objectives in Article 4 (Environmental Objectives)	<ul style="list-style-type: none"> <li>National Government</li> </ul>	None
Measures to meet the requirements of Article 7 (Waters used for the abstraction of Drinking Water).	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	Water Pollution Act and S.I. No. 439 of 2000 requires Local Authorities to take measures to ensure drinking water meets the requirements of Directives 80/778/EEC & 93/83/EC.
Establish Controls for the abstraction of fresh surface water and groundwater and impoundment of fresh surface water including. <ul style="list-style-type: none"> <li>a register of water abstractions</li> <li>a requirement of prior authorisation for abstraction and impoundment. Review controls periodically and update if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Local Authority</li> </ul>	Section 9 of the Water Pollution Act 1977 requires Local Authorities to maintain registers of abstractions.
Establish Controls including a requirement for prior authorisation of artificial recharge or augmentation of groundwater bodies. Review controls periodically and update where necessary.	<ul style="list-style-type: none"> <li>Local Authority</li> <li>-----</li> <li>EPA</li> </ul>	S.I. No. 42 of 1999 gives LAs responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.  ----- -- S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LAs and their agents. The EPA may attach conditions to such licences for environmental protection.

<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
<p>Establish prior regulations for point sources liable to cause pollution.</p> <ul style="list-style-type: none"> <li>– Prohibit entry of pollutants into water or</li> <li>– Establish a requirement for prior authorisation / registration based on general binding rules laying down emission controls for the pollutants concerned including controls in accordance with articles 10 and 16.</li> </ul> <p>Review controls periodically and update where necessary.</p>	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p><i>SECTION 4 OF THE WATER POLLUTION ACT PROVIDES FOR LICENSING OF DISCHARGES TO WATERS BY LOCAL AUTHORITIES.</i></p> <p>-----</p> <p><i>PART 4 OF THE EPA ACT PROVIDES FOR THE LICENSING BY THE EPA OF CERTAIN ACTIVITIES LISTED UNDER THE FIRST SCHEDULE.</i></p>
<p>Establish measures to prevent/control the input of pollutants from diffuse sources. Controls may:</p> <ul style="list-style-type: none"> <li>– Prohibit entry of pollutants into water or</li> <li>– Establish a requirement for prior authorisation/registration based on general binding rules where such a requirement is not otherwise provided in EU legislation.</li> </ul> <p>Review controls periodically and update where necessary.</p>	<ul style="list-style-type: none"> <li>• National Government through RBD <i>COMPETENT AUTHORITY</i></li> <li>• Local Authority</li> </ul>	<p><i>NONE</i></p> <p><i>SI NO. 258 OF 1998, WATER QUALITY STANDARDS FOR PHOSPHORUS REGULATIONS</i></p>
<p>Establish controls to ensure that the hydromorphological conditions of bodies of water are consistent with the achievement of the required ecological status. Review controls periodically and update where necessary.</p>	<ul style="list-style-type: none"> <li>• National Government through RBD Competent Authority</li> </ul>	<p><i>NONE</i></p>
<p>Prohibit Direct Discharges of Pollutants into groundwater.</p>	<ul style="list-style-type: none"> <li>• Local Authority</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• EPA</li> </ul>	<p>S.I. No. 42 of 1999 gives LAs responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.</p> <p>-----</p> <p>--</p> <p>S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LAs and their agents. The EPA may attach conditions to such licences for environmental protection.</p>

<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
<p>Authorise reinjection for certain activities and specify conditions.</p> <ul style="list-style-type: none"> <li>– Activities include: mining, exploration, Building, Construction and maintenance of Civil Works, Injection of Natural or Liquefied Petroleum Gas for storage purposes, Discharges of small quantities for scientific purposes for characterisation.</li> <li>– Discharges must not compromise the achievement of the environmental objectives established for that groundwater body of the groundwater body.</li> </ul> <p>Measures</p> <ul style="list-style-type: none"> <li>– to eliminate pollution of surface waters by priority substances (ref. Article 16)</li> <li>– to progressively reduce pollution by other substances which would prevent Member States from achieving their Environmental Objectives (ref. Article 4)</li> </ul>		<i>NONE SPECIFIC</i>
<p>Measures to prevent significant losses of pollutants from technical institutions and to prevent the impact of accidental pollution incidents resulting from floods etc.</p>		None specific

<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
<b>Requirements</b>	<b>Lead Authority</b>	<b>Existing National Legislation</b>
<p>➤ Adopt if necessary <b>Supplementary Measures</b> in addition to the <b>Basic Measures</b> to achieve the required Environmental Objectives (Ref Article 4).</p> <p><i>THE FOLLOWING IS A NON EXHAUSTIVE LIST OF</i></p> <p><b>SUPPLEMENTARY MEASURES. Ref. (Annex IV)</b></p> <ul style="list-style-type: none"> <li>i. Legislative Instruments</li> <li>ii. Administrative Instruments</li> <li>iii. Economic or Fiscal Instruments</li> <li>iv. Negotiated Environmental Agreements</li> <li>v. Emission Controls</li> <li>vi. Codes of Good Practice</li> <li>vii. Recreation and Restoration of Wetlands Areas</li> <li>viii. Abstraction Controls</li> <li>ix. Demand Management Measures</li> <li>x. Efficiency and Reuse Measures</li> </ul>	<ul style="list-style-type: none"> <li>• National Government</li> <li>• Local Authority</li> <li>• EPA</li> </ul>	<p><u>Supplementary Measures</u></p> <p>The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.</p> <p>Under Section 199 of Act 30 of 2000, Local Government (Planning &amp; Development) Act a local authority can make bye-laws in relation to the use, operation, protection, regulation or management of any lands, services or any other matter provided by or under the control or management of the local authority (refer to Appendix C).</p> <p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act, 1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO's) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act 1992, prepare and publish Codes of Practice for the purposes of environmental protection and to approved codes of practice drawn up by any other body.</p>
<p>➤ Ensure the following when data indicates that the Environmental Objectives (Article 4) are unlikely to be achieved for the body of water.</p> <p>-Investigate the causes of possible</p>	<ul style="list-style-type: none"> <li>• National Government through RBD <i>COMPETENT</i></li> </ul>	<p><i>NONE</i></p>

<b>ARTICLE 11 – PROGRAMME OF MEASURES</b>		
<p>failure</p> <ul style="list-style-type: none"> <li>-Review relevant permits/authorisations</li> <li>-Review and adjust monitoring programmes where appropriate.</li> <li>-Establish additional measures to achieve objectives including stricter environmental quality standards.</li> </ul> <p>➤ Additional Measures may be deemed unpractical in exceptional natural circumstances that could not have been foreseen – extreme floods, prolonged droughts.</p>	<p>Authority</p>	
<p>➤ Establish measures to avoid increase in pollution to Marine Waters.</p>	<ul style="list-style-type: none"> <li>• National Government through RBD <i>COMPETENT</i> Authority</li> </ul>	<p>None</p>
<p>➤ Establish the Programme of Measures by 2009. All the measures should be operational by 2012.</p> <p>➤ Review Programme of Measures and update by 2015 and every 6 years thereafter.</p>	<ul style="list-style-type: none"> <li>• National Government through RBD <i>COMPETENT</i> Authority</li> </ul>	<p>None</p>
<p><u>Comment</u></p> <p>1. It will be the responsibility of the Competent Authority to establish a programme of measures under the WFD. Basic measures are mostly in place with regard to the implementation of existing Directives (the exception being the Nitrates Directive). Also, existing legislation is in place to proceed with some supplementary measures identified in Part B, Annex VI of the Directive. However, new legislation may be required to implement some aspects of the programme of measures.</p>		

<b>ARTICLE 12 – ISSUES WHICH CANNOT BE DEALT WITH AT MEMBER STATE LEVEL</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<ul style="list-style-type: none"> <li>➤ Submit a report to the Commission when an issue regarding the management of its waters cannot be resolved.</li> <li>➤ Commission to respond to the report within 6 months</li> </ul>	National Government	None

<b>ARTICLE 13 – RIVER BASIN MANAGEMENT PLANS</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<ul style="list-style-type: none"> <li>➤ Produce a River Basin District Management Plan for each river basin district.</li> <li>➤ Aim to produce a single international river basin management plan for cross border river basin districts.</li> <li>➤ Include the following information in the River Basin Management Plan. Reference Annex VII)               <ul style="list-style-type: none"> <li>- Description of the RBD characteristics, Ref Article 5 and Annex II.</li> <li>- Summary of significant pressures and impact of human Activity on the status of Waters</li> <li>- Identify and map protected areas, Ref. Article 6 and Annex IV.</li> <li>- Map monitoring network and results of monitoring programmes.(Article 8 &amp; Annex 5).</li> <li>- List Environmental Objectives (Article 4)</li> <li>- Provide a summary of the economic analysis of water use (Article 5 and Annex III).</li> <li>- Provide a summary of the programme of measures. (Article 11)</li> <li>- Provide a register of any more detailed programmes and management plan for the RBD.</li> <li>- Provide a summary of Public consultation measures taken.</li> <li>- List competent authorities</li> <li>- Contact Points and Procedures.</li> </ul> </li> <li>➤ Publish River Basin Plan by 2009</li> <li>➤ Review and update by 2015 and every 6 years thereafter.</li> </ul>	National Government through RBD Competent Authority	<p>Primary Legislation required – refer to comments on Article 3.</p> <p>The Local Government (Water Pollution) Act, 1977.</p>

<b>ARTICLE 14 – PUBLIC INFORMATION AND CONSULTATION</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<p>➤ Encourage the active involvement of all interested parties. Publish and make available to the public :-</p> <ul style="list-style-type: none"> <li>- Timetable and work programme for the RBMP (3 years before the plan is initiated)</li> <li>- Overview of significant water management issues (2 years before the plan is initiated)</li> <li>- Draft copies of the RBMP (1 year before the plan is initiated)</li> </ul> <p>Make available all background information used</p> <p>➤ Allow at least 6 months before commenting on the documents in writing to allow for public consultation.</p>	<p>National Government through RBD Competent Authority</p>	<p>No legislation in place to require a proactive approach to consultation required under the WFD. Primary legislation may be required – refer to comments on Article 3.</p>

<b>ARTICLE 15 – REPORTING</b>		
<i>Requirements</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<p>➤ Forward copies of the River Basin Management Plans (RBMP) and updates to the commission and other involved member states within three months of publication.</p> <p>➤ Submit a summary report of the analysis (Article 5) and monitoring programmes undertaken (Article 8) to the commission within 3 months of their completion.</p> <p>➤ Submit an interim progress report to the Commission within 3 years of publicising the RBMP.</p>	<p>National Government through RBD Competent Authority</p>	<p>None</p>

<b>ARTICLE 16 – STRATEGIES AGAINST POLLUTION OF WATER</b>		
<i>Requirement</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<ul style="list-style-type: none"> <li>➤ European Parliament and the Council to adopt specific measures against pollution of water by pollutants presenting a significant risk to or via the aquatic environment including risks to waters used for the abstraction of drinking water.</li> <li>➤ Submit a proposal setting out a list of priority substances that present a significant risk to the aquatic environment. Substances shall be prioritised for action on the basis of a risk assessment.</li> <li>➤ Identify the priority hazardous substances (take account of legislation regarding hazardous substances &amp; international agreements).</li> <li>➤ Review the adopted list of priority substances by 2004 and every 4 years thereafter and prepare proposals where appropriate.</li> <li>➤ Take account of recommendations from relevant scientific bodies, organisations and member states in preparing proposals.</li> <li>➤ Submit proposals for the Control of priority substances by 2003. <ul style="list-style-type: none"> <li>- to progressively reduce discharges/emissions of priority substances</li> <li>- to phase out discharges/emissions of priority hazardous substances.</li> </ul> </li> <li>➤ Submit proposals for quality standards applicable to the concentrations of the priority substances in surface water, sediments or biota by 2003.</li> <li>➤ Review the limit values and quality objectives in the Daughter directives (Annex IX) of the Dangerous Substances Directive when preparing proposals for controls.</li> </ul>	<p>European Parliament and Council</p> <p>European Commission</p> <p>European Commission</p> <p>European Commission</p> <p>European Commission</p> <p>European Commission</p> <p>European Commission</p> <p>European Commission</p>	<p>Decision No. 2455/2001/EC of the European Parliament and of the Council established the list of Priority substances in the field of water policy and amended the Water Framework directive 2000/60/EC –</p> <p>The list of 33 Priority Substances is added to Annex X of the WFD.</p> <p>The list also identified substances as priority hazardous substances.</p> <p>The Commission developed a combined monitoring-based and modelling based priority setting (COMMPS), scheme, in collaboration with experts of interested parties. The 33 Priority substances were selected on the COMMPS procedure.</p> <p>“Annex IX transfers the legal status of the limit values and quality objectives for List I (dangerous substances directive) substances to the WFD” (Peter Chave, 2001)</p>



**ARTICLE 17 STRATEGIES TO PREVENT CONTROL POLLUTION OF GROUNDWATER**

<i>Requirement</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<p>➤ Adopt measures to prevent and control groundwater pollution and to achieve good groundwater chemical status by 2002 Include above measures in the Programme of Measures for the RBDs</p>	European Parliament and Council	None.

**ARTICLE 18 – COMMISSION REPORT**

<i>Requirement</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<p>➤ Publish a report on the implementation of the Water Framework Directive by 2012 and every 6 years thereafter. Submit to European Parliament and Council.</p> <p>➤ Publish a report based on the summary reports submitted by member states. (analyses and monitoring programmes for first RBMP) Article 15(2).</p> <p>➤ Publish an interim report based on the interim reports submitted by member states describing progress on implementation. Article 15(3). Submit to European Parliament and Council.</p> <p>➤ Organise a conference of interested parties to comment on the Commission's implementation reports in line with the reporting cycle. Participants should include representatives from the competent authorities, the European Parliament, NGO's, experts.</p>	<p>Commission</p> <p>Commission</p> <p>Commission</p> <p>Commission</p>	



**ARTICLE 22 – REPEALS AND TRANSITIONAL PROVISIONS**

<i>Requirement</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<ul style="list-style-type: none"> <li>➤ Repeal the following Directives in December 2007.               <ul style="list-style-type: none"> <li>- Directive 75/440/EEC, concerning surface water for Drinking Water abstraction.</li> <li>- Directive 77/795/EEC establishing a common procedure for the exchange of information on the quality of surface freshwater in the community.</li> <li>Directive 79/869/EEC, concerning the measurement of surface (Drinking) water.</li> </ul> </li> <li>➤ Repeal the following Directives in December 2013.               <ul style="list-style-type: none"> <li>- Directive 78/659/EEC Freshwater Fish Directive.</li> <li>- Directive 79/923/EEC Shellfish Water Directive</li> <li>- Directive 80/68/EEC Groundwater Directive.</li> <li>- Directive 76/464/EEC Dangerous Substances Directive.</li> </ul> </li> </ul>	European Commission/National Government	All statutory instruments specifically intended to enforce these EU Directives.

Comment

As stated previously in comments on Article 3, new primary legislation is likely to be required to implement the Water Framework Directive. This would result in the making of new regulations, which shall be implemented by new Statutory Instruments.

**ARTICLE 23 – PENALTIES**

<i>Requirement</i>	<i>Lead Authority</i>	<i>Existing National Legislation</i>
<ul style="list-style-type: none"> <li>➤ Determine Penalties applicable to breaches of the National Provisions adopted pursuant to this Directive. The penalties thus provided shall be effective proportionate and dissuasive.</li> </ul>	National Government	Penalties can be imposed by the Courts resulting from actions taken under existing legislation.

<b>ARTICLE 24 – IMPLEMENTATION</b>		
<b><i>Requirement</i></b>	<b><i>Lead Authority</i></b>	<b><i>Existing National Legislation</i></b>
➤ Transpose into National Law by December 22nd 2003 and inform the commission when this is completed.	National Government	S.I. No. 254 of 2001 S.I. No. 12 of 2001
<p><u>Notes</u> Related Regulations introduced post the publication of the WFD generally refer to the purpose of the regulations as being for the purposes of giving effect to the WFD (2000/60/EC). Primary Legislation is likely to be required (Refer to comments under Article 3).</p>		

<b>ARTICLE 25 – ENTRY INTO FORCE</b>		
<b><i>Requirement</i></b>	<b><i>Lead Authority</i></b>	<b><i>Existing National Legislation</i></b>
➤ The Water Framework Directive came into force on the 22nd December 2000 when it was published in the Official Journal of the European Communities.	National Government	The European Communities Act, 1972 requires National Government to implement European Law.

## References

- Irvine K. et al. (2000) **Review of Monitoring and Research to meet the needs of the EU Water Framework Directive – Final Report.** EPA.
- Clabby K (2002) **Presentation on River Typology for WFD.** EPA
- Chave P. (2001) **The EU Water Framework Directive – An Introduction.** IWA Publishing.
- DOELG, DAFF (1996). **Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates.** Department of Agriculture, Food and Forestry.
- DAFRD (2001) **Good Farming Practice.** DARFD
- EPA (2002) **Integrated Pollution Prevention and Control (IPPC).** www.epa.ie
- EU (2000a) **Introduction into the new EU Water Framework Directive -**  
<http://europa.eu.int/comm/environment/water/water-framework/overview.html>
- EU (2000b) **Handbook on the Implementation of EC Environmental Legislation – Water Sector.**
- EU (2000c) **Communication from the Commission to the European Parliament and the Council -**  
**Developing a new Bathing Water Policy.**

## ***Bibliography***

- Black, A.R., O.M. Bragg, R.W. Duck, A.M. Jones, J.S. Rowan and A. Werrity (2000). **Anthropogenic Impacts on the hydrology of Rivers and Lochs**, SNIFFER WFD Research Project (<http://www.sniffer.org.uk>)
- DELG. (1997) **Sustainable Development; A Strategy for Ireland**. Department of the Environment and Local Government, Dublin.
- WWF (2000). **Implementing the EU Water Framework Directive – Seminar Series**. [www.panda.org/europe/freshwater](http://www.panda.org/europe/freshwater)
- Bowman, J.J. and P.F. Toner (2001). **National Lake Water Quality monitoring Programme. A Discussion Document**. Environmental Protection Agency.
- Brogan, J., M. Crowe and G. Carthy (2001). **Developing a National Phosphorus Balance for Agriculture in Ireland**. EPA
- Clenaghan, C., C. Collins, and M. Crowe (2001). **Phosphorus Regulations National Implantation Report**. Environmental Protection Agency.
- DOELG (1997). **Managing Irelands Rivers and Lakes: A catchment based strategy against Eutrophication**. Department of the Environment and Local Government, Dublin.
- DOELG (2002) **Information Paper on Good Agricultural Practice and Protection of the Environment**. DOELG
- Department of the Marine and Natural Resources. **Code of Best Forest Practice**. Department of the Marine and Natural Resources.
- Dr Lanz, K & Scheuer (2001) **EEB Handbook on EU Water Policy under the Water Framework Directive**. EEB.
- Dr. Whelan D. (2002) **Guide to Irish Law**. <http://www.llrx.com/features/irish.htm>
- EPA (1997). **Environmental Quality Objectives and Environmental Quality Standards. The Aquatic Environment. A Discussion Document**. Environmental Protection Agency.
- EPA (2000) **The Quality of Drinking Water in Ireland. A report for the Year 199 with a review of the period 1997-1999**. EPA
- EPA (2000). **Irelands Environment. A Millennium Report**. EPA
- EU (2000) **Water Policy in the European Union** <http://europa.eu.int/comm/environment/water/index.html>
- EU (2001) **Common Strategy on the Implementation of the Water Framework Directive**, Office for Official Publications of the European Communities.
- EU (2001) **Facts Sheets – Community Water Protection and Management Policy**. <http://europa.eu.int/scadplus/leg/en/s15005.htm>
- EU (2002) **The Water Framework Directive – Tap Into It!** Office for Official Publications of the European Communities.
- EU (2002) **Water is Life**. Office for Official Publications of the European Communities.
- Hickie David (1997) **Evaluation of Environmental Designations in Ireland**. The Heritage Council.
- Irish Government (2002) **Government and politics at European level -** [http://www.oasis.gov.ie/government\\_in\\_ireland/government\\_and\\_politics\\_at\\_european\\_level/](http://www.oasis.gov.ie/government_in_ireland/government_and_politics_at_european_level/)
- Jones T. (2001) **Elements of Good Practice in Integrated River Basin Management A Practical Resource for implementing the EU Water Framework Directive**. World Wide Fund for Nature (WWF)
- Lehane, M., O LeBolloch, P. Crawley (2002). **Environment in Focus. Key Environmental Indicators for Ireland**. Environmental Protection Agency.
- Lough Derg and Lough Ree (1998). **Catchment Monitoring and Management System**. Interim Report.
- Lough Leane Catchment (2000). **A catchment based approach for reducing nutrient inputs from all sources to the Lakes of Killarney**. Second Interim Report.
- McGarrigle, M.L., J.J. Bowman, K.J. Klabby, J. Lucey, P. Cunningham, M. MacCarthaigh, M. Keegan, B. Cantrell, M. Lehane, C. Clenaghan and P.F. Toner. (2000). **Water Quality in Ireland 1998-2000**. EPA.
- McGivern F. (1999) **IEI Water Course – Urban Catchment Drainage Sanitary Services Legislation**. IEI Ireland.

- O'Connor S (2001) **Consultants Brief – For the Establishment of a River Basin Management System.** Carlow County Council.
  - Office of the Attorney General (1998) **Irish Statue Book.** <http://193.120.124.98/>
  - Premazzi, G. (2000) *The Perspectives of the New Water Framework Directive.*
  - Scannell, Y. (1995). **Environmental and Planning Law in Ireland.** Round Hall Press, Dublin.
  - Three Rivers Project (2001). **Water Quality Monitoring and Management. Interim Report.** MCOS
  - Wallin T. et al. (2002) **Guidance on establishing reference conditions and ecological status class boundaries for inland surface waters.**
  - WWF (2000). **Activities across Europe to assist the implementation of the EU Water Framework Directive and Integrated River Basin Management.** WWF
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**APPENDIX A**

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**APPENDIX A Common Implementation Strategy – OVERALL WORK PROGRAMME**

PROJECTS / ACTIVITIES	2000												2001												2002												2003				2004				2005				2006			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	3	6	9	12	3	6	9	12	3	6	9	12	3	6	9	12
<b>KEY ACTIVITY 1 Information sharing</b>																																																				
<b>1. Tools for information sharing</b>												LEAD: Commission												WFD requirements:																												
<i>Internet page (first version)</i>																																																				
<i>Electronic interest group</i>																																																				
<b>2. Raising awareness</b>												LEAD: Commission												WFD requirements:																												
<i>Brochure on WFD</i>																																																				
<i>National and International workshop</i>												x x x x x x x x x x x x												x x x x x x x x x x x x																												
<b>KEY ACTIVITY 2 Develop guidance on technical issues</b>																																																				
<b>1. Analysis of pressures and impacts</b>												LEAD: UK ; Germany												WFD requirements: Article 5 ; Annex II, sections 1.4, 1.5, 2.3, 2.4 and 2.5																												
<i>Collection of information</i>												x x x																																								
<i>Identification of technical tools / Development of guidance</i>																								x x x x x x x x																												
<i>Dissemination of results</i>																																																				
<i>Elaboration of final version of guidance produced</i>																																																				
<b>2. Designation of heavily modified bodies of water</b>												LEAD: UK ; Germany												WFD requirements: Article 4 ; Annex II, sections 1.1, 1.3 and 1.4 ; Annex V, sections 1.1.5 and 1.2.5																												
<i>I) Member States case studies</i>																																																				
<i>Application of HMW designation process</i>												x x x x x x x x x x x x												x x x x x x x x x x																												
<i>Definition of maximum and good ecological potential</i>																								x x x x x x x x x x x x																												
<i>II) European Synthesis Project</i>																																																				
<i>Synthesis of Member States case studies project</i>																								x x x x x x x x																												
<i>Clarification of concepts used on the designation process</i>																								x x x x x x x x																												
<i>Clarification of concepts related to ecological potential</i>																								x x x x x x x x																												
<b>3. Classification of inland surface water status and identification of reference conditions</b>												LEAD: Sweden												WFD requirements: Article 5 ; Annex II, 1.1, 1.2.1, 1.2.2 and 1.3 ; Annex V, 1.1.1, 1.1.2, 1.2.1 and 1.2.2																												
<i>Elaboration of work programme /Establishment of website</i>												x x x																																								
<i>Establishment of common understanding of concepts and terms</i>																								x x x x x x x x x x																												
<i>Review of techniques</i>																								x x x x																												
<i>Evaluation of techniques</i>																								x x x x x x																												
<i>Elaboration of first protocol</i>																								x x x x x																												
<i>Review and validation of the protocol</i>																																																				
<i>Elaboration of final version</i>																																																				
<b>4. Development of typology and classification systems of transitional and coastal waters</b>												LEAD: UK ; Spain ; EEA												WFD requirements: Article 5 ; Annex II, 1.1, 1.2.3, 1.2.4 and 1.3 ; Annex V, 1.1.3, 1.1.4, 1.2.3 and 1.2.4																												
<i>Design of a typology system</i>																								x x x x x x x x																												
<i>Establishment of a classification scheme</i>																								x x x x x x x x																												
<i>Development of guidance</i>																								x x x x x x x x																												
<b>5. Guidance on a protocol for intercalibration</b>												LEAD: EC-JRC/EI												WFD requirements: Annex V, section 1.4.1																												
<i>Definition of scientific and technical basis for the intercalibration network</i>																								x x x x x x x x																												
<i>Identification of sites through expert judgement and joint inspections</i>																																																				
<i>Registration of the intercalibration sites</i>																																																				
<i>Intercalibration exercise</i>																																																				
<i>Results of the intercalibration exercise</i>																																																				

PROJECTS / ACTIVITIES	2000												2001												2002												2003				2004				2005				2006							
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	3	6	9	12	3	6	9	12	3	6	9	12	3	6	9	12				
<b>6. Economic analysis</b>													LEAD: France ; Commission												WFD requirements: Article 5 ; Article 9 ; Annex III																															
Review of existing experiences												x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																													
Development of draft guidelines												x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																													
Tests in pilot river basins /Validation												x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																													
Agreement on the guidelines												x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																													
<b>7. Monitoring</b>													LEAD: Italy ; Commission												WFD requirements: Article 7 ; Article 8 ; Annex V, section 1.3, 2.2 and 2.4																															
Program and organisation													x	x	x	x	x	x	x	x	x	x	x	x																																
Guidance on monitoring of inland surface waters													x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				
Guidance on monitoring of transitional and coastal waters													x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				
Guidance on monitoring of groundwaters													x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				
Monitoring data																																					x	x	x	x	x	x	x	x	x	x	x	x								
Dissemination of results																																									x	x	x	x	x	x	x	x	x	x	x	x				
<b>8. Assessment and classification of groundwater</b>													LEAD: Austria												WFD requirements: Article 4 ; Article 17 ; Annex V 2.1.2, 2.3.2, 2.4.4 and 2.4.5																															
Elaboration of a first interim report				x	x	x	x	x	x	x	x	x	x																																											
Discussion of methods														x																																										
Elaboration of the final report																x	x	x	x	x	x	x	x	x																																
<b>9. Best practices in River Basin Planning</b>													LEAD: Spain												WFD requirements: Article 3 ; Article 11 ; Article 13 ; Article 14 ; Annex I ; Annex VI ; Annex VII																															
Review of information													x	x	x	x	x	x	x	x	x	x	x	x																																
Development of guidance																	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				
Development of technical tools / Implementation requirements																									x	x	x	x	x	x	x	x	x	x	x	x																				
Dissemination of results																																																								
Training																									x	x	x	x	x												x	x	x	x					x	x	x	x				
Co-ordination and integration with other activities													x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				
<b>KEY ACTIVITY 3 Information and data management</b>																																																								
<b>1. Development of a common GIS</b>													LEAD: EC-JRC/SAI												WFD requirements: Annex II and Annex III																															
Preparatory Work													x	x	x	x	x	x	x																																					
Data Acquisition and Preprocessing																	x	x	x	x	x	x	x	x																																
Definition of Data Model																									x	x	x																													
Derivation of Drainage Network and Catchments																									x	x	x	x	x	x	x	x																								
Catchment Characteristics and Coding																									x	x	x	x	x	x	x	x	x	x	x	x																				
Validation and Finalisation																																																								
<b>KEY ACTIVITY 4 Application, testing and validation</b>																																																								
<b>1. Integrated testing of guidelines in pilot river basins</b>													LEAD: Strategic group												WFD requirements:																															
Identification of pilot river basins													x	x	x	x	x	x	x																																					
Integrated application of guidance documents																									x	x	x																													

**APPENDIX B**

**APPENDIX B Designations and Standards as set through Irish Legislation**

**(i) Drinking Water**

**S.I. No. 294 of 1989. European Community (Quality of Surface Water Intended for Abstraction of Drinking Water) Regulations**

Parameters	Unit Of Measurement	Standard for Categories		
		A1	A2	A3
pH	pH Unit	5.5-8.5	5.5-9.0	5.5-9.0
Colouration (after simple filtration)	mg/l Pt scale	20*	100*	150*
Total Suspended Solids	mg/l SS	50		
Temperature	°C	25*	25*	25*
Conductivity	ms/cm <sup>-1</sup> at 20°C	1000	1000	1000
Odour	(dilution factor at 25°C)	5	10.0	20
Nitrates	mg/l NO <sub>3</sub>	50*	50*	50*
Chlorides	mg/l Cl	250	250	250
Phosphates	mg/l P <sub>2</sub> O <sub>5</sub>	0.5	0.7	0.7
Chemical Oxygen Demand	mg/l O <sub>2</sub>			40
Dissolved Oxygen saturation rate	%O <sub>2</sub>	>60%	>50%	>30%
Biochemical Oxygen Demand	mg/l O <sub>2</sub>	5	5	7
Ammonium	mg/l NH <sub>4</sub>	0.2	1.5	4*
Total coliforms	100ml	5000	25000	100000
Faecal coliforms	100ml	1000	5000	40000
Kjeldahl Nitrogen	mg/l N	200	2,000	10,000
Dissolved iron	mg/l Fe	0.2	2	2
Manganese	mg/l Mn	0.5	0.3	1
Copper	mg/l Cu	0.05*	0.1*	1*
Zinc	mg/l Zn	3	5	5
Sulphates	mg/l SO <sub>4</sub>	200	200*	200*
Phenols	mg/l C <sub>6</sub> H <sub>5</sub> OH	0.0005	0.005	0.1
Surfactants (reacting with Methylene blue)	mg/l laurylsulphate	0.2	0.2	0.2
Fluorides	mg/l	1	1.7	1.7
Boron	mg/l	2	2	2
Arsenic	mg/l	0.05	0.05	0.1
Cadmium	mg/l	0.005	0.005	0.005
Total Chromium	mg/l	0.05	0.05	0.05
Lead	mg/l	0.05	0.05	0.05
Selenium	mg/l	0.01	0.01	0.01
Mercury	mg/l	0.001	0.001	0.001
Barium	mg/l	0.1	1	1
Cyanide	mg/l	0.05	0.05	0.05
Dissolved or Emulsified hydrocarbons	mg/l	0.01	0.2	1
Polycyclic aromatic hydrocarbons	mg/l	0.0002	0.0002	0.001
Total Pesticides	mg/l	0.0005	0.0025	0.005
Substances extractable with chloroform	mg/l	0.2	0.4000	1.0000
Faecal streptococci	Number per 100ml	200	2000	10000
Salmonella		Not present in 500 ml	Not present in 200 ml	

\*=excepting climatic or geographical conditions.

**S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000.**

**(i) Microbiological Parameters**

Parameter	Parametric value	Unit
<i>Escherichia coli</i>	0	number/100ml
<i>Enterococci</i>	0	number/100ml

**(ii) Chemical Parameters**

Parameter	Parametric value	Unit
Acrylamide	0.10	µg/l
Antimony	5.0	µg/l
Arsenic	10	µg/l
Benzene	1.0	µg/l
Benzo(a)pyrene	0.01	mg/l
Boron	10	µg/l
Bromate	10	µg/l
Cadmium	5.0	µg/l
Chromium	50	mg/l
Copper	2.0	µg/l
Cyanide	50	µg/l
1,2-dichloroethane	3.0	µg/l
Epichlorohydrin	0.1	µg/l
Fluoride	10	mg/l
Lead	10	µg/l
Mercury	1.0	µg/l
Nickel	20	µg/l
Nitrate	50	mg/l
Nitrite	0.5	mg/l
Pesticides	0.1	µg/l
Pesticides – Total	0.5	µg/l
Polycyclic aromatic hydrocarbons	0.1	µg/l
Selenium	10	µg/l
Tetrachloroethene and Trichloroethene	10	µg/l
Trihalomethanes – Total	100	µg/l
Vinyl chloride	0.5	µg/l

**(iii) Indicator Values**

Parameter	Parametric value	Unit
Aluminium	200	ug/l
Ammonium	0.3	mg/l
Chloride	250	mg/l
Clostridium perfringens (including spores)	0	number/100 ml
Colour	Acceptable to consumers and no abnormal change	
Conductivity	2500	uS cm <sup>-1</sup> at 20°C
Hydrogen ion concentration	>=6.5 and <=9.5	pH units
Iron	200	ug/l
Manganese	50	ug/l
Odour	Acceptable to consumers and no abnormal change	
Oxidisability	5	mg/l O <sub>2</sub>
Sulphate	250	mg/l

Sodium	200	mg/l
Taste	Acceptable to consumers and no abnormal change	
Colony count 22°	No abnormal change	
Coliform bacteria	0	number/100 ml
Total organic carbon (TOC)	No abnormal change	
Turbidity	Acceptable to consumers and no abnormal change	

(iv)

**Radioactivity Paramters**

Parametric value	Unit	Comments
Tritium	100	Bq/l
Total indicative dose	0.1	mSv/year

(ii) **Salmonid Water**

**S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations.**

Parameter	Units	Standard	Sampling Frequency	Conformance to standard
Temperature	°C	Downstream of thermal discharge. Discharge > 1.5°C, temperature of receiving water >21.5°C May-Oct > 10°C Nov-April	Weekly upstream and downstream	98% of time
Dissolved Oxygen (DO)	mg/l O <sub>2</sub>	> 9 danger at 6, Local Authority to prove no harm to fish populations E.U. Directive –guidance limits > 7	Monthly representative of low O <sub>2</sub> conditions	50% of time 100% of time
pH		≥ 6 ≤ 9 not exceeded ±0.5 change in the receiving water	Monthly	95% of monthly samples 100% when less frequent monitoring
Suspended Solids (SS)	mg/l	≤ 25 does not apply to SS with harmful chemical properties	Monthly	Average over 12 months
BOD <sub>5</sub>	mg/l O <sub>2</sub>	≤ 5 EU Directive guidance limit <3	Monthly	95% of monthly samples, 100% when less frequently monitored
Nitrites	mg/l	≤ 0.05 EU Directive guidance limit <0.01	Monthly	95% of monthly samples, 100% when less frequently monitored
Non-Ionised Ammonia	mg/l NH <sub>3</sub>	≤ 0.02	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Ammonium	mg/l NH <sub>4</sub>	≤ 1	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Residual Chloride	mg/l HOCl	≤ 0.005	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Zinc	mg/l Zn	≤ 0.03 ≤0.5 dependant on water hardness	Monthly	95% of monthly samples, 100% when less frequently monitored
Dissolved Copper	mg/l Cu	≤ 0.005 ≤ 0.112 dependant on water hardness	Monthly	95% of monthly samples, 100% when less frequently monitored
Phenolic compounds		Not adversely affect fish flavour	Monthly when presence of phenolic compounds are suspended	
Petroleum Hydrocarbons		Not form visible film on water surface or benthic surfaces; not to be detectable in fish flavour; not produce harmful effects in fish	Monthly	

**Rivers within the Shannon RBD designated under S.I. No. 293 of 1988.**

<b>Salmonid</b>	<b>Extent</b>	<b>Hydrometric Area</b>
River Feale	Main Channel	23
River Fergus	Main Channel	27



(iii) **Shellfish Water**

**S.I. No. 200 of 1994. Quality of Shellfish Waters Regulations, 1994.**

Parameter	Units	Standard	Sampling Frequency	Conformance to standard
Temperature	°C	Discharge affecting shellfish waters should not cause receiving waters	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Colouration	mg Pt/l	<10	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
pH	pH unit	> 7 < 9	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Suspended Solids (SS)	mg/l	Not >20% increase in unaffected waters	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Salinity	‰	≤ 40 and discharges affecting shellfish waters must not cause the salinity to exceed 10% to salinity of unaffected waters	Monthly	95% of samples, over a period of 12 months
Dissolved Oxygen	Saturation	≥70% and not < 60% unless not harmful effects on shellfish colonies can be proven	Monthly	
Petroleum Hydrocarbons		No visible film	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Organo-halogenated substances		Does not detract from the quality of shellfish products	Half yearly	100% of samples over 12 months
Metals Silver Arsenic Cadmium Chromium Copper Mercury Lead Zinc Nickel	mg/l	Does not detract from the quality of shellfish products	Half yearly	100% of samples over 12 months
Faecal coliforms	Number/100 ml	With no purification treatment <300 in shellfish flesh or intervalvular liquid.	Quarterly	100% of samples over 12 months
Substances affecting the taste of shellfish		Not adversely affect flavour	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter

(iv) **Bathing Water**

**S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992.**

Parameter	Unit	Standard
Total coliforms	No./100ml	(a) ≤ 5,000; (b) ≤ 10,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded by any two consecutive samples in any case.)
Faecal coliforms	No./100ml	(a) ≤ 1,000; ≤ (b) 2,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded in any case by any two consecutive samples.)
Colour		No abnormal change in colour. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Mineral oils	mg/litre	No film visible on the surface of bathing water and no odour. (To be conformed in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Surface active substances reacting with methylene blue	mg/litre (lauryl-sulfate)	No lasting foam. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Phenols (phenol indices)	mg/litre C <sub>4</sub> H <sub>3</sub> OH	≤ 0.05 and no specific odour. (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples. No sample to exceed 0.075)
Transparency	metres/depth	≥ 1 (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard. Transparency never to be less than 0.5).
Tarry residues. Floating materials such as wood, plastic articles, bottles, containers of glass, plastic, rubber and other sub-stances. Waste or splinters.		No offensive presence. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Faecal streptococci	No./100ml	≤ 300 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
Salmonella	No./litre	0 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
Enteroviruses	PFU/10 litres	0 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
pH		≥ 6 and ≤ 9 (To be conformed with by 95% of samples. No two consecutive samples to fall outside the range.)
Dissolved Oxygen	% saturation O <sub>2</sub>	≥ 70 and ≤ 120 (To be conformed with by 95% of samples. No two consecutive samples to fall outside the range).

**Designated Bathing Waters in the Shannon RBD. S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998**

County	Beach
Leitrim	Keeldra Lake, Cloone
Westmeath	The Cut, Lough Lene Portnashangan, Lough Owel Lilliput, Lough Ennel
Galway	Portumna
Clare	Fanore Whitestrans, Milltown Malbay Whitestrans, Doonbeg Mountshannon Ballycuggeran, Killaloe Cappagh Pier Beach at Kilrush Spanish Point Ballyallia Lake, Ennis Kilkee Seafield, Quilty Lahinch
Kerry	Ballybunion North Ballybunion South Ballyheigue Banna strand Fenit Castlegregory Maharabeg, Castlegregory

(v) **Dangerous Substances**

**S.I. No12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.**

Substance	Standard (µg/l)
Atrazine	1.0
Dichloromethane	10.0
Simazine	1
Toluene	10
Tributyltin	0.001
Xylenes	10

Substance	Standard (µg/l) for fresh water Harness of water (mg/l CaCO <sub>3</sub> )		Standard (µg/l) for tidal water
	≤100	>100	
Arsenic	25	25	20
Chromium	5	30	15
Copper	5	30	5
Cyanide	10	10	10
Fluoride	500	500	1,500
Lead	5	10	5
Nickel	8	50	25
Zinc	8 (≤10 mg/l CaCO <sub>3</sub> )	50 (>10 ≤100 mg/l CaCO <sub>3</sub> )	40

**(vi) Phosphorus Standards**

**S.I. No 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998.**

Rivers			
Existing Biological Quality Rating		MRP Median Concentration µg P/l	Minimum Target Biological Quality Target (Q) Rating
5	Unpolluted	15	5
4-5		20	4-5
4		30	4
3-4	Slightly Polluted	30	4
3	Moderately polluted	50	3-4
2-3		70	3
<2	Seriously Polluted	70	3
Lakes			
Existing Trophic Status		Minimum Target Trophic Status	Total Phosphorus Average Concentration (µg P/l)
Ultra- Oligotrophic	Satisfactory	Ultra-Oligotrophic	>5
Oligotrophic		Oligotrophic	>5 ≤10
Mesotrophic		Mesotrophic	>10 ≤20
Eutrophic	Unsatisfactory	Mesotrophic	>10 ≤20
Hypertrophic		Eutrophic	>20 ≤50

(vii) Urban Waste Water

S.I. 254 of 2001. Urban Waste Water Treatment Regulations

Parameters	Concentration	Minimum % of reduction	Method of Measurement
BOD without nitrification	25 mg/l O <sub>2</sub>	70-90	Homogenised, unfiltered undecanted sample. Determination of dissolved oxygen before and after five-day incubation at 20°C ±1°C in complete darkness. Addition of a nitrification inhibitor
COD	125 mg/l O <sub>2</sub>	75	Homogenised, unfiltered, undecanted sample Potassium dichromate
Total Suspended Solids	35 mg/l	90	-Filtering of a representative sample through a 0.45µm filter membrane. Drying at 105°C and weighing -Centrifuging of a representative sample drying at 105°C and weighing.
Requirements for discharges from urban waste water treatment plants to sensitive areas. One or both parameters may be applied depending on the local situation.			
Total Phosphorous	2 mg/l (10,000-100,000 p.e.) 1 mg/l (> 100,000 p.e.)	80	Molecular absorption spectrophotometry
Total Nitrogen	15 mg/l (10,000-100,000 p.e.) 10 mg/l (> 1000,000 p.e.)	70-80	Molecular absorption spectrophotometry

<b>Third Schedule: Part I (More stringent treatment required on commencement of the Regulations)</b>	
Waterbody	Section
River Camlin	County Longford - from sewage treatment works at Longford to entry into the River Shannon
River Nenagh	County Tipperary - downstream of sewage treatment works outfall in Nenagh to entry into Lough Derg
River Tullamore	County Offaly - 0.5 km section downstream of sewage treatment works outfall in Tullamore.
Lough Derg and Lough Ree	On the River Shannon
<b>Third Schedule: Part II (Treatment plants must be in place by 31<sup>st</sup> May 2008)</b>	
Waterbody	Section
River Brosna	Downstream of Mullingar sewage outfall [opposite intersection of regional road (R400) with N52 south of Mullingar], to Lough Ennell
River Hind	Downstream of Roscommon Town sewage outfall, to Lough Ree
Little Brosna River	Downstream of Roscrea sewage outfall below its confluence with the Bunow River, to the bridge near Brosna House
Lough Ennell	County Westmeath.
Feale Estuary Upper	Downstream of Finuge Bridge, to Poulnahaha old Railway Bridge.
Cashen / Feale Estuary	Downstream of Poulnahaha old Railway Bridge, to Moneycashen
Lee Estuary Upper (Tralee)	From Ballymullin Bridge to seaward end of Tralee Ship Canal / Annagh Island.

**(viii) Conservation of Wild Birds (79/409/EEC)**

**Special Protected Areas designated within the Shannon RBD**

<b>County</b>	<b>Name</b>
Sligo/Roscommon	Lough Gara
Roscommon	Bellangare Bog
Roscommon/Longford/Westmeath	Lough Ree
Roscommon/Longford/Westmeath	Middle Shannon Callows
Longford	Ballykenny Fisherstown Bog
Longford/Cavan/Westmeath	Lough Kinale and Derragh Lough
Longford	Garriskill Bog
Longford	Lough Iron
Longford	Lough Owel
Longford	Lough Ennell
Westmeath	Glenlough
Galway /Roscommon	River Suck Callows
Offaly	Mongan Bog
Offaly	All Saints Bog
Offaly	Dovegrove Callows
Tipperary North/Offaly	River Little Brosna Callows
Galway/Clare/Tipperary North	Lough Derg
Clare	Cliffs of Moher
Clare	Balliallia Lake Wildfowl Sanctuary
Clare	Mutton Island
Clare	Mattle Island
Clare	Illaunonearaun
Clare	Loop Head
Clare/Limerick	River Shannon and River Fergus estuaries
Kerry	Lough Gill
Kerry	Maharees Islands
Kerry	Tralee Bay
Kerry	Akeragh Lough, Bana and Barrow Harbour

(This list was compiled from available Heritage Data, 30/05/2003)

**National Heritage Areas in the Shannon River Basin**

AREA	SITECODE	NAME
717950.875	000010	DOVEGROVE CALLOWS
56376040.000	000011	LOUGH DERG
31260636.000	000011	LOUGH DERG
50055828.000	000011	LOUGH DERG
1614816.500	000014	BALLYALLIA LAKE
262122.719	000014	BALLYALLIA LAKE
789977.625	000015	BALLYCAR LOUGH
1942134.375	000016	BALLYCULLINAN LAKE
3801497.000	000019	BALLYOGAN LOUGH
22052866.000	000020	BLACK HEAD-POULSALLAGH COMPLEX
55669668.000	000020	BLACK HEAD-POULSALLAGH COMPLEX
4754.553	000020	BLACK HEAD-POULSALLAGH COMPLEX
361.142	000020	BLACK HEAD-POULSALLAGH COMPLEX
771.726	000020	BLACK HEAD-POULSALLAGH COMPLEX
87170.438	000022	CAHERMURPHY WOOD
2168071.500	000026	CLIFFS OF MOHER
331.318	000026	CLIFFS OF MOHER
1231750.500	000026	CLIFFS OF MOHER
5311.465	000026	CLIFFS OF MOHER
84.118	000026	CLIFFS OF MOHER
238.984	000026	CLIFFS OF MOHER
976.104	000026	CLIFFS OF MOHER
161.162	000026	CLIFFS OF MOHER
4618192.000	000027	CLONDERALAW BAY
149.193	000028	CLOONLARA HOUSE
156.203	000030	DANES HOLE, POULNALECKA
8715272.000	000032	DROMORE WOODS AND LOUGHS
21.341	000033	DURRA CASTLE
329.958	000035	FORT FERGUS (BALLYNACALLY)
4396893.000	000036	INAGH RIVER ESTUARY
90.771	000037	POULADATIG CAVE
2731102.000	000038	INCHICRONAN LOUGH
3545021.750	000045	LOOP HEAD
1408.542	000045	LOOP HEAD
44.225	000045	LOOP HEAD
751.219	000045	LOOP HEAD
50.745	000045	LOOP HEAD
151.228	000045	LOOP HEAD
51.053	000045	LOOP HEAD
791740.688	000045	LOOP HEAD
239.761	000045	LOOP HEAD
402.329	000045	LOOP HEAD
61.694	000045	LOOP HEAD
337.349	000045	LOOP HEAD
1520.128	000045	LOOP HEAD
411.097	000045	LOOP HEAD
2237.045	000045	LOOP HEAD
100.503	000045	LOOP HEAD
724.857	000045	LOOP HEAD
579.822	000045	LOOP HEAD
106155.672	000048	LOUGH GOLLER
408479.688	000050	DERRYGEEHA LOUGH
260592.766	000051	LOUGH GASH TURLOUGH

AREA	SITECODE	NAME
60974876.000	000054	MONEEN MOUNTAIN
4803499.500	000057	MOYREE RIVER
10917.765	000057	MOYREE RIVER
613.083	000061	NEWPARK HOUSE (ENNIS)
680.780	000062	PARADISE HOUSE (BALLYNACALLY)
555.351	000064	POULNAGORDON CAVE (QUIN)
7393780.500	000065	POULNASHERRY BAY
4873879.500	000070	TULLAHER LOUGH AND BOG
494196.875	000071	TURLOUGHNAGULLAUN
3580184.000	000174	CURRAGHCHASE WOODS
1137.565	000174	CURRAGHCHASE WOODS
1245133.375	000200	FARRIHY LOUGH
3360429.250	000216	RIVER SHANNON CALLOWS
6780127.500	000216	RIVER SHANNON CALLOWS
13173614.000	000216	RIVER SHANNON CALLOWS
19850308.000	000216	RIVER SHANNON CALLOWS
15246639.000	000216	RIVER SHANNON CALLOWS
500347.125	000218	COOLCAM TURLOUGH
621963.375	000218	COOLCAM TURLOUGH
553411.813	000220	LOUGH NAMUCHA BOG
2211239.250	000220	LOUGH NAMUCHA BOG
491503.688	000221	MOORFIELD BOG/FARM COTTAGE
899781.063	000221	MOORFIELD BOG/FARM COTTAGE
14819729.000	000222	SUCK RIVER CALLOWS, CASTLECOOTE-SHANNONBRIDGE
3395780.750	000222	SUCK RIVER CALLOWS, CASTLECOOTE-SHANNONBRIDGE
15818931.000	000222	SUCK RIVER CALLOWS, CASTLECOOTE-SHANNONBRIDGE
39974.941	000222	SUCK RIVER CALLOWS, CASTLECOOTE-SHANNONBRIDGE
1655838.000	000229	BALLYGAR BOG
1736416.375	000231	BARROUGHTER BOG
1049343.500	000235	BRACKLAGH BOG
1612630.875	000239	CASTLE LAKE
2807219.750	000240	CAMDERRY BOG
540.008	000244	CLONFERT CATHEDRAL
2026114.375	000245	CLOONCULLAUN BOG
5544263.500	000248	CLOONMOYLAN BOG
1197675.625	000249	CLOONOLISH BOG
8549466.000	000252	COOLE-GARRYLAND COMPLEX
7337703.000	000254	CRIT ISLAND WEST
463743.656	000255	CROAGHILL TURLOUGH
2782255.500	000256	CURRAGHLEHANAGH BOG
1182556.125	000261	DERRYCRAG WOOD NATURE RESERVE
1827681.750	000267	FUNSHIN BOG
1590052.500	000280	CASTLEFRENCH WEST BOG
3245389.500	000281	KEELOGES BOG
1604956.750	000283	KILMORE BOG
1678690.000	000284	KILNABORRIS BOG
2797340.250	000285	KILLSALLAGH BOG
1021928.813	000292	LEAHA BOG
4554943.000	000296	LISNAGEERAGH BOG AND BALLINASTACK TURLOUGH
11544786.000	000301	LOUGH LURGEEN BOG/GLENAMADDY TURLOUGH
6158800.000	000308	LOUGHATORICK SOUTH BOG
2724621.750	000308	LOUGHATORICK SOUTH BOG
2174116.250	000310	MENEEN BOG
737635.000	000319	POLLNAKNOCKAUN WOOD NATURE RESERVE



AREA	SITECODE	NAME
1362226.500	000326	SHANKILL WEST BOG
7518277.500	000332	AKERAGH, BANNA AND BARROW HARBOUR
63879.684	000332	AKERAGH, BANNA AND BARROW HARBOUR
4458066.000	000332	AKERAGH, BANNA AND BARROW HARBOUR
5932988.000	000337	DOON LOUGH
2147266.750	000374	MOANVEANLAGH BOG NHA
141174560.000	000375	MOUNT BRANDON
15973251.000	000412	SLIEVE BLOOM MOUNTAINS
26815352.000	000412	SLIEVE BLOOM MOUNTAINS
947238.188	000413	ANNAGHMORE LOUGH FEN (OFFALY)
1832823.125	000413	ANNAGHMORE LOUGH FEN (OFFALY)
629657.625	000422	AGHNAMONA BOG
3476767.000	000422	AGHNAMONA BOG
895408.125	000424	CLOONCOE WOOD AND LOUGH
197482.844	000429	ADARE WOODLANDS
559768.063	000429	ADARE WOODLANDS
237734.938	000429	ADARE WOODLANDS
174083.000	000429	ADARE WOODLANDS
282925.281	000429	ADARE WOODLANDS
529.225	000430	ARDAGH CHURCH, NEWCASTLEWEST (DISUSED)
466430.031	000432	BARRIGONE
208.508	000433	CASTLECONNELL (DOMESTIC DWELLING, OCCUPIED)
32114208.000	000435	INNER SHANNON ESTUARY - SOUTH SHORE
96887.984	000435	INNER SHANNON ESTUARY - SOUTH SHORE
736827.688	000435	INNER SHANNON ESTUARY - SOUTH SHORE
12853.430	000435	INNER SHANNON ESTUARY - SOUTH SHORE
315453.281	000436	HERBERTSTOWN FEN
1479035.875	000437	LOUGH GUR
229678.938	000437	LOUGH GUR
423346.125	000438	LOUGHMORE COMMON TURLOUGH
769037.563	000439	TORY HILL
766819.813	000442	BROWN BOG
2150265.500	000445	CLOONEEN BOG
3286892.000	000447	DERRYMORE BOG
521278.250	000448	FORTWILLIAM TURLOUGH
3318181.750	000449	LOUGH BANNOW
226728.750	000523	LOUGH GOWER
7522643.000	000564	LITTLE BROSNA CALLOWS; NEW BRIDGE – RIVER SHANNON
5704387.000	000564	LITTLE BROSNA CALLOWS; NEW BRIDGE – RIVER SHANNON
1798.878	000564	LITTLE BROSNA CALLOWS; NEW BRIDGE – RIVER SHANNON
615356.625	000565	CLONYDONNIN BOG
765434.500	000565	CLONYDONNIN BOG
3869198.750	000566	ALL SAINTS BOG AND ESKER
111.306	000567	BANAGHER (DOMESTIC DWELLING, OCCUPIED)
40.253	000568	BIRR (DOMESTIC DWELLING NO. 2, OCCUPIED)
167.862	000569	BIRR (DOMESTIC DWELLING NO. 1, OCCUPIED)
508830.031	000571	CHARLEVILLE WOOD
44664.848	000571	CHARLEVILLE WOOD
1196632.500	000571	CHARLEVILLE WOOD
248323.234	000572	CLARA BOG
8405993.000	000572	CLARA BOG
78159.664	000572	CLARA BOG
1163584.125	000574	CLONAD WOOD
1530826.500	000575	FERBANE BOG

Shannon River Basin District  
Policy and Legislation Report

AREA	SITECODE	NAME
778742.813	000576	FIN LOUGH (OFFALY)
53.436	000579	KINNITTY (DOMESTIC DWELLING, OCCUPIED)
2078303.500	000580	MONGAN BOG
1298608.375	000581	MOYCLARE BOG
216488.406	000583	ROSCREA BOG
2016485.125	000584	CUILCAGH - ANIERIN UPLANDS
35942744.000	000584	CUILCAGH - ANIERIN UPLANDS
58786872.000	000584	CUILCAGH - ANIERIN UPLANDS
9026.465	000585	SHARAVOGUE BOG
2234327.000	000585	SHARAVOGUE BOG
2523588.000	000586	WOODFIELD BOG
16925068.000	000587	LOUGH GARA
624364.125	000587	LOUGH GARA
720483.625	000587	LOUGH GARA
8646582.000	000587	LOUGH GARA
1633873.000	000588	BALLINTURLY TURLOUGH
1986338.250	000591	BELLA BRIDGE BOG
12074023.000	000592	BELLANAGARE BOG
1373239.625	000594	BRIERFIELD TURLOUGH
686209.688	000596	CARRIGEENROE MARSH
3410893.000	000597	CARROWBEHY/CAHER BOG
859470.375	000598	CASTLEPLUNKET TURLOUGH
3482078.000	000600	CLOONCHAMBERS BOG
2067600.125	000602	CORBO BOG
1239769.500	000603	CORNAVEAGH BOG
861865.625	000604	DERRINEA BOG
3498734.500	000605	DERRYCANAN BOG
836993.938	000607	ERRIT LOUGH
9405009.000	000608	KILGLASS AND GRANGE LOUGHS
911757.063	000609	LISDUFF TURLOUGH
1502690.875	000610	LOUGH CROAN TURLOUGH
4809604.500	000611	LOUGH FUNSHINAGH
424350.875	000612	MULLYGOLLAN TURLOUGH
338468.406	000613	RATHNALULLEAGH TURLOUGH
2383363.500	000614	CLOONSHANVILLE BOG
4532251.000	000617	TULLYTAWEN BOG
4195174.500	000640	ARRAGH MORE BOG
2695653.000	000641	BALLYDUFF/CLONFINANE BOG
1074886.375	000642	BALLYMACEGAN BOG NHA
6766732.500	000647	KILCARREN - FIRVILLE BOG
2172721.000	000648	KILLEEN BOG
431127.719	000650	LOUGH OURNA
3227520.000	000652	MONAINCHA BOG/BALLAGHMORE BOG NHA
71471.320	000653	NEWCHAPEL TURLOUGH
5550350.500	000654	REDWOOD BOG NHA
380584.156	000673	BALLYNAFID LAKE AND FEN
2927476.500	000674	BALLYNAGRENIA AND BALLINDERRY BOGS
2478921.250	000676	CARN PARK BOG
2343294.500	000677	CLONCROW BOG (NEW FOREST)
2066078.500	000678	CROSSWOOD BOG
3248113.500	000679	GARRISKIL BOG
1076324.250	000681	HILL OF MAEL AND THE ROCK OF CURRY
14060134.000	000684	LOUGH DERRAVARAGH
26384.832	000684	LOUGH DERRAVARAGH

Shannon River Basin District  
Policy and Legislation Report

AREA	SITECODE	NAME
48014.238	000684	LOUGH DERRAVARAGH
17189824.000	000685	LOUGH ENNELL
1718863.500	000686	LOUGH GLORE
6210722.000	000687	LOUGH IRON
429491.813	000687	LOUGH IRON
11197416.000	000688	LOUGH OWEL
32793.082	000688	LOUGH OWEL
621898.188	000689	LOUGH SEWDY
1245609.000	000690	LOUGH SHEEVER FEN/SLEVIN'S LOUGH COMPLEX
79797.578	000691	RINN RIVER
2458383.500	000691	RINN RIVER
1697698.000	000691	RINN RIVER
470149.813	000691	RINN RIVER
239357.484	000692	SCRAGH BOG
1969946.125	000694	WOODDOWN BOG NHA
2787870.500	000859	CLONASLEE ESKERS AND DERRY BOG
339640.656	000882	BALLINTEMPLE BOG
633998.688	000885	BALLYDUFF ESKER
55968.906	000889	CAMCOR WOOD
212340.813	000890	CANGORT BOG
1059147.500	000890	CANGORT BOG
164007.344	000892	CLONFINLOUGH ESKER
128940.961	000892	CLONFINLOUGH ESKER
63711.805	000892	CLONFINLOUGH ESKER
1163106.625	000893	CLONLYON GLEBE BOG
391984.313	000894	CLORHANE WOOD
28147.709	000896	DERRYGOLAN ESKER
140557.484	000897	DERRYKEEL MEADOWS
42033.566	000900	DRUMAKEENAN, EAGLE HILL AND PERRY'S MILL
57349.445	000900	DRUMAKEENAN, EAGLE HILL AND PERRY'S MILL
262739.719	000900	DRUMAKEENAN, EAGLE HILL AND PERRY'S MILL
237593.313	000903	GOLDEN GROVE WOODS
456740.813	000906	KILCORMAC ESKER
21254.449	000906	KILCORMAC ESKER
12788.445	000906	KILCORMAC ESKER
2141706.750	000909	LOUGH COURA
50092.410	000909	LOUGH COURA
387116.250	000910	LOUGH NANAG ESKER
27327.160	000913	MOUNT ST. JOSEPH WOODS
9255.882	000913	MOUNT ST. JOSEPH WOODS
24742.779	000913	MOUNT ST. JOSEPH WOODS
96211.688	000913	MOUNT ST. JOSEPH WOODS
201270.484	000913	MOUNT ST. JOSEPH WOODS
696463.500	000916	PALLAS LOUGH
277162.281	000918	RAHUGH RIDGE (KILTOBER ESKER)
65053.793	000919	RIDGE ROAD, SW OF RAPEMILLS
403379.813	000920	ROSS AND GLENNS ESKERS
1770312.375	000921	SCREGGAN BOG
36800.836	000921	SCREGGAN BOG
1138755.750	000927	WOODVILLE WOODS
400207.813	000929	CLAREEN LOUGH
669761.313	000929	CLAREEN LOUGH
123540.211	000930	CLARE GLEN
113689.352	000930	CLARE GLEN

AREA	SITECODE	NAME
345440.906	000931	DERRYGAREEN HEATH
1276882.750	000932	FIAGH BOG
687712.813	000932	FIAGH BOG
196644.984	000933	FRIARS LOUGH
1342750.125	000934	KILDUFF, DEVILSBIT MOUNTAIN
966482.000	000936	LOUGH NAHINCH (TIPPERARY)
52268.020	000936	LOUGH NAHINCH (TIPPERARY)
3929639.750	000937	SCOHABOY BOG
248279.484	000939	SILVERMINE MOUNTAINS
76625.188	000941	SPRING PARK WETLANDS
226224.234	000941	SPRING PARK WETLANDS
61380.695	000943	WILLSBOROUGH ESKER
12690.045	000943	WILLSBOROUGH ESKER
166836.891	000961	KNOCKANAVAR WOOD
25564.389	000961	KNOCKANAVAR WOOD
401722.563	000985	LOUGH KINALE AND DERRAGH LOUGHS
3188314.250	000985	LOUGH KINALE AND DERRAGH LOUGHS
553052.375	000985	LOUGH KINALE AND DERRAGH LOUGHS
6292322.000	000987	LOUGH SHEELIN
5641951.500	000987	LOUGH SHEELIN
13422702.000	000987	LOUGH SHEELIN
856766.000	000993	AYLE LOWER BOG
64261.324	000994	BALLYTEIGE (CLARE)
61790.824	001000	CAHIRACON WOODS
458933.375	001001	CAHIRCALLA WOOD
418711.313	001004	CLOONSNAGHTA LOUGH AND GORTAGLASS LOUGH
80002.438	001005	DERRYHUMMA WOOD
190480.563	001006	DERRYMORE WOOD
2799055.250	001007	WHITE STRAND/CARROWMORE MARSH
168020.016	001008	DROMOLAND LOUGH
2567876.750	001010	FIN LOUGH (CLARE)
266654.219	001012	GARRANNON WOOD
546915.813	001013	GLENOMRA WOOD
396699.656	001014	ILLAUNONEARAUN
61858.402	001014	ILLAUNONEARAUN
1131.731	001014	ILLAUNONEARAUN
334800.375	001015	GORTGLASS LOUGH
2550028.250	001017	LOUGH CALLAUNYHEADA
1842143.125	001019	LOUGH O'GRADY
956965.250	001020	LOUGHANILLOON BOG
3813543.500	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
24385192.000	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
1094998.750	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
837.414	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
2929.220	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
118.688	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
1579.470	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
985.592	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
1469.777	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
90.901	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
802.724	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
50.430	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
74.843	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
51.095	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS

Shannon River Basin District  
Policy and Legislation Report

AREA	SITECODE	NAME
116.801	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
315.817	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
66.267	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
181.564	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
527.141	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
463.107	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
165.669	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
460.943	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
974.322	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
57418.992	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
576.794	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
584.128	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
35.103	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
24.590	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
240.668	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
227.713	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
57.692	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
186.296	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
23.858	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
27.433	001021	CARROWMORE POINT TO SPANISH POINT AND ISLANDS
58567.367	001022	DERRYVINNAUN WOOD
40531.754	001024	CAHERKINALLIA WOOD
10006.096	001024	CAHERKINALLIA WOOD
308013.875	001025	ST.SENAN'S LOUGH
1401883.375	001030	DROMORE AND BLEACH LOUGHS
731949.000	001133	NENAGH RIVER GORGE
202418.313	001178	KILLAVALLA WOOD
4143284.500	001197	KEEPER HILL
1261890.750	001222	ARDAGH BOG
1835417.125	001224	ARDGRAIGUE BOG
2635766.000	001227	AUGHRIM BOG
3721647.750	001229	SLIEVE AUGHTY BOG, MOYGLASS AND WOODFORD
2404555.250	001229	SLIEVE AUGHTY BOG, MOYGLASS AND WOODFORD
303309.438	001239	CALLOW LOUGH
1186430.750	001240	CAPIRA/DERREN BOG
4908468.500	001242	CARROWNAGAPPUL BOG
2042874.375	001244	CASTLEFRENCH EAST
34811.512	001247	CLOONASCRAUGH FEN AND BLACK WOOD
113109.883	001247	CLOONASCRAUGH FEN AND BLACK WOOD
2468935.750	001254	DERRINLOUGH BOG
1320109.500	001264	ESKERBOY BOG
254558.984	001279	KILKERRIN TURLOUGH
1190341.750	001282	KILTULLAGH LOUGH
4784649.500	001283	KILLURE BOG
2085072.750	001303	MOORFIELD BOG
211871.172	001313	ROSTURRA WOOD
179212.234	001313	ROSTURRA WOOD
971342.063	001319	SUMMERVILLE LOUGH
501204.531	001321	TERMON LOUGH
36366.469	001321	TERMON LOUGH
352279.188	001331	LOUGH CLEGGAN
5208712.500	001332	BALLYLONGFORD BAY
297559.156	001335	BEAL POINT
6787845.500	001340	CASHEN RIVER ESTUARY

AREA	SITECODE	NAME
18434.043	001341	CHURCH HILL, TRALEE
1518745.500	001352	ROSS ISLAND (NP)
233619.516	001359	ILLAUNNABARNAGH ISLAND
467.414	001359	ILLAUNNABARNAGH ISLAND
1298.760	001359	ILLAUNNABARNAGH ISLAND
4126.930	001359	ILLAUNNABARNAGH ISLAND
41.115	001359	ILLAUNNABARNAGH ISLAND
6317.356	001359	ILLAUNNABARNAGH ISLAND
361109.313	001365	LOUGH BOORA
1636753.500	001379	SYBIL POINT/CARRIGBREAN
1221451.125	001386	TARBERT BAY
675938.500	001386	TARBERT BAY
217370.641	001402	ANNAGHEARLY LOUGH
1285923.250	001405	CASHEL BOG (LEITRIM)
14533.247	001412	DRUMHIERNY WOOD
2778300.250	001417	LOUGH RINN
130059.000	001419	OWENGAR WOODS
2226840.000	001420	CORRACRAMPH BOG
462525.781	001421	SHEEMORE WOOD
1479702.000	001423	CLOONAGEEHER BOG
1367554.000	001423	CLOONAGEEHER BOG
688754.188	001425	BALLYMORRISHEEN MARSH
267546.813	001427	BALLINVIRICK MARSH
27680.775	001427	BALLINVIRICK MARSH
13528.038	001429	CAPPAGH FEN
19446.979	001429	CAPPAGH FEN
168536.063	001429	CAPPAGH FEN
284856.906	001430	GLEN BOG
191506.281	001431	GLENASTAR WOOD
197563.438	001432	GLENSTAL WOOD
109326.242	001433	GORTEENAMROCK
26011.002	001434	HEATHFIELD WOOD
346310.469	001436	STURAMUS ISLAND
67587.609	001436	STURAMUS ISLAND
820508.000	001443	LOUGH SLAWN
375383.313	001444	DERRY LOUGH
1219768.875	001448	FORTHILL BOG
1475359.750	001450	MOUNT JESSOP BOG NHA
562298.125	001571	URLAUR LAKES
531166.000	001571	URLAUR LAKES
1566019.000	001571	URLAUR LAKES
912554.938	001617	ARDAKILLIN LOUGH
5999724.000	001623	CARRICKYNAGHTAN BOG
533000.500	001624	CARROWREAGH TURLOUGH
344056.000	001625	CASTLESAMPSON ESKER
1920374.000	001626	ANNAGHMORE LOUGH (ROSCOMMON)
574940.563	001626	ANNAGHMORE LOUGH (ROSCOMMON)
119908.789	001627	CORBALLY TURLOUGH
118838.719	001630	CRANBERRY LOUGH
503331.375	001631	DRUM BRIDGE (LOUGH KEY)
1051808.375	001632	DRUMALOUGH BOG
1387470.250	001632	DRUMALOUGH BOG
325456.719	001632	DRUMALOUGH BOG
185971.063	001633	DRUMMAN'S ISLAND

Shannon River Basin District  
Policy and Legislation Report

AREA	SITECODE	NAME
292791.938	001634	FEACLE TURLOUGH
288971.969	001636	FIN LOUGH (& BLACK LOUGH) (ROSCOMMON)
1005621.188	001637	FOUR ROADS TURLOUGH
45880.465	001638	HOG'S ISLAND (LOUGH KEY)
7604734.000	001642	LOUGH BODERG/LOUGH BOFIN
5860802.000	001642	LOUGH BODERG/LOUGH BOFIN
9276104.000	001643	LOUGH DRUMHARLOW
942446.000	001643	LOUGH DRUMHARLOW
750734.750	001644	LOUGH GLINN
2026210.125	001645	LOUGH O'FLYNN
150773.609	001646	NEWTOWN TURLOUGH
416629.656	001648	SHAD LOUGH
78947.750	001651	TAWNYTASKIN WOOD (LOUGH KEY)
994625.438	001652	TULLAGHAN BOG (ROSCOMMON)
434093.594	001683	LISKEENAN FEN (FORMERLY LISKEENAN TURLOUGH)
822376.938	001684	LORRHA BOG
108276.711	001686	CLOONAMIRRAN WOOD
1218115.250	001687	GLEN LOUGH
345197.531	001687	GLEN LOUGH
21057.049	001711	ARDAN WOOD
190572.172	001713	BALLYNAGARBRY
140324.594	001714	LOUGH GRANNEY WOODS
290645.844	001721	LOUGH BANE
2253613.750	001725	NURE BOG NHA
247098.141	001731	WALSHESTOWN FEN
480262.438	001732	WATERSTOWN LAKE
119246.828	001775	MURPHY'S BRIDGE ESKER
174062.359	001775	MURPHY'S BRIDGE ESKER
21602.676	001775	MURPHY'S BRIDGE ESKER
80508.828	001775	MURPHY'S BRIDGE ESKER
30454.594	001775	MURPHY'S BRIDGE ESKER
158621.266	001776	PILGRIM'S ROAD ESKER
45998.719	001776	PILGRIM'S ROAD ESKER
22510.324	001776	PILGRIM'S ROAD ESKER
114516.203	001777	BALLYDUFF WOOD
14878.619	001779	BALLINASLOE ESKER
9175.745	001779	BALLINASLOE ESKER
35860.613	001779	BALLINASLOE ESKER
136661.891	001779	BALLINASLOE ESKER
32393.709	001779	BALLINASLOE ESKER
16963.723	001779	BALLINASLOE ESKER
552920.375	001807	LOUGH ERREW
130295.641	001808	LOUGH SALLAGH
816205.313	001810	WHITE LOUGH, BEN LOUGHS AND LOUGH DOO
379509.313	001810	WHITE LOUGH, BEN LOUGHS AND LOUGH DOO
1995.037	001810	WHITE LOUGH, BEN LOUGHS AND LOUGH DOO
2189916.500	001812	LOUGH GARR NHA
283965.594	001814	LOUGH NANEAGH
605794.813	001814	LOUGH NANEAGH
290809.594	001814	LOUGH NANEAGH
1592157.375	001818	LOUGH FORBES COMPLEX
11797371.000	001818	LOUGH FORBES COMPLEX
490878.344	001819	LOUGH BAWN
200003.703	001821	CORDARA TURLOUGH

AREA	SITECODE	NAME
2016214.375	001822	CARRICKGLASS DEMESNE
82666.313	001830	DOON ESKER WOOD
713594.375	001831	SPLIT HILLS AND LONG HILL ESKER
38712.520	001831	SPLIT HILLS AND LONG HILL ESKER
33922.734	001844	BALLYDONAGH MARSH
84364.266	001844	BALLYDONAGH MARSH
150187.797	001846	BALLYNEILL MARSH
37617.750	001847	PHILIPSTON MARSH
84868.656	001848	KILBEG MARSH
932780.375	001849	BALLYVORHEEN BOG
708853.813	001850	DROMSALLAGH BOG
2193107.250	001851	BILBOA AND GORTNAGERAGH RIVER VALLEYS
986565.938	001911	SCATTERY ISLAND
3400649.750	001912	GLENDREE BOG
6541221.500	001926	EAST BURREN COMPLEX
3560570.250	001926	EAST BURREN COMPLEX
168480752.000	001926	EAST BURREN COMPLEX
158071.984	001926	EAST BURREN COMPLEX
61685.215	001926	EAST BURREN COMPLEX
4477423.500	001958	SMERWICK HARBOUR SANDHILLS AND MARSHES
179571.875	001962	MUCKLAGHMORE ISLAND
5225.785	001962	MUCKLAGHMORE ISLAND
282769.594	001963	GURRIG ISLAND (MAGHAREES)
39352.254	001963	GURRIG ISLAND (MAGHAREES)
181.997	001963	GURRIG ISLAND (MAGHAREES)
990720.375	001964	ILLAUNTANNIG (MAGHAREES)
324060.406	001964	ILLAUNTANNIG (MAGHAREES)
237483.688	001964	ILLAUNTANNIG (MAGHAREES)
18201.314	001964	ILLAUNTANNIG (MAGHAREES)
21202.602	001964	ILLAUNTANNIG (MAGHAREES)
220.822	001964	ILLAUNTANNIG (MAGHAREES)
795894.063	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
56197.914	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
111.266	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
860.498	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
129127.344	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
154.414	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
88.667	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
3478.943	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
94.303	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
131.498	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
62.073	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
69.891	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
56.935	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
55.680	001965	INISHTOOSKERT AND ILLAUNIMMIL (MAGHAREES)
867956.875	001995	LOUGH AVAN
530954.750	001995	LOUGH AVAN
50439.973	001995	LOUGH AVAN
184293.703	001996	SKOOLHILL
428910.906	002001	KNOCKALISHEEN MARSH
1410793.875	002001	KNOCKALISHEEN MARSH
182.364	002010	OLD DOMESTIC BUILDING (KEEVAGH)
1039283.188	002013	TULLAGHANROCK BOG
	002014	SHANNON CALLOWS, PORTUMNA



AREA	SITECODE	NAME
	002015	SHANNON CALLOWS, PORTLAND ISLAND
	002016	SHANNON CALLOWS, KILLYCROSS
	002017	SHANNON CALLOWS, MEELICK, REDWOOD
	002018	SHANNON CALLOWS, INCHERKY
	002019	SHANNON CALLOWS, INISHEE
	002020	SHANNON CALLOWS, BANAGHER
	002021	SHANNON CALLOWS, LEHINCH
	002022	SHANNON CALLOWS, DERRYHOLMES
	002023	SHANNON CALLOWS, BISHOP'S ISLANDS
	002024	SHANNON CALLOWS, SHANNONBRIDGE
	002025	SHANNON CALLOWS, CLONBURREN
	002026	SHANNON CALLOWS, CLONMACNOISE
	002027	SHANNON CALLOWS, CLONCRAFF
	002028	SHANNON CALLOWS, LONG ISLAND
	002029	SHANNON CALLOWS, CARRICKYNAUGHTON
	002030	SHANNON CALLOWS, ATHLONE
6019653.000	002032	BARLEART AND LACKAGH BOGS
1795946.000	002033	DAINGEAN BOG
9240464.000	002036	BALLYHOURA MOUNTAINS
1746726.000	002048	FERGUS ESTUARY AND INNER SHANNON, NORTH SHORE
119552720.000	002048	FERGUS ESTUARY AND INNER SHANNON, NORTH SHORE
2939103.750	002054	ROSROE LOUGH
69.337	002058	BRACKEN'S DWELLING, NEAR WHITEFORD
221.561	002059	CLOGHANBEG
146.159	002063	ST. JOSEPH'S MOUNTHEATON
7132.718	002063	ST. JOSEPH'S MOUNTHEATON
274.204	002064	DRUMAKEENAN NATIONAL SCHOOL
339.136	002065	MILTOWN, SHINRONE
1173311.500	002069	ARDAGULLION BOG
102971152.000	002070	TRALEE BAY AND MAGHAREES PENINSULA, WEST TO CLOGHANE
1538164.000	002070	TRALEE BAY AND MAGHAREES PENINSULA, WEST TO CLOGHANE
80374.570	002070	TRALEE BAY AND MAGHAREES PENINSULA, WEST TO CLOGHANE
16216.988	002070	TRALEE BAY AND MAGHAREES PENINSULA, WEST TO CLOGHANE
34824.832	002070	TRALEE BAY AND MAGHAREES PENINSULA, WEST TO CLOGHANE
1090157.125	002072	LISNANARRIAGH BOG
203179.625	002089	BALLYROE HILL AND MORTLESTOWN HILL
133951.641	002089	BALLYROE HILL AND MORTLESTOWN HILL
196974.375	002089	BALLYROE HILL AND MORTLESTOWN HILL
1197383.375	002090	CASTLEOLIVER WOODS
1366538.875	002091	NEWHALL AND EDENVALE COMPLEX
2465703.500	002103	ROYAL CANAL
1906266.500	002103	ROYAL CANAL
252977.313	002104	GRAND CANAL
7924624.000	002104	GRAND CANAL
1116650.125	002109	LOUGH ALLEN
22586.359	002109	LOUGH ALLEN
28293.572	002109	LOUGH ALLEN
8259.027	002109	LOUGH ALLEN
12945.154	002109	LOUGH ALLEN
3816398.750	002110	CORLISKEA/TRIEN/CLOONFELLIV BOG
3435725.750	002110	CORLISKEA/TRIEN/CLOONFELLIV BOG
379615.563	002112	BALLYSEEDY WOOD
16908.338	002112	BALLYSEEDY WOOD
1229109.875	002124	BOLINGBROOK HILL

AREA	SITECODE	NAME
850161.375	002124	BOLINGBROOK HILL
162443.578	002126	ANGLESEY ROAD
474989.000	002157	NEWGROVE HOUSE
231624.672	002211	
2447796.500	002302	BALLYNAMONA BOG AND CORKIP LOUGH NHA
1675236.375	002307	CLOONLOUM MORE BOG NHA
38362388.000	002310	LOUGH REE NHA
61995108.000	002310	LOUGH REE NHA
43462856.000	002310	LOUGH REE NHA
2731277.500	002344	ANNAGHBEG BOG NHA
1367407.500	002355	HAWKSWOOD BOG NHA

(This list was compiled from available Heritage Data, 30/05/2003)

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**APPENDIX C**

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**APPENDIX C Local Authority Responsibilities**

**Part 1 Water Quality Oriented Legislation**

**(i) Bathing Water**

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>3(1)</b> of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Sets out the quality standards for designated bathing water. Schedule 1 lists the designated waters.
Article <b>4(1)(b)</b> of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Shall conduct sampling and monitoring of the water quality of designated bathing waters
Article <b>4(2)</b> of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Shall determine sampling locations
Article <b>5(1)</b> of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	In the event of a non-compliance with the standards shall give public notice and take necessary measures to ensure compliance
Article <b>6(3)</b> of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Arrange for the display of up to date monitoring results

**(ii) Drinking Water**

<b>Regulatory Power</b>	<b>Measure</b>
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a private water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall issue a notice requiring the person responsible to prepare and implement an action plan (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a public water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall prepare an Action Programme for the improvement of the quality of the water (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a private water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall prepare an Action Programme for the improvement of the quality of the water (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
Article <b>4(1)</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000) * These regulations will come into force on 1 <sup>st</sup> January 2004 and will revoke S.I. No. 81 of 1988 and S.I. No. 177 of 2000.	It is the duty of a Sanitary Authority to ensure that water intended for human consumption meets the requirements of the European Communities (Drinking Water) Regulations, 2000. (S.I. No. 439 of 2000).
Article <b>5</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority may apply to the Environmental Protection Agency for a departure from the European Communities (Drinking Water) Regulations, 2000. (S.I. No. 439 of 2000).
Article <b>6</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that the parametric values specified in Part 1 of the Schedule of the European Communities (Drinking Water) Regulations, 2000 are complied with. (S.I. No. 439 of 2000).
Article <b>7(1)</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall regularly monitor the quality of water intended for human consumption at the point where it is made available to the user (S.I. No. 439 of 2000).

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>9(1)</b> European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that any failure to meet the parametric values specified in Part 1 of the Schedule is immediately investigated so as to identify the cause of such failure (S.I. No. 439 of 2000).
Article <b>9(2)</b> European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	Shall warn users of the public water supply if the quality of water intended for human consumption does not meet the requirements of the European Communities (Drinking Water) Regulations, 2000 and where there is an unacceptable risk to public health (S.I. No. 439 of 2000).
Article <b>9(2)(b)</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	Shall prepare an Action Plan for the improvement of the quality of water if a public water supply does not meet the requirements of the European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000).
Article <b>9(5)</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that, where remedial action is taken in relation to a water supply, consumers are informed of such action (S.I. No. 439 of 2000).
Article <b>12(1)</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority may charge for monitoring the quality of private water supplies intended for human consumption (S.I. No. 439 of 2000).
Article <b>13</b> of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	LAs will have regard to recommendations issued by the Minister regarding the quality of water intended for human consumption (S.I. No. 439 of 2000).

**(iii) Surface Water**

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>3(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Sets quality standards for water intended for human consumption.
Article <b>4(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Take necessary measures to ensure that water for human consumption meets required standards
Article <b>7(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Regularly monitor quality of water intended for human consumption
Article <b>8(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	In the event of a non compliance with standards ensure (a) users are warned of the non-compliance (b) a action programme is implemented and (c) the person responsible for the non-compliance is notified
Article <b>9(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	An authorised person may enter any premises in order to fulfil the requirements of this act
Article <b>10(1)</b> of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Charge of the monitoring of water intended for human consumption
Article <b>3(1)</b> of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Shall classify the surface water in accordance with standards set as A1, A2 or A3.
Article <b>3(2)</b> of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Take steps to ensure that classified waters meet the quality standards
Article <b>4(1)</b> of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Where appropriate prepare an action programme including a timetable for the improvement of water quality
Article <b>6(1)</b> of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Regularly monitor the quality of surface water at the points at which the water is abstracted prior to treatment

**(iv) Salmonid Water**

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>3(1)</b> of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Specifies waters which are capable of supporting salmonid fish
Article <b>3(2)</b> of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Sets out the quality standards of salmonid waters
Article <b>4(1)</b> of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Carry out monitoring of the specified waters
Article <b>5(1)</b> of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Adopt an action programme when the standards are not complied with

**(v) Shellfish Water**

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>3(1)</b> of Quality of Shellfish Waters Regulations, 1994 (S.I. No. 200 of 1994)	Sets the quality standards for shell fish waters
Article <b>5(1)</b> of Quality of Shellfish Waters Regulations, 1994 (S.I. No. 200 of 1994)	In the event of non-compliance with the standards shall adopt an Action Programme comprising necessary measures to ensure conformity with standards

**Part 2 – Emission Control Legislation**

**(i) Water Pollution**

<b>Regulatory Power</b>	<b>Measure</b>
Section <b>4(1)(a)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A licence to discharge trade or sewage effluent to waters may be granted under this section
Section <b>4(4)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A local authority shall not grant a licence in respect of a discharge which would not comply with or result in the receiving waters not complying with any relevant standard.
Section <b>7(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A local authority may review a licence under section 4 at intervals of not less than three years from the date of issue of the licence or at any time with the consent of the person making, causing or permitting the discharge.
Section <b>12(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	In order to prevent or control pollution of waters the local authority may serve notice in writing on any person holding polluting matter
Section <b>13(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May take urgent measures to prevent, remove, or dispose of polluting matter and to mitigate or remedy the effects of pollution
Section <b>13(2)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May recover the costs of such urgent measures from the person whose act or omissions necessitated such steps (“Polluter Pays Principle”)
Section <b>15(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May and if directed by the Minister make a water quality management plan.
Section <b>16(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May refuse or grant a licence for the discharge of any trade effluent to a sewer. In considering any licence application the local authority will have regard to objectives contained in any relevant plan under section 15.
Section <b>16(13)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May serve notice on a person making, causing or permitting a discharge of trade effluent to a sewer without a licence

Section <b>16(14)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May take and steps as it considered necessary to prevent, mitigate or remedy the effect of discharge and may recover the costs of such measures from the person whose act of omission necessitated such measures (“The Polluter Pays Principle”).
Section <b>17(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A licence to discharge to sewer will be reviewed at intervals of not less than three years or at any time with the consent of the person making, causing or permitting the discharge.
Section <b>21(2)(1)</b> of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	Impose restrictions of the release of polluting matter including sewage on water borne craft on non-tidal waters.
Section <b>23</b> of Local Government Water Pollution Act 1977	Allows a Local Authority to obtain information from, for example, a non-licensed industry in relation to its drainage systems when investigating a pollution incident
Section <b>21(2)(a)</b> of Local Government (Water Pollution) (Amendment) Act, 1990 (No. 21 of 1990)	Make bye-laws prohibiting or subjecting to controls, activities in relation to horticulture, agriculture and forestry whenever it is considered necessary for the purpose of preventing or eliminating the entry of polluting matter to waters.
Section <b>21A(1)(a)</b> of Local Government (Water Pollution) (Amendment) Act, 1990 (No. 21 of 1990)	May serve notice on the owner occupier of land to prepare and furnish a nutrient management plan within 5 month of the serving of a notice (amended by the Waste Management Act, 1996)
Article <b>40(1)</b> of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	A licence application in respect of sewage effluent or trade effluent containing a harmful substance which is discharged to an aquifer should be accompanied by results of a prior investigation unless the local authority is satisfied that the harmful substance is present in so small a quantity as to obviate deterioration in the quality of the water (S.I. No 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999)
Article <b>40(2)(a)</b> of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Take into account prior investigations when granting or refusing a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Article <b>43</b> of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May specify conditions in a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer requiring a standard different to the quality standard prescribed in these Regulations (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Article <b>47(2)</b> of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May attach conditions to a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Review licences to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer at intervals of not more than four years (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Carry out or arrange for monitoring to determine compliance with conditions attached to a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer and determine the effects of a discharge on water in an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).

Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May take steps to secure compliance with water quality standards for water in an aquifer in respect of a harmful substance (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Article <b>3(2)</b> of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	Water quality in a river shall be maintained or improved so as to meet the relevant specified standard
Article <b>3(6)</b> of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	Water quality in a lake shall be maintained or improved to meet relevant standards
Article <b>4 (2)</b> of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	A local authority shall, in relation to its functions under the Principal Act, submit a report to the Agency by the 31st day of July, 1999, setting out the measures to be taken.
Article <b>4 (3)</b> of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	A local authority shall submit to the Agency by 31st day of July, 2000, a report on the progress made in relation to implementation of the measures, and further such progress reports shall be submitted at intervals not exceeding two years until the 31st day of July 2008
Article <b>19A(1)</b> of Local Government (Water Pollution) (Amendment) Regulations 1996 (S.I. No. 184 of 1996)	Shall determine the application for a licence to discharge within two months provided all requirements of the application are complied with
Article <b>42A</b> of Local Government (Water Pollution) (Amendment) Regulations 1996 (S.I. No. 184 of 1996)	If a harmful substance in sewage effluent or trade effluent is present in so small a quantity and concentration it will not affect the quality of water in the aquifer to which it is to be discharged no standards will be set.



(ii) **Urban Waste Water**

<b>Regulatory Power</b>	<b>Measure</b>
Article <b>3(1)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Provide a collecting system for urban waste water serving a population equivalent of 10,000 discharging into sensitive areas serving a population equivalent of 15,000 serving a population equivalent of between 2,000 and 15,000 by December 31 <sup>st</sup> 2005
Article <b>4(1)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Shall provide treatment plants that provide for secondary treatment or equivalent by 31 <sup>st</sup> December 2005 for population equivalents of 10,000 and 15,000. And discharges to freshwaters or estuaries for population equivalents of between 2,000 and 10,000
Article <b>4(2)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	More stringent treatment will be required for discharges from population equivalents of 10,000 into sensitive areas on the commencement of these regulations for sensitive areas listed under Schedule 1 and by 31 <sup>st</sup> May 2008 for sensitive areas listed under Schedule 2
Article <b>5</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	More stringent treatment may be needed where receiving waters must satisfy any relevant Community Directives
Article <b>6</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Identifies sensitive areas
Article <b>7</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Ensure that wastewater discharged to freshwaters and estuaries from a population equivalent of 2,000 and waste water discharged to coastal waters from population equivalents of 10,000 receive the appropriate treatment.
Article <b>8(1)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Ensure that treatment plants will operate under all climatic conditions and seasonal loads are taken into consideration
Article <b>8(3)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Design treatment plants so samples of incoming waste and treated effluent can be taken
Article <b>8(4)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Points of discharge are chosen so as to minimise the effects on the receiving environment
Article <b>10(1)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Shall carry out monitoring of discharges from treatment plants and of the receiving waters
Article <b>10(2)</b> of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Results of monitoring shall be returned to EPA

**(iii) Groundwater**

<b>Regulatory Power</b>	<b>Measure</b>
Article 4(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA shall not cause or permit the direct discharge to an aquifer of an effluent which contains a harmful substance unless under and in accordance with a licence granted by the EPA
Article 5(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA may apply to the EPA for a licence to discharge effluent to an aquifer
Article 40(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LAs can request that any application for a licence to discharge sewage or trade effluent containing harmful substances will be accompanied by a prior investigation
Article 40(2)(a) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	The prior investigation can contain an assessment of the environmental impact associated with alternative methods of disposal
Article 43 of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LAs may attach conditions relating to the licence to discharge
Article 47(2) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA may specify conditions in a licence requiring different standards from the quality standard prescribed in the regulations

**(iv) Dangerous Substances**

<b>Regulatory Power</b>	<b>Measure</b>
Article 4(1) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can determine the application for a licence to discharge trade or sewage effluent and for a licence to discharge to sewers on the basis of the specified standards as set out
Article 4(2) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can determine a review of a licence to discharge trade or sewage effluent and for a licence to discharge to sewers to ensure the specified standards of dangerous substances are being met not later than 5 years after the commencement of these regulations
Article 7 Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	May allow for an extension, not exceeding five years, of the period for reviewing a licence to discharge trade or sewage effluent and for a licence to discharge to sewers to determine if the standards for dangerous substances are being met if the local authority is satisfied that at least the best available techniques are being used to treat any direct discharge affecting a water body.
Article 8(1)(a) Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can take steps to ensure that, where the existing condition of a water body does not meet a specified standard in relation to a substance, there shall be no disimprovement.
Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Take steps to secure compliance with the specified standards not later than 31 <sup>st</sup> December 2010.
Article 10(1) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Submit a report to the Agency by 31 <sup>st</sup> July 2002 setting out the measures to be taken to secure compliance with the specified standards for Dangerous Substances.
Article 10(2) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Submit to the Agency by the 31 <sup>st</sup> July 2004 (and at intervals not exceeding 2 years thereafter), a report on the progress made to secure compliance with the specified standards for Dangerous Substances.
Article 10(4) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	The report will identify each water body and will specify the condition in relation to the specified standards, the reporting period and any circumstances as to why compliance would not be feasible

<b>Regulatory Power</b>	<b>Measure</b>
Article 3(1) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Best available technology will be used to ensure the prevention, limitation or treatment of effluent discharges containing asbestos.
Article 6(2) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Can specify conditions of a licence to discharge effluents containing asbestos to waters.
Article 10(1) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Can carry out or arrange for the monitoring of discharges
Article 4(1) of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Sets quality standards in trade effluent discharged to waters
Article 7 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Ensure best technical means are used to eliminate pollution from new plants
Article 8 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Review a licence to discharge at least every 4 years
Article 9 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Ensure that the granting of a licence will not result in an increase in the pollution of soil or air
Article 4(1) of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Sets quality standards in trade effluent discharged to waters
Article 5 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Ensure best technical means are used to eliminate pollution from new plants
Article 6 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Review a licence to discharge at least every 4 years
Article 7 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Ensure that the granting of a licence will not result in an increase in the pollution of soil or air
Article 4(1) of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Sets quality standards for trade effluent discharged to waters
Article 6 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1994 (S.I. No. 43 of 1994)	Ensure Best available technology is used in new plants
Article 7 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl <sub>3</sub> Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Review the licence to discharge every 4 years.
Article 5 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Sets quality standards for trade effluent discharged to waters
Article 6 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Ensure best available technology is used in new plants
Article 7 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Review the licence every 4 years

<b>Regulatory Power</b>	<b>Measure</b>
Article 9 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Sets quality standards for trade effluent discharged to sewers
Article 10 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Ensure Best available technology is used in new plants
Article 11 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Review the licence to discharge to sewers every 4 years

**(v) Waste Management Act 1996**

<b>Regulatory Powers</b>	<b>Measure</b>
Section 55 of Waste Management Act 1996	Outlines the powers of Local Authority to holding, recovery and disposal of waste
Section 56 of the Waste Management Act 1996	Outlines measures which Local Authorities can take to prevent or limit environmental pollution caused by waste
Section 59 of the Waste Management Act 1996	Gives functions of Local Authorities with regard to waste
Section 64 of the Waste Management Act 1996	The Minister may make regulations requiring the provision of information to use, consumption or release of certain specified substances to be furnished to the EPA or specified public authorities
Section 66 of the Waste Management Act 1996	Amends Section 26 of the Local Government (Water Pollution) Act 1977, to prohibit the production, use, storage of any specified substance. Section 3 of the 1977 Act is also amended to allow that it is a defence for a defendant to show that any pollution was a result of activities carried out in accordance with a Nutrient Management Plan. Section 21 of the Local Government (Water Pollution) (Amendment) Act 1990 is amended to allow Local Authority to serve notice requiring the submission of a NMP to prevent pollution of waters.

**Part 3 Water Sector Related Legislation**

**(i) Sewage Sludge**

<b>Regulatory Power</b>	<b>Measure</b>
Article 3 of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Ensure sludge is used and supplied in accordance with the Regulations with regard to nutrient needs, land use, soil analysis, etc.
Article 6 of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Sets limit values for amounts of heavy metals which may be added annually to agricultural land
Article 7(1) of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Soil of the land to which sludge is to be added shall be analysed
Article 8(2) Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 to 2001 S.I. No. 148 of 1998 as amended by S.I. No. 267 of 2001	Establish and maintain a Sludge Register to record specified details regarding sludges (S.I. No. 148 of 1998 as amended by S.I. No. 267 of 2001)

**(ii) Waste**

<b>Regulatory Power</b>	<b>Measure</b>
Section <b>10(3)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Notify the Agency if an application for a waste collection permit involves the collection of hazardous waste
Section <b>10(4)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Have regard to any written submission received from the Agency before granting or refusing a waste collection permit application
Section <b>11(1) &amp; 11(2)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Make documents relating to a waste collection permit application available for public inspection and purchase.
Section <b>15(1)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Give notice of decision in relation to a waste collection permit
Section <b>15(2)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Give notice of decision in relation to a waste collection permit
Section <b>15(4)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Make waste collection permits available for public inspection
Section <b>16, 17(1), &amp; 18</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Attach conditions to waste collection permits
Section <b>21(1)</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Review waste collection permits at least every two years
Section <b>24</b> Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Notify the Agency regarding the granting, amendment or revoking of permit
Section <b>4</b> Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The making of a Waste Management Plan shall be an executive function.
Section <b>22(10)(d)</b> Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The review, variation or replacement of a waste management plan shall be a reserved function.
Section <b>22(10A)</b> Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The Development Plan shall be deemed to include the objectives contained in the Waste Management Plan
Section <b>4(1)</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	A waste licence is required for specified facilities for the disposal, recovery or composting of waste
Section <b>5</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	Publish a notice of intention to apply to the Agency for a waste licence or the review of a waste licence
Section <b>11</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	An application shall be submitted to the principal office of the Agency.
Section <b>12(3)</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	If applying for a review of a waste licence, state the grounds on which the application is made
Section <b>13(1)</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	If a development of a waste disposal or waste recovery activity specified in article 24 of the Environmental Impact Assessment Regulations, the application for a waste licence should be accompanied by an Environmental Impact Statement
Section <b>19(4)</b> Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	Make waste licence application documents available for public inspection

**(iii) Sea Pollution**

<b>Regulatory Power</b>	<b>Measure</b>
Sea Pollution (Amendment) Act, 1999 (No. 18 of 1999)	Prepare and submit to the Minister a plan for the prevention and minimisation of damage arising out of an oil pollution incident occurring in a harbour or area of seashore within the functional area.
Sea Pollution (Amendment) Act, 1999 (No. 18 of 1999)	Have in place an oil pollution emergency plan in relation to harbours and areas of seashore to which the regulations apply.

**(iv) Planning & Development**

<b>Regulatory Power</b>	<b>Measure</b>
Section <b>3(b)</b> of Local Government (Planning and Development) Regulations, 1996 (S.I. No. 100 of 1996)	Can request the production of an Environmental Impact Assessment for forestry developments of greater than 70 hectares. Local authorities shall also be consulted in relation to forestry developments of greater than 25 hectares.
Building Regulations, 1997 (S.I. No. 497 of 1997).	<b>H2</b> Septic tanks will not pollute any water including groundwater used as a source of drinking water
Section <b>261(1)</b> of Planning and Development Act, 2000 (No. 30 of 2000)	The owner or operator of a quarry to which this section applies shall provide the planning authority information relating to the operation of the quarry, and the planning authority shall enter it in the register.
<b>261(3)</b> of Planning and Development Act, 2000 (No. 30 of 2000)	A planning authority may require a person who has submitted information in accordance with this section to submit such further information as it may specify.
<b>261(6)(a)</b> of Planning and Development Act, 2000 (No. 30 of 2000)	Not later than 2 years from the registration of a quarry a planning authority may, in the interests of proper planning and sustainable development, and having regard to the development plan, impose conditions on the operation of that quarry
<b>261(7)(a)</b> of Planning and Development Act, 2000 (No. 30 of 2000)	Where the continued operation of a quarry would be likely to have significant effects on the environment a planning authority shall require the owner or operator of the quarry to apply for planning permission and to submit an environmental impact statement to the planning authority not later than 6 months from the date of service of the notice
<b>261(12)</b> Planning and Development Act, 2000 (No. 30 of 2000)	Have regard to any guidelines issued by the Minister

(v) **Local Government**

<b>Regulatory Power</b>	<b>Measure</b>
<b>199 (1)</b> Local Government Act, 2001 (37 of 2001)	May make a bye-law for or in relation to the use, operation, protection, regulation or management of any land, services, or any other matter provided by or under the control or management of the local authority, whether within or without its functional area or in relation to any connected matter
<b>199 (4) (a)</b> Local Government Act, 2001 (37 of 2001)	A local authority may amend any bye-law made by it.
<b>199 (4) (b)</b> Local Government Act, 2001 (37 of 2001)	A local authority may revoke any bye-law made by it
<b>199 (6)</b> Local Government Act, 2001 (37 of 2001)	The power of a local authority to make a bye-law in respect of its functional area includes a power to make a bye-law in respect of the foreshore and of coastal waters adjoining that functional area and with the agreement of any other local authority, of the coastal waters adjoining the functional area of that other local authority
<b>202 (3) (a)</b> Local Government Act, 2001 (37 of 2001)	The local authority shall keep a copy of the bye-law open for public inspection during ordinary office hours at the principal offices of the local authority and any person may apply for a copy of it.
<b>202 (5) (a)</b> Local Government Act, 2001 (37 of 2001)	Where a bye-law relates to the use, regulation or management of land provided by a local authority, a local authority shall endeavour to keep a notice displayed at or near such land that a bye-law applies to it.
Section <b>37(1)</b> of Local Government Act 1994 (No. 8 of 1994)	Make bye-laws in relation to the use, operation, protection regulation or management of any land, services, or any other thing whatsoever provided by or under the control or management of the local authority or in relation to any other matter connected therewith
Section <b>37(2)(a)</b> of Local Government Act 1994 (No. 8 of 1994)	Make a bye-law to control or regulate any activity or matter such that any nuisance can be controlled or suppressed if it is in the interests of the common good of the community.
Section <b>37(7)</b> of Local Government Act 1994 (No. 8 of 1994)	Make bye-laws in respect of the foreshore and of coastal waters adjoining that functional area and with the agreement of any adjoining local authority of the coastal water adjoining the functional area of that local authority.

**APPENDIX D**



**APPENDIX D ORGANISATIONS AND THEIR FUNCTIONS**

<b>Organisation</b>	<b>Functions</b>
Department of Communications, Marine & Natural Resources	<ul style="list-style-type: none"> <li>- promote and protect the quality of the Marine Environment</li> <li>- to bring into force laws, regulations and administrative provisions necessary to implement marine environment directives</li> </ul>
Central & Regional Fisheries Boards	<ul style="list-style-type: none"> <li>- manage, protect, conserve, develop &amp; improve fish life relating to all aspects of the aquatic environment</li> <li>- sustainable development of inland fisheries resources</li> <li>- maintenance of fish habitats</li> </ul>
Department of the Environment and Local Government	<p><b>DoELG</b></p> <ul style="list-style-type: none"> <li>- primary responsibility for the policy and legislation for the quality of water in Ireland</li> </ul> <p><b>LAs</b></p> <ul style="list-style-type: none"> <li>- primary responsibility for the control of pollution to waters</li> <li>- the making of water quality management plans</li> <li>- the granting, or refusal of licenses to discharge effluent to waters or sewer</li> <li>- the making of by-laws to prohibit or regulate farming practices in the interests of eliminating or preventing water pollution</li> <li>- the monitoring of water quality</li> <li>- the provision of supplies of drinking water</li> </ul>
Environmental Protection Agency	<ul style="list-style-type: none"> <li>- the licensing and regulation of industrial and other processes with significant polluting potential</li> <li>- the monitoring of environmental quality</li> <li>- advising public authorities in respect of environmental functions</li> <li>- the promotion of environmentally sound practices</li> <li>- the promotion and co-ordination of environmental research</li> <li>- The licensing and regulation of all significant waste disposal and recovery activities</li> <li>- Implementing a system of permitting for the control of VOC emissions</li> <li>- Preparation and implementation of a national hydrometric programme for the collection analysis and publication of information.</li> <li>- Overseeing the performance by local authorities in respect of their statutory environmental protection functions</li> </ul>
Geological Survey of Ireland	<ul style="list-style-type: none"> <li>- to acquire, interpret and provide the best geological information relating to Ireland's earth resources and physical environment</li> </ul>
Marine Institute	<p>MI is recognised by the EU Commission as the National Reference Lab in Ireland for marine biotoxins in shellfish (Directive 91/492), fish health (Directive 91/64), monitor residues in farmed fish (Directive 96/23)</p> <ul style="list-style-type: none"> <li>- marine licences vetting committee – regulate dumping at sea, placement of pipe and dumping of dredge spoil</li> <li>- aquaculture licence advisory committee – regulate aquaculture industry</li> <li>- co-ordinate, promote and assist in marine research and development which will promote economic development, create employment and <b>protect the marine environment</b></li> </ul>
Office of Public Works	<ul style="list-style-type: none"> <li>- the OPW is recognised as the body through which Central Government exercises its statutory responsibilities in respect of <b>river drainage and flood relief.</b></li> </ul>

Organisation	Functions
	<ul style="list-style-type: none"> <li>- reducing <b>risk to life and damage to property from fluvial and tidal flooding</b> within scheme catchments</li> <li>- preserving the productive potential of the agricultural land served by drainage schemes</li> <li>- <b>providing a Hydrometric service and a flood relief Design service</b></li> </ul>
Dúchas (DoELG)	
Department of Agriculture and Food	<ul style="list-style-type: none"> <li>- provision of grant assistance for animal housing and waste storage facilities to better <b>manage farm wastes</b> etc</li> <li>- promoting <b>good farming practice</b> as part of a number of DAFF schemes</li> <li>- promoting farmers to join <b>REPS</b> where they must comply with nutrient management plans and other measures</li> </ul>
Department of Community, Rural & Gealtacht Affairs	<p>DoCRGA</p> <ul style="list-style-type: none"> <li>- specific responsibility for community and local development</li> <li>- retains the responsibilities previously held by the former Department of Arts, Heritage, Gaeltacht and the Islands for both the Irish language and the Gaeltacht, and the development of the off-shore islands.</li> <li>- The North –South body, Waterways Ireland is under the aegis of DoCRGA</li> </ul>
Local Government Computer Services Board	
Waterways Ireland (DoCRGA)	<ul style="list-style-type: none"> <li>- Statutory Remit to manage, maintain, develop and restore the inland navigable waterways principally for recreational purposes</li> </ul>

**APPENDIX E**

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**APPENDIX E ORGANISATIONS AND THEIR ASSOCIATED ROLE/FUNCTION IN RELATION TO THE WFD.**

<b>Organisation</b>	<b>Function/Role in relation to the WFD</b>
Department of Communications, Marine & Natural Resources	<ul style="list-style-type: none"> <li>- to bring into force laws, regulations and administrative provisions necessary to comply with the directive</li> <li>- to co-ordinate the activities, in relation to the WFD, of the marine institute, the fisheries boards and other relevant organisations under the aegis of the department</li> </ul>
Central & Regional Fisheries Boards	<ul style="list-style-type: none"> <li>- lead role in fish stock management and development including habitat protection</li> <li>- role within the scope of the Directive to contribute to policies and developments in land use management strategies likely to impact on aquatic habitats</li> <li>- provide guidance on analyses of pressures and impacts particularly in the identification of anthropogenic pressures</li> <li>- lead role regarding the <b>assessment of the status of fish stocks</b> in rivers, lakes and estuaries, to monitor these as additional indicators of ecological quality and to report back to the EU on a three yearly cycle in conjunction with DCMNR &amp; MI.</li> </ul>
Department of the Environment and Local Government & Local Authorities	<ul style="list-style-type: none"> <li>- to ensure that a co-ordinated approach is adopted toward the achievement of the objectives set out in the WFD</li> <li>- to co-ordinate the activities of Local authorities in the making of RBMP</li> <li>- to provide advise to LAs in relation to setting up RBMD and other requirements of the WFD</li> <li>- to bring into force laws, regulations and administrative provisions necessary to comply with the directive</li> <li>- to carry out an economic analysis of water use – develop a cost effective set of measures for achieving the environmental objectives of the WFD</li> <li>- to ensure that techniques/methodologies/ reference conditions are compatible with those of the EU</li> <li>- to develop (with the EPA) guidelines for monitoring</li> <li>- lead role in the <b>co-ordination of implementation</b> procedures</li> <li>- lead role regarding <b>policy and legislation</b> re water quality and services</li> <li>- lead role by LAs in <b>development and implementation of RBMP</b></li> </ul>
Environmental Protection Agency	<ul style="list-style-type: none"> <li>- role in relation to <b>water quality monitoring</b></li> <li>- issuing guidelines on environmental quality objectives and standards</li> <li>- to <b>advise</b> local authorities in relation to their obligation and duties</li> <li>- <b>supervising</b> environmental monitoring by other authorities</li> <li>- <b>advising</b> on policy matters</li> <li>- <b>licensing</b> major developments and enforcing compliance</li> </ul>
Geological Survey of Ireland	<ul style="list-style-type: none"> <li>- compilation of geological and hydrogeological data</li> <li>- aquifer/groundwater body mapping</li> <li>- characterisation of the overlying strata</li> </ul>

<b>Organisation</b>	<b>Function/Role in relation to the WFD</b>
Geological Survey of Ireland (continued)	<ul style="list-style-type: none"> <li>- groundwater qualitative status</li> <li>- groundwater quantitative status</li> <li>- GSI guidelines on source protection zone and NVZ delineation should be followed</li> <li>- Monitoring of groundwater status – in advisory role to EPA</li> <li>- Surface water characterisation: geological and hydrogeological aspects – advisory and mapping role</li> <li>- Producing a 3D conceptual catchment model</li> </ul>
Marine Institute	<ul style="list-style-type: none"> <li>- primary role in <b>monitoring programmes for transitional and coastal waters</b> (it is likely that EU monitoring will be based on methodologies under JAMP/CEMP &amp; HELCOM programmes of OSPAR of which MI is the main contributor to these groups for Ireland)</li> <li>- lead role in issues relating to <b>priority hazardous substances in coastal and transitional waters</b> and for nutrients in marine waters</li> </ul>
Office of Public Works	<ul style="list-style-type: none"> <li>- primary role in <b>arterial drainage and flood relief</b></li> <li>- a role to play in considering the issue of water management (of which flood management is one aspect) when River Basin Management Plans are being prepared.</li> <li>- Making available hydrological data to all interested parties.</li> </ul>
Dúchas (DoELG)	<ul style="list-style-type: none"> <li>- Advise on the protection of natural heritage sites and special areas of conservation</li> </ul>
Department of Agriculture and Food	<ul style="list-style-type: none"> <li>- involvement at both the planning and preparation phases of RBMP – technical skills regarding soil characteristics e.g. nature of topsoil, thickness, permeability etc.</li> <li>- identification of land uses/management as well as nutrient inputs</li> <li>- indication of how farming systems combined with soil types impact on leaching losses to ground/surface waters</li> </ul>
Department of Community, Rural and Gealtacht Affairs	Co-ordination of activities of Waterways Ireland, which falls under the aegis of DoCRGA
Local Government Computer Services Board	
Waterways Ireland (DoCRGA)	<ul style="list-style-type: none"> <li>- Administration of the Shannon Navigation, including the Shannon-Erne Waterway</li> </ul>

**APPENDIX F**

**APPENDIX F ORGANISATIONS And THE ASSOCIATED REQUIREMENTS OF THE WFD**

<b>Organisation</b>	<b>Requirements of the WFD</b>
Department of Communications, Marine & Natural Resources	<b>See Marine Institute &amp; Fisheries Boards</b>
Central & Regional Fisheries Boards (FB)	<b>None given</b>
Department of the Environment and Local Government and Local Authorities	<p>In relation to each RDBP there are several requirements of the WFD which must be taken by LAs and DoELG.</p> <ul style="list-style-type: none"> <li>• the determination of the characteristics of the waters concerned</li> <li>• the operation of monitoring programmes in respect of water quality</li> <li>• the control of direct and diffuse discharges to water</li> <li>• the review of the impact of human activity on the status of waters</li> <li>• the establishment of environmental objectives aimed to achieve quality targets</li> <li>• the drawing up and implementation of a programme of measures to achieve the established environmental objectives</li> <li>• the carrying out of an economic analysis of water use</li> </ul>
Environmental Protection Agency	<p>In relation to each RDBP the EPA has several functions in meeting the requirements of the WFD</p> <ul style="list-style-type: none"> <li>• the determination of the characteristics of the waters concerned</li> <li>• the operation of monitoring programmes in respect of water quality</li> <li>• the control of direct and diffuse discharges to water</li> <li>• the licensing of direct and diffuse discharges to water</li> </ul>
Geological Survey of Ireland	<ul style="list-style-type: none"> <li>- <b>River Basin District Characterisation – Requirements</b> <ul style="list-style-type: none"> <li>• Location and boundaries of the groundwater body or bodies</li> <li>• A description of the groundwater bodies</li> </ul> </li> <li>- <b>Groundwater Qualitative Status Requirements</b> <ul style="list-style-type: none"> <li>• ‘good status’</li> <li>• characterisations of the chemical composition for RBD characterisation</li> <li>• information on trends and trend reversal</li> <li>• groundwater monitoring network</li> <li>• review of impact of pollution on groundwater quality</li> <li>• information on construction of sampled well</li> <li>• information on the pressures on groundwater bodies</li> </ul> </li> <li>- <b>Groundwater Quantitative Status Requirements</b> <ul style="list-style-type: none"> <li>• Ensure a balance between abstraction and recharge</li> </ul> </li> </ul>

Organisation	Requirements of the WFD
Geological Survey of Ireland (continued)	<ul style="list-style-type: none"> <li>• Monitoring of the chemical and quantitative status</li> <li>• Review of impact of changes in groundwater levels</li> <li>• A monitoring network</li> <li>• Interpretation and presentation of groundwater quantitative status</li> </ul> <p>- <b>Protected Areas –</b> <u>Requirements</u></p> <ul style="list-style-type: none"> <li>• Register of protected areas including water abstraction points, NVZs &amp; areas designated for the protection of species</li> </ul> <p>- <b>Surface Water Characterisations: Geological/Hydrogeological Aspects –</b> <u>Requirements</u></p> <ul style="list-style-type: none"> <li>• For describing surface water body types – descriptors (calcareous, siliceous, organic etc)</li> <li>• Information on the hydrogeology and groundwater</li> </ul> <p>- <b>Monitoring of groundwater status</b> – largely responsibility of EPA</p> <p>- <b>Integration of Hydrogeological Aspects</b> – many tasks are interrelated</p>
Marine Institute (MI)	<b>None given</b>
Office of Public Works	<ul style="list-style-type: none"> <li>- flood management</li> <li>- making hydrological data available to all interested parties</li> </ul>
Dúchas (DoELG)	– Register of protected areas especially relating to rivers, lakes, estuaries, groundwater, transitional and coastal waters
Department of Agriculture and Food	<b>None given</b>
Department of Community, Rural & Gealtacht Affairs	None given
Local Government Computer Services Board	
Waterways Ireland (DoCRGA)	

**Likely overlaps:**

- DAFF & Dúchas regarding overgrazing in target areas such as National Heritage Areas and commonage
- DAFF & Teagasc regarding fertiliser recommendations

FB & MI in some aspects of transitional and coastal waters fish stock monitoring