

A Review of Current Knowledge

**Water and the Water
Environment: a summary of
UK legislation and
agreements**

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Review of Current Knowledge

This review is one of a series of 'reviews of current knowledge (**ROCKs**)' produced by **FWR**. They focus on topics related to water supply, wastewater disposal and water environments, which may be the subject of debate and inquiry. The objective of each review is to produce concise, independent scientific and technical information on the subject to facilitate a wider understanding of the issues involved and to promote informed opinion about them.

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Review of Current Knowledge

Water and the Water Environment: a summary of UK legislation and agreements.



The River Pang, Near Reading, Berkshire

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Definitions

Coastal water - as defined in regulations¹ - the surface water on the landward side of a line every point of which is at a distance of 1 nautical mile on the seaward side from the nearest point of the baseline from which the breadth of the territorial waters is measured, extending where appropriate up to the outer limit of transitional water.

Controlled waters - all watercourses, lakes, lochs, canals, coastal waters and water contained in underground strata.

Sewerage - a system of pipes and associated works conveying foul sewage or surface water, or both, to a place of disposal.

Sewerage undertakers - water companies, who have responsibilities for providing, improving, maintaining and cleansing public sewers.

Territorial seas - the waters in the 0-12 nautical mile zone from the coast.

Transitional water - the transitional area at the mouth of a river between fresh water and coastal waters (e.g. an estuary).

¹ The Water Framework Directive (Implementation) (England and Wales) Regulations 2003

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Abbreviations and acronyms

BAP	Biodiversity Action Plan
CBD	Convention on Biological Diversity
CCW	Countryside Council for Wales
CIS	Common Implementation Strategy
CITES	Convention for the International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
Defra	Department for Environment, Food and Rural Affairs
DSI	Draft Statutory Instrument
DSR	Draft (Northern Ireland) Statutory Rule
DSSI	Draft Scottish Statutory Instrument
EA	Environment Agency for England and Wales
EHS	Environment and Heritage Service (Northern Ireland)
EN	English Nature
EC	European Council
EU	European Union
HAP	Habitat Action Plan
HMSO	Her Majesty's Stationery Office
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention and Control
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LAPC	Local Air Pollution Control
MCEU	Marine Consents and Environment Unit

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MNR	Marine Nature Reserve
NAW	National Assembly for Wales
NI	Northern Ireland
NNR	National Nature Reserve
OFWAT	Office of Water Services
OSPAR	The Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
SAP	Species Action Plan
SAC	Special Area of Conservation
SEPA	Scottish Environment Protection Agency
SI	Statutory Instrument
SNH	Scottish National Heritage
SPA	Special Protection Area
SPO	Statutory Publications Office
SR	(Northern Ireland) Statutory Rule
SSI	Scottish Statutory Instrument
SSSI	Site(s) of Special Scientific Interest
UKTAG	UK WFD Technical Advisory Group
UN	United Nations
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UWWT	Urban Waste Water Treatment
WFD	Water Framework Directive
WHO	World Health Organization

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1 Introduction

This review summarises environmental legislation and agreements that apply within the UK and are concerned with water resources and the water environment. The extent of the relevant legislation is large and made complex by the interactions of European Union Law and UK Law. Further complexity is created by much legislation being adopted at devolved government level for England, Scotland, Wales and Northern Ireland. Fortunately, at the European Commission level, it has been recognised that much of the water policy legislation developed between the mid 1970s to the mid 1990s represented a piecemeal approach, which sometimes created conflicting methods and definitions. The intended solution to this complexity is the Water Framework Directive (WFD) – a major initiative that is addressed by the final section of this review.

The early sections of this review explain how UK environmental law and agreements are developed, and who is responsible for their application as far as water resources and the water environment are concerned. There is also a description of information sources, which can be used to obtain more detail and news on the latest developments. Subsequent sections address legislation under the following categories.

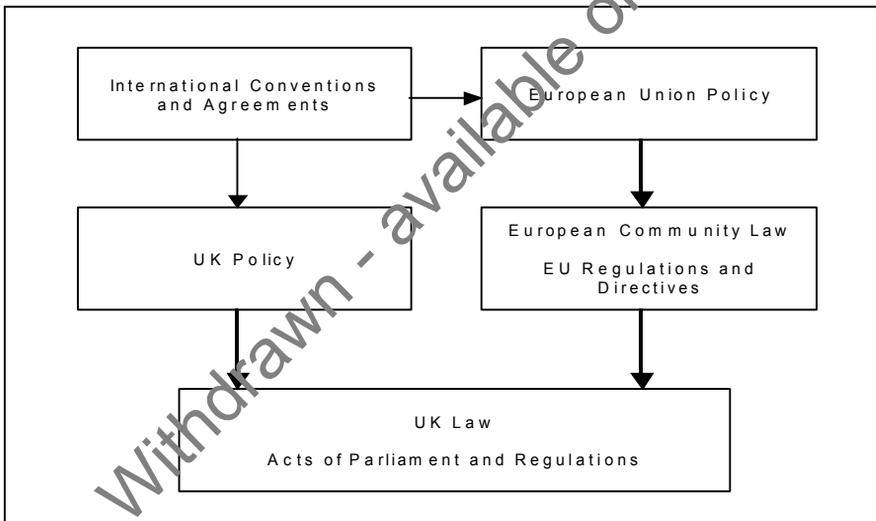
- The provision of water supplies and sewerage services.
- The pollution of inland, transitional and coastal waters.
- The conservation of the environment and bio-diversity.
- The Water Framework Directive.

These categories are further divided into primary legislation (Acts of Parliament), European legislation (such as EC Directives), and international agreements where appropriate. A brief summary of the purpose and scope of the legislation in each category is provided. Interaction and relationship with other legislation is also described. The numbers of related statutory instruments and

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regulations can be very large, especially when drafted separately for devolved governments. Consequently, the description of this secondary legislation is limited to summary detail sufficient to allow convenient referencing. European legislation is provided with an individual reference description (listed under 'References' at the end of the review) whereas details of all primary and secondary legislation can be obtained from the HMSO WebPages at www.legislation.hmso.gov.uk/acts.htm using the legislation title and date. Further information is provided in the section entitled 'Sources of information'.

2 The framework of legislation and agreements



The above diagram illustrates the structure of International, European and UK law. The faint lines show how UK and European policy are influenced, whereas the bold lines reflect direct causal links.

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The Law of England and Wales, Scottish Law and Northern Ireland Law are all “written” laws established by an Act of Parliament. This is called statutory law or primary legislation. Primary legislation often provides for the making of subsidiary legislation (regulations and orders) by a designated minister or official. These regulations and orders are called statutory instruments (often referred to as secondary legislation) and they contain the detail necessary to implement the primary legislation. Since 1999 some responsibility for making new laws has been transferred to the Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly in a process known as devolution. In the case of Wales, this responsibility is limited to secondary legislation.

European Community Law is made by the Council of Ministers (the Council) and the European Commission (the Commission). They may make a regulation (not to be confused with UK secondary legislation mentioned above) or issue a directive. EC regulations have general application, are binding in their entirety and are directly applicable to all member states. EC directives are binding as to the result to be achieved by the member states; however, the national authorities may decide upon the method and form of implementation. For example, the EU Regulations on Transboundary Air Pollution must be implemented (as drafted) by all member states. However, the EC Drinking Water Directive 1998 is transposed into UK legislation by the Water Supply (Water Quality) Regulations (see section 6.3) and the Water Industry Act 1991. Much UK environmental legislation is now driven by directives and regulations adopted by the Council and the Commission. This is to be expected, as the environment is not confined by national boundaries.

International agreements and conventions are often led by organisations such as the UN or the World Trade Organisation. Countries may formally sign these agreements and adopt the defined measures. Agreements may also be driven by problems experienced by countries in a particular region. An example is the Convention for the Protection of the Marine Environment of the North-East

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Atlantic (OSPAR Convention), which was driven by common concerns about marine pollution in this area.

3 Implementation of legislation: who does what

Government Ministers and their supporting government organisations are normally responsible for defining environmental policy and specifying how legislation and agreements will be implemented. The key government organisations are as follows.

England & UK as a whole	Department for Environment, Food and Rural Affairs (Defra)
Wales	National Assembly for Wales (NAW)
Scotland	Scottish Executive
Northern Ireland	Department of the Environment (Northern Ireland)

These government organisations may contain specialist departments that are charged with the implementation of a particular piece of legislation (or agreement). Alternatively, implementation may be assigned to a non-governmental public body.

An example of a non-governmental public body is the Environment Agency for England and Wales (EA). The EA is the leading public body for protecting and improving the environment in England and Wales, and is sponsored by both Defra and NAW. A similar body exists in Scotland. The Scottish Environment Protection Agency (SEPA) is the national public body responsible for environmental protection and improvement in Scotland. However there are differences between the EA and SEPA in relation to certain functions. For example, the EA is responsible for flood warning and defence, whereas SEPA is responsible only

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for flood warning (the local authorities in Scotland are responsible for flood defence).

An example of a governmental specialist department is the Drinking Water Inspectorate for England and Wales. This is a department within Defra charged with ensuring that water companies in England and Wales comply with the requirements of the Water Supply (Water Quality) Regulations.

A list of organisations and departments, which have responsibilities related to the regulation of water and the water environment, is shown in Table 1.

Table 1. UK departments and organisations

Department for Environment, Food and Rural Affairs (Defra)	UK government department with overall responsibility for issues concerning the environment, food (including agriculture, horticulture & fisheries) and rural affairs. Contains a Water Directorate. (www.defra.gov.uk)
Drinking Water Inspectorate (DWI)	Part of Defra. Responsible for ensuring that water companies in England and Wales supply wholesome water. (www.dwi.gov.uk)
Scottish Executive Environment and Rural Affairs Department	Government department in Scotland responsible for agriculture, fishing industry, water industry and matters concerning the environment. Contains a water services unit and a water environment unit.
Department of the Environment (Northern Ireland)	Government department whose responsibilities include the environment, waste management, pollution control and wildlife protection in NI.
Environment and Heritage Service (EHS)	Sponsored by the Department of the Environment (NI). An executive agency that takes the lead in advising on, and in implementing, the Government's environmental policy and strategy in Northern Ireland. (www.ehsni.gov.uk)

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Environment Agency (EA)	Sponsored by Defra, a non-departmental public body for the integrated management and regulation of air, land and water to protect the environment in England and Wales. (www.environment-agency.gov.uk)
Scottish Environment Protection Agency (SEPA)	Sponsored by Scottish Executive, a public body responsible for environmental protection and improvement in Scotland. (www.sepa.org.uk)
English Nature (EN)	Funded by Defra, a government agency, which advises on nature conservation in England. (www.english-nature.org.uk)
Scottish Natural Heritage (SNH)	Sponsored by Scottish Executive, the key statutory agency for advising and acting as the Government's agent in the delivery of conservation designations in Scotland. (www.snh.org.uk)
Countryside Council for Wales (CCW)	Sponsored by National Assembly for Wales, the Government's statutory adviser on sustaining natural beauty, wildlife and the opportunity for outdoor enjoyment in Wales and its inshore waters. (www.ccw.gov.uk)
Joint Nature Conservation Committee (JNCC)	The forum through which the three country conservation agencies—CCW, EN and SNH—deliver their statutory responsibilities for Great Britain as a whole, and internationally. (www.jncc.gov.uk)
Office of Water Services (OFWAT)	A non-Ministerial government department, whose Director is the economic regulator of the privatised water industry in England & Wales. (www.ofwat.gov.uk)
Local Government Authorities	Unitary authorities and district councils have numerous environmental responsibilities. Those related to water include monitoring of drinking water quality, assessment of contaminated land and the granting of consents for certain quantities of hazardous substances.

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4 Sources of information

With effect from 1988, the full text of new Public General Acts is available via HMSO Web Pages at www.legislation.hmso.gov.uk/acts.htm. They appear as originally passed by the UK Parliament. Also available online are: -

- UK Statutory Instruments (SIs): 1987 - 2003
- Draft UK Statutory Instruments (DSIs): 1997 - 2003
- Acts of the Northern Ireland Assembly: 2000 - 2003
- Northern Ireland Statutory Rules (SRs): 1991 - 2003
- Draft Northern Ireland Statutory Rules (DSRs): 2000 - 2002
- Updated Statutes of Northern Ireland: 1921 - 2001
- Acts of the Scottish Parliament: 1999 - 2003
- Scottish Statutory Instruments (SSIs): 1999 - 2003
- Draft Scottish Statutory Instruments (DSSIs): 2001 - 2003

With effect from 1999, all new Public Acts that result from Bills introduced into either House of Parliament by a Government Minister (with the exception of Appropriation, Consolidated Fund, Finance and Consolidation Acts) are accompanied by Explanatory Notes. The text of the Explanatory Notes is produced by the Government Department responsible for the subject matter of the Act. The purpose of these Explanatory Notes is to make the Act of Parliament accessible to readers who are not legally qualified and who have no specialised knowledge of the matters dealt with. They are intended to allow the reader to grasp what the Act sets out to achieve and place its effect in context. These Explanatory Notes are very useful and can be accessed via the HMSO Web Pages at www.legislation.hmso.gov.uk

Summaries of the main legislative measures and procedures for each of the activities of the European Union, including those related to the environment, are available from http://europa.eu.int/scadplus/scad_en.htm

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The EA, SEPA and EHS have developed a UK web site designed to help small businesses navigate through the maze of environmental legislation. This is available at www.environment-agency.gov.uk/netregs/

5 Evolution of legislation and redundancy of legislation

The Statutory Publications Office (SPO) is producing a Statute Law Database of United Kingdom legislation. The database under development currently contains the text of all Acts that were in force on 1 February 1991, and all Acts and printed Statutory Instruments passed since then. The main task of the SPO team is to apply the effects of amending legislation to primary legislation. The key feature of the SPO database is that it will provide an historical view of primary legislation for any specific day from the base date of 1 February 1991 and any prospective legislation. Although secondary legislation is not being updated, the enquiry system will facilitate the identification of any legislation that amends or repeals it. The latest developments are available at www.lcd.gov.uk/lawdatfr.htm

6 Legislation concerning the provision of water supplies and sewerage services

See section 2 for a description of the relationships between primary, secondary and European legislation.

6.1 Primary legislation

The foremost primary legislation for England and Wales is the **Water Industry Act 1991**. It specifies the appointment and the duties of organisations that supply water (water undertakers) and those that provide sewerage services (sewerage undertakers). The quality and sufficiency of water supplies are defined for water undertakers. It defines the requirements for sewerage undertakers to provide and

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maintain drainage and sewerage systems and the authorisation and charging for the discharge of trade effluent to sewers. The Act permits the discharge of trade effluent into the public sewers if the sewerage undertaker agrees. A discharge without the undertaker's agreement is a criminal offence. An application for the undertaker's permission must describe the nature or composition of the discharge, the maximum daily rate and the highest rate of discharge. This is essential information since the procedures are flexible and allow consents to be tailored to a particular situation. After consideration of an application, the undertaker may issue an unconditional consent, or it may set conditions as to the nature or composition, rates of discharge and as to which sewer(s) receive the discharge. The consent may also impose additional conditions as to timing, content, flow, inspection, control procedures and charges. The Act also defines the financial regulatory role of the Director General of Water Services (for water companies in England and Wales).

The **Water Industry Act 1999** provides new entitlements for water consumers in England and Wales. It addresses charging for water and sewerage services and the powers of disconnection. For Scotland, the Act establishes the Water Industry Commissioner for Scotland to promote the interests of customers of water and sewerage authorities.

The **Water Industry (Scotland) Act 2002** provides for the establishment of Scottish Water as the successor to the three water and sewerage authorities. Provisions have also been included for Scottish Water to have a board structure that differs from that of the existing authorities and for Scottish Water to have a greater measure of commercial freedom than that enjoyed by the existing authorities. The Act's other elements provide for changes to the representation of the interests of water customers and the creation of a Drinking Water Quality Regulator.

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The **Water Environment and Water Services (Scotland) Act 2003** is concerned with the EC Water Framework Directive (WFD), which is described in section 9 of this review. However, Part 2 of the Act makes changes to the system for funding new connections to the water and sewerage infrastructure by amending the Sewerage (Scotland) Act 1968 and the Water (Scotland) Act 1980. These include clarifying when and how infrastructure vests in Scottish Water and conferring regulation making powers for various detailed provisions including determining reasonable cost and setting construction standards and detailed conditions for connection agreements. It also adds sustainable urban drainage systems to Scottish Water's core functions as provider of sewerage services.

At the time of publication of this review the **Water Bill** is being considered by Parliament. Part 1 of the Bill deals with the abstraction and impounding of water resources. The **Water Resources Act 1963** created the current framework for abstraction licensing. The Bill changes the water abstraction authorisation system to ensure that we use water sustainably. Part 1 and elements of Part 3 provide the Environment Agency with additional tools for managing water resources and stronger powers to take action against abstractions causing environmental damage. There are provisions to increase the scope and public availability of information on water resources, intended to enable abstractors to plan in an environmentally responsible manner. There are provisions to increase the flexibility, accountability and administrative efficiency of the abstraction and impounding licensing system, with the intended result of increasing the ease of access to sustainable water resources. Part 1 also imposes a duty on the Secretary of State to develop measures to ensure water users do not waste water and to ensure the timely establishment of a working framework to further establish practices required by the Water Framework Directive (see section 9 of this review).

Part 2 of the Bill establishes a regulatory Board within OFWAT, along with a new independent Consumer Council for Water to replace the Customer Service

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Committees. It also introduces other provisions intended to improve the regulatory regime and to extend the opportunities for competition in the water industry, by allowing new entrants to supply non-household customers who use large volumes of water.

6.2 European legislation concerning the quality of water supplies

The quality of supplies used for drinking water and food production is subject to the provisions of the **EC Drinking Water Directive 1998** (Reference 1). This sets standards for drinking water to protect public health and maintain the aesthetic quality of drinking water supplies. These standards define values for chemical, microbiological and physical parameters for water at the point of delivery to the consumer.

The **EC Surface Water Abstraction Directive 1975** (Reference 2) addresses the quality of surface freshwater used or intended for the abstraction of drinking water after appropriate treatment and supplied by public distribution networks. Surface water is classified according to its physical, chemical and microbiological characteristics. Minimum levels of treatment are defined according to these characteristics.

6.3 Secondary legislation concerning the quality of water supplies

The implementation of the Water Industry Acts and the European Directives is assisted by the following regulations.

Surface Waters (Abstraction for Drinking Water) (Classification) Regulations 1996 (SI 3001)
Surface Waters (Abstraction for Drinking Water) (Classification) (Scotland) Regulations 1996 (SI 3047 (S.233))

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These regulations prescribe a system for classifying the quality of inland freshwaters according to their suitability for abstraction for supply as drinking water. They transpose the EC Surface Water Abstraction Directive 1975 into law in England, Wales and Scotland.

Water Supply (Water Quality) Regulations 2000 (SI 3184)
Water Supply (Water Quality) Regulations 2001 (Welsh SI 3911)
Water Supply (Water Quality) (Scotland) Regulations 2001 (Scottish SI 207)
Water Supply (Water Quality) Regulations (Northern Ireland) 2002 (SR 331)
Water Supply (Water Quality) (Amendment) Regulations 2001 (SI 2885)
Drinking Water (Undertakings) (England and Wales) Regulations 2000 (SI 1297)

This legislation applies to public water supplies and transposes the 1998 Drinking Water Directive into law in England, Wales and Scotland. The regulations establish chemical, physical and microbiological standards for the quality of the water supply. The regulations incorporate national procedures for dealing with the microbial pathogen *Cryptosporidium* in water supplies. They also specify how to monitor supplies, certain water treatment requirements and the approval of materials that contact water supplies during treatment and distribution. Equivalent regulations transposing the Directive for **Private Water Supply** and for water used in **Food Production** are awaited.

Private Water Supplies Regulations 1991 (SI 2790)

These regulations currently prescribe standards of wholesomeness in respect of water from private supplies for drinking, washing or cooking or for food production purposes. Local Authorities are responsible for monitoring private supplies, and a scheme of classification of private supplies is defined for monitoring purposes. The regulations make provision for local authorities to charge for sampling. The EC Drinking Water Directive 1998 is applicable to private supplies and updated regulations are awaited as mentioned above.

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Water Supply (Water Fittings) Regulations 1999 (SI 1148)

Water Supply (Water Fittings) (Amendment) Regulations 1999 (SI 1506)

The Water Fittings Regulations (or Byelaws 2000 in Scotland) are national requirements for the design, installation and maintenance of plumbing systems, water fittings and water-using appliances. Their purpose is to prevent misuse, waste, undue consumption or erroneous measurement of water and, most importantly, to prevent contamination of drinking water. Detailed information may be obtained from the website of the Water Regulations Advisory Scheme (www.wras.co.uk).

6.4 Secondary legislation concerning the provision of sewerage services

Unlike water supply, there is not a substantial body of secondary legislation concerning sewerage services. However, the primary legislation is complex. An explanation of English and Welsh law is available from FWR in the form of “An Inspector’s Guide to Sewerage Law” (Reference 3). This publication refers to other related primary legislation such as the Public Health Act 1962.

7 Legislation concerning the pollution of inland, transitional and coastal waters

See section 2 for a description of the relationships between primary, secondary and European legislation.

7.1 Primary legislation

The **Environmental Protection Act 1990** defines pollution, harm and the environment. It applies to the whole of the UK. Part I of the 1990 Act contains

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the Integrated Pollution Control (IPC) regime and Local Air Pollution Control (LAPC) regime. Both are concerned with regulating pollution from industrial processes. The first is concerned with preventing or minimising pollution of the environment due to the release of substances into the air, water or land. The second is concerned with preventing or minimising air pollution and applies to those industrial processes that are not considered to give rise to significant pollution of water or land. Central to both regimes is the requirement that the "Best Available Techniques Not Entailing Excessive Costs" should be used to prevent or minimise pollution. In addition to these regimes, Part II of the 1990 Act contains the Waste Management Licensing system, which is concerned with regulating the deposit, disposal or recovery of waste.

The **Water Resources Act 1991** applies to England and Wales, and consolidates previous water legislation concerning water resources. It defines the responsibilities of the Environment Agency (then the National Rivers Authority) to prevent the pollution of watercourses and groundwater. Under the Act, it is an offence to cause or knowingly permit polluting matter to enter into controlled waters without permission. Permission is generally obtained as discharge consent granted by the Environment Agency. The Agency sets conditions, which may control volumes and concentrations of particular substances or impose broader controls on the nature of the effluent. Each consent is based on the objective set by the Agency for the quality of the stretch of water to which the discharge is made as well as any relevant standards from EC Directives. The Environment Agency can refuse an application for a discharge consent. The Act provides powers to the Secretary of State to establish environmental water quality standards for particular stretches of inland and coastal waters. These powers have been used to fulfil the requirements of European Directives such as the Bathing Waters Directive and the Shellfish Waters Directive (see below).

The majority of trade effluent discharges are regulated through a different system that permits the discharge of trade effluent into the public sewers if the

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sewerage undertaker agrees. This is part of the **Water Industry Act 1991** (see section entitled ‘Legislation concerning the provision of water supplies and sewerage services’).

The **Environment Act 1995** applies to England, Scotland and Wales. It establishes the Environment Agency and the Scottish Environment Protection Agency. Their functions are defined with respect to water pollution control, waste regulation, flood protection, IPC regulation, the remediation of contaminated land, the control of pollution from abandoned mines and national air quality strategies.

The **Pollution Prevention and Control Act 1999** applies to the UK. It establishes a new pollution control system to meet the requirements of the EC Directive on Integrated Pollution Prevention and Control (see below under ‘European legislation’) and provides other measures to prevent and control pollution. The Act enables a single, coherent pollution control system to be set up by regulations which will apply to all of the installations to which the IPPC Directive applies and to those installations currently regulated under Part I of the 1990 Environmental Protection Act but to which the Directive does not apply. The whole of Part I of the 1990 Act will, in due course, be repealed by this Act. The Act also provides for regulations to be made to cover various ancillary matters connected with the prevention or control of pollution. An example would be the collection of information about emissions, energy and waste for inclusion in a pollution inventory. Regulation making powers are transferred to the National Assembly for Wales, in so far as exercisable in relation to Wales, and to the Scottish Executive in so far as exercisable in Scotland.

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7.2 European legislation

The **EC Bathing Water Directive 1975** (Reference 4) concerns the quality of bathing water (coastal and inland waters) with the exception of water intended for therapeutic purposes and water used in swimming pools. Discharges from sewage treatment works or diffuse pollution from agriculture can affect the quality of water used for bathing and can result in offensive material being found on beaches and adjacent land. The Directive sets the minimum quality criteria to be met by bathing water based on physical, chemical and microbiological parameters.

Like several other directives, the Bathing Waters Directive includes two types of standard. These are the mandatory Imperative Standards, and the more stringent Guide Standards. The UK must meet the Imperative Standards but has discretion about how quickly to move to the Guide Standards, if they are not already being met. In England and Wales, the Government has instructed the EA to ensure that the Imperative Standards are met consistently by at least 97 per cent of waters by 2005.

The Directive is implemented under the following regulations, which prescribe a system of classifying the quality of relevant territorial waters, coastal waters and inland waters that are bathing waters. The classification reflects the mandatory standards as laid down in the EC Bathing Water Directive.

[Bathing Waters \(Classification\) Regulations 1991 \(SI 1597\)](#)

[Bathing Waters \(Classification\) \(Scotland\) Regulations 1991 \(SI 1609 \(S. 144\)\)](#)

[Bathing Waters \(Classification\) \(England\) Regulations 2003 \(SI 1238\)](#)

The European Commission have produced a proposal for the revision of the Bathing Water Directive containing the following.

- An obligation to meet a much tighter bathing water quality standard than the existing Bathing Water Directive.

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- Limited provisions for recreational waters with no standards for these waters.
- Some management measures for bathing waters.
- Improved provision of information at bathing waters.

The Commission has used World Health Organization (WHO) draft methodology to justify the tightening of bathing quality standards in terms of public health benefits. However, there are concerns that the Commission's proposal emphasises the requirement to achieve good microbiological quality standards but largely disregards other aspects of the WHO approach such as the role of management action as a means of public health protection. The latest developments concerning the revision of this Directive are available on www.defra.gov.uk/environment/water/quality/bathing/revision.htm

The **EC Dangerous Substances Directive 1976** (Reference 5) applies to inland surface water, territorial waters, coastal waters and groundwater. The Directive controls discharges to water to prevent adverse impacts on the environment. There are two lists of Dangerous Substances. List I covers those which are particularly toxic, persistent, and which may tend to accumulate in the Environment (e.g. hexachlorobutadiene, chloroform, cadmium). List II covers substances whose effects are less serious (e.g. zinc, lead). Quality objectives and emission standards are laid down for the substances on List I, based on the best available technology. Quality objectives are compulsory; emission standards are not if the quality objectives are met continuously. All discharges require prior authorisation by the competent authority in the member state concerned. For the substances on List II, the member states must adopt and implement programmes to preserve and improve water quality. All discharges are subject to prior authorisation by the competent authority in the member state concerned, once again laying down the emission standards. A procedure is laid down for revising and adding to the lists or transferring specific substances from List II to List I.

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The Directive is transposed into UK law under the following regulations.

Surface Waters (Dangerous Substances) (Classification) Regulations 1989 (SI 2286)
Surface Waters (Dangerous Substances) (Classification) Regulations 1992 (SI 337)
Surface Waters (Dangerous Substances) (Classification) Regulations 1997 (SI 2560)
Surface Waters (Dangerous Substances) (Classification) Regulations 1998 (SI 389)
Surface Waters (Dangerous Substances) (Classification) (Scotland) Regulations 1990 (SI 116 (S 15))
Surface Waters (Dangerous Substances) (Classification) (Scotland) Regulations 1992 (SI 574 (S 63))
Surface Waters (Dangerous Substances) (Classification) (Scotland) Regulations 1993 (SI 250 (S 9))
Surface Waters (Dangerous Substances) (Classification) (Scotland) (No. 2) Regulations 1998 (SI 1344 (S 68))
Surface Waters (Dangerous Substances) (Classification) Regulations (Northern Ireland) 1998 (SR 397)

The **EC Freshwater Fish Directive 1978** (Reference 6) addresses the protection and improvement of the quality of running or standing fresh waters which support or which, if pollution were reduced or eliminated, would become capable of supporting certain fish species. Waters in natural or artificial fish ponds used for intensive fish farming are excluded from the scope of the Directive. Member states are required to designate the fresh waters suitable for fish breeding and subdivide them into salmonid waters and cyprinid waters. The Directive protects water quality through the application of chemical standards to designated waters. At present, 20,000 km of rivers and canals, and over 100 still-waters are designated under the Directive. In 2013, it will be subsumed into the Water Framework Directive.

The Directive is transposed into UK law in 1997 through the following regulation.

Surface Waters (Fishlife) (Classification) Regulations 1997 (SI 1331)
Surface Waters (Fishlife) (Classification) (Scotland) Regulations 1997 (SI 2471 (S. 163))
Surface Waters (Fishlife) (Classification) Regulations (Northern Ireland) 1997 (SR 488)
Surface Waters (Fishlife) (Classification) (Amendment) Regulations 2003 (SI 1053)

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Surface Waters (Fishlife) (Classification) (Scotland) Amendment Regulations 2003 (SSI 85)

Surface Waters (Fishlife) (Classification) (Amendment) Regulations (Northern Ireland) 2003 (SR 194)

The **EC Shellfish Waters Directive 1979** (Reference 7) concerns the quality of coastal and brackish waters that can support shellfish life (bivalve and gastropod molluscs). Member states are required to designate those waters to be considered as shellfish waters. The Directive sets standards for designated waters and aims to ensure a suitable environment for the growth of shellfish. As in several other directives, there are Imperative and Guide Standards. The UK must meet the Imperative Standards, but there is discretion on how quickly to move to the Guide Standards in places where they are not already being met. The Directive is transposed into UK law in 1997 through the following regulations.

Surface Waters (Shellfish) (Classification) Regulations 1997 (SI 1332)

Surface Waters (Shellfish) (Classification) (Scotland) Regulations 1997 (SI 2470 (S. 162))

Surface Waters (Shellfish) (Classification) Regulations (Northern Ireland) 1997 (SR 489)

Another EC Directive, the **EC Shellfish Hygiene Directive 1991**, administered by the Food Standards Agency, sets conditions for the production and marketing of shellfish intended for human consumption. Harvesting areas are placed in categories A, B or C. Shellfish may be marketed only if they are taken from classified waters and, for categories B and C, only after the shellfish have been purified in clean water. A fourth category exists, from which harvesting is prohibited.

The **EC Groundwater Directive 1979** (Reference 8) lists substances that should be prevented from entering, or prevented from polluting, groundwater. It requires a system of prior investigation, authorisation and surveillance to be put in place. The Directive is transposed into UK law through the following regulations.

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Groundwater Regulations 1998 (SI 2746)

Groundwater Regulations (Northern Ireland) 1998 (SR401)

These regulations supplement regulation 15 of the Waste Management Licensing Regulations 1994 and existing water pollution legislation. They require the EA, SEPA and the Secretary of State to use their new powers and their existing powers under Part II of the Control of Pollution Act 1974, Part III of the Water Resources Act 1991 and Part I of the Environmental Protection Act 1990 to prevent the direct or indirect discharge of List I substances to groundwater and to control pollution resulting from the direct or indirect discharge of List II substances.

The **EC Nitrates Directive 1991** (Reference 9) requires member states to designate, as Nitrate Vulnerable Zones, surface or underground waters that are or could be high in nitrate from agricultural sources. Within these zones farmers must observe an action programme of measures restricting the timing and application of fertilisers and manures and must keep accurate records. The Directive is transposed into UK law through a series of regulations. The latest information is posted on the Defra Web Pages at www.defra.gov.uk/environment/water/quality/nitrate/default.htm

The **EC Urban Waste Water Treatment (UWWT) Directive 1991** (Reference 10) defines requirements for the collection of sewage, and standards for the disposal of sewage effluents. The stringency of the required standards of treatment depends on the size of the discharge and on the type of water to which it is discharged. The Directive requires that all significant discharges receive two stages of treatment (primary and secondary). Discharges to coastal waters are permitted a lower level of treatment (primary) if they are discharged where natural dilution and dispersion is particularly effective. The discharger must prove that the discharge would pose no risks to the environment. However, the UK Government decided not to invoke this aspect of the Directive. Treatment to

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at least secondary level is to be provided for all the discharges designated as significant by the Directive and, going beyond the requirements of the Directive, for discharges serving as few as 2,000 people, to coastal waters.

The Directive also requires member states to 'decide on measures to limit pollution from storm water overflows'. These overflows operate under certain storm conditions when large quantities of rainwater can overload the sewerage networks. In England and Wales, there are about 7,000 such overflows and the Government has asked that 85 per cent of the overflows be brought up to standard by 2005.

The Directive also requires special treatment for discharges to waters that are designated as sensitive. One type of sensitive water is called the Eutrophic Sensitive Area. (Eutrophication occurs where the nutrients, normally nitrogen and phosphorus compounds, cause excess growth and decay of algae and other plants, leading to a lack of oxygen. This can be detrimental to wildlife. See Reference 11.) Once a water has been identified, the larger sewage treatment works discharging into it must meet the Directive's standards for the removal of nutrients, unless it is demonstrated that the removal will have no effect on the degree of eutrophication.

The Directive also banned the disposal of sludge to sea from the end of 1998. After this date, the principal options for the recovery or disposal of sludge were limited to incineration, landfill or use on agricultural land. A different directive deals specifically with the use of sludge on agricultural land.

The Directive is transposed into UK law through the following regulations.

Urban Waste Water Treatment (England and Wales) Regulations 1994 (SI 2841)
Urban Waste Water Treatment (Scotland) Regulations 1994 (SI 2842 (S 144))
Urban Waste Water Treatment Regulations (Northern Ireland) 1995 (SR 12)
Urban Waste Water Treatment (Amendment) Regulations 2003 (SI 1788)

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Urban Waste Water Treatment (Scotland) Amendment Regulations 2003 (SSI 273)

Urban Waste Water Treatment (Amendment) Regulations (Northern Ireland) 2003 (SR 278)

The **EC Integrated Pollution Prevention and Control (IPPC) Directive 1996** (Reference 12) requires a range of industrial installations to be regulated by a system of integrated pollution control (i.e. a system in which emissions to air, water and land, plus other environmental effects, are considered together and conditions set so as to achieve a high level of protection for the environment as a whole). Permit conditions must be based on the use of the "Best Available Techniques", which is a very similar concept to "Best Available Techniques Not Entailing Excessive Cost" in Part I of the 1990 Environmental Protection Act. Both concepts are designed to provide for a flexible, case by case approach to regulation, which balances cost with environmental benefit. Around 7,000 installations in the UK will be covered by the Directive. These include: -

- most of those regulated at present under the IPC regime in Part I of the 1990 Act;
- 1,500 of the 13,000 installations regulated at present under the LAPC regime in Part I of that Act;
- over 1,000 of the installations regulated under the Waste Management Licensing regime contained in Part II of that Act;
- significant numbers of installations which are at present unregulated by either Part I or Part II of the 1990 Act.

This latter category mainly comprises large, intensive pig and poultry installations, plus large installations for the manufacture of food and drink products.

The Directive is transposed into UK law through the following regulations.

Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 1973)

Pollution Prevention and Control (Scotland) Regulations 2000 (SSI 323)

Pollution Prevention and Control Regulations (Northern Ireland) 2003 (SR 46)

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7.3 Secondary legislation

Much of the secondary legislation in this area has already been indicated under specific EC Directives. There are, however, many regulations concerned with trade effluents (prescribed processes and substances) and the disposal of dangerous substances that are too numerous to list here. Further information on these can be obtained from the Web Pages dealing with environmental regulations on behalf of the EA, SEPA and EHS (NI) at www.environment-agency.gov.uk/netregs/legislation/

8 Legislation and agreements concerning conservation of the environment and bio-diversity

See section 2 for a description of the relationships between primary, secondary and European legislation.

8.1 Primary legislation

The **Coast Protection Act 1949** provides for the control of works, or the removing and depositing of materials, on the seashore and seabed. The controls normally apply anywhere within the limit of territorial waters. However, the **Continental Shelf Act 1964** extends the controls in respect of works and removal to any part of the seabed in designated areas outside the territorial waters. The 1949 Act imposes restrictions on works that may be detrimental to the safety of navigation. However, the introduction of environmental regulations extended the scope to potential environmental effects. The Act does not apply to works in non-tidal inland waters.

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The **Food and Environment Protection Act 1985** addresses the deposit and placement of materials in the sea and other tidal waters both during construction activities and for the purpose of their disposal. This is implemented by means of licences issued under the Act and administered by the Marine Consents and Environment Unit (MCEU). Licences are only granted after detailed scientific assessment of the potential environmental impact, with particular regard to the need to safeguard marine conservation sites. Detailed information about the Unit and its responsibilities, the statutory licensing regime and how to apply for a licence is available from the MCEU website - www.mceu.gov.uk. The controls apply equally to all waste materials that are dumped at sea (principally dredged materials) where, in addition to the general environmental factors, consideration may focus particularly on the potential risk to fish and other marine life from contaminants and burial of benthic communities.

The **Sea Fisheries (Wildlife Conservation) Act 1992** is very brief. It imposes a duty on Ministers and relevant bodies concerned with the implementation of Sea Fisheries Acts. The duty is to have regard to the conservation of marine flora and fauna.

The foundations of nature conservation legislation in the UK are laid by the **National Parks and Access to the Countryside Act 1949**. This based conservation on ecological principles by protecting habitats. The Act defines the “Site of Special Scientific Interest” (SSSI) and the “Nature Reserve”.

The **Wildlife & Countryside Act 1981** makes provisions for species and countryside protection. It replaces and adds to previous legislation such as the Protection of Birds Acts (1954, 1964 and 1967) and the Conservation of Wild Creatures and Wild Plants Act 1975. It includes the UK's domestic implementation of the species protection of the EC Directive on the Conservation of Wild

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Birds (see below under European Legislation). The Act is the primary legislation in Great Britain for the protection of flora, fauna and the countryside. The Wildlife (Northern Ireland) Order is a separate act for Northern Ireland.

The Act gives powers to the statutory nature conservation agencies to designate and protect SSSIs, National Nature Reserves (NNRs), Marine Nature Reserves (MNRs), and to apply Nature Conservation Orders. Relevant conservation agencies are English Nature, Scottish Natural Heritage, the Countryside Council for Wales, and the Environment and Heritage Service (Northern Ireland). Owners and occupiers of SSSIs are required to notify the conservation agency of operations with the potential to cause damage.

Part III of the **Countryside and Rights of Way Act 2000** strengthens the legislation for the protection of wildlife and natural features. New provisions enable the conservation agencies to impose permanent restrictions to prevent damaging operations on SSSIs in England and Wales. These new provisions apply only to England and Wales (SSSIs are a devolved matter). There is also a power for the conservation agencies to secure the management of an SSSI. The Act also imposes duties on government to: -

- publish lists of habitat types and species which are considered of principal importance for the conservation of biological diversity in accordance with the UN Convention on Biological Diversity 1992,
- notify the conservation agencies of sites designated under the 1971 Ramsar Convention on Wetlands of International Importance.

These conventions are described in the later section on 'International agreements'.

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8.2 European legislation

The **EC Conservation of Wild Birds Directive 1979** (Reference 13) is often referred to as the ‘Birds’ Directive. The purpose is to protect birds, their eggs, nests and habitats in the EU. This is achieved by the protection of the birds’ potential habitats, through the preservation, maintenance or restoration of a sufficient diversity and area of habitats essential to the conservation of all species of birds. These targets are principally being met through the establishment of Special Protection Areas (SPAs).

The **EC Conservation of Natural Habitats and of Wild Fauna and Flora Directive 1992** (Reference 14) is often referred to as the ‘Habitats’ Directive. It is transposed into UK legislation by the following regulations.

The Conservation (Natural Habitats &c.) Regulations 1994 (SI 2716)

The Conservation (Natural Habitats, &c.) (Amendment) (England) Regulations 1997 (SI 192)

The Directive requires member states to designate sites based on species and habitats in the Directive’s annexes, and existing designations from the Birds Directive. Once agreed by the European Commission, these sites become part of a European network, Natura 2000. Member states must take measures to maintain in ‘a favourable condition’, the habitats and species for which the sites have been selected, or, where necessary, take action to restore them. Natura 2000 sites are Special Protection Areas (SPAs), classified under the Birds Directive, or Special Areas of Conservation (SAC), designated under the Habitats Directive. The Habitats Regulations requires the environmental regulator (e.g. the EA, SEPA) to review all licences and permits, for example, to discharge and abstract water, and to determine whether they are likely to have an ‘adverse effect’ on SACs and SPAs.

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The Directive requires that any activities, plans, or projects whether inside or outside a 'Natura 2000' site, that are likely to have a significant effect on the conservation status of the site's features, shall be subject to assessment.

Complete listings of SPA and SAC sites are available to view on the Joint Nature Conservancy Council (JNCC) website at www.jncc.gov.uk

8.3 International agreements

During the 1970s and early 1980s, several international agreements were made to halt the decline in habitat and species diversity. These included the Ramsar, Bern, Bonn, and CITES (Convention for the International Trade in Endangered Species) Conventions.

One of the most influential conventions was the United Nations Conference on Environment and Development (the Earth Summit) at Rio de Janeiro in 1992. It recognised that biodiversity should be treated as a global resource to be protected according to the principles of ecological, economic and social sustainability. The summit also identified the need to establish a programme of sustainability at the local level (Agenda 21). The UK signed the Convention on Biological Diversity (CBD), which led to the establishment of the UK Biodiversity Action Plan. This is the UK's initiative to maintain and enhance biodiversity. It recognises 391 species and 45 habitats as priorities for action.

These agreements and conventions are described in more detail below.

The **Convention on Wetlands** was signed in Ramsar, Iran, in 1971, and has come to be known popularly as the "**Ramsar Convention**". This provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The full name of the treaty – The

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Convention on Wetlands of International Importance especially as Waterfowl Habitat – reflects its original emphasis on the conservation and use of wetlands primarily to provide habitat for waterbirds. The scope has evolved to cover all aspects of wetland conservation, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. For this reason, the short form of the treaty's title, the "Convention on Wetlands", is entirely appropriate.

The Convention entered into force in 1975 and as of May 2003 has 136 Contracting Parties. More than 1280 wetlands have been designated for inclusion in the List of Wetlands of International Importance, covering some 109 million hectares (more than the surface area of France, Germany, and Switzerland combined). When countries join the Convention, they are making the following commitments.

1. To designate sites for inclusion in the List of Wetlands of International Importance (the "Ramsar List") and to promote their conservation. Selection for the Ramsar List should be based on the wetland's significance in terms of ecology, botany, zoology, limnology, or hydrology.
2. To include wetland conservation considerations in their national land-use planning.
3. To establish nature reserves in wetlands, whether or not they are included in the Ramsar List, and to promote training in the fields of wetland research, management and wardening.
4. To consult with other Contracting Parties about implementation of the Convention, especially in regard to transfrontier wetlands, shared water systems, and shared species.

UNESCO serves as Depositary for the Convention, but its secretariat, known as the "Ramsar Bureau", is housed in the headquarters of IUCN (The World

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Conservation Union) in Gland, Switzerland. More details about the bureau and 'Ramsar' are available from the website at www.ramsar.org.

In the UK, there are 144 designated Ramsar sites as of March 2003. More information and complete listings of UK Ramsar sites are available to view on the Joint Nature Conservancy Council (JNCC) website at www.jncc.gov.uk.

The **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (CITES) is sometimes known as the Washington Convention. The Convention entered into force in 1975, and the UK became a Party in 1976. CITES protects certain species of wild fauna and flora (listed in Appendices) against over-exploitation through international trade. There are more than 150 Parties to the Convention. The CITES Secretariat is administered by the United Nations Environment Programme (UNEP).

In the UK, trade in endangered species is regulated through the issue of import and export permits by Defra. Defra is supported by advice provided by two independent Scientific Authorities. JNCC is appointed as the Scientific Authority for animals and the Royal Botanic Gardens Kew, provides the complementary role for plants.

More information can be found at the UK CITES website at www.ukcites.gov.uk.

The **Convention on the Conservation of European Wildlife and Natural Habitats** is also known as the **Bern Convention**. It came into force on 1 June 1982 and has 45 Contracting Parties including 39 member States of the Council of Europe, as well as the European Community, Monaco and 4 African States. Full details are available on the Council of Europe's website at www.nature.coe.int/english/cadres/bern.htm.

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The Convention promotes the conservation of wild flora and fauna species and their habitats. Special attention is given to endangered and vulnerable species, including endangered and vulnerable migratory species specified in appendices.

The Parties undertake to take all appropriate measures to ensure the conservation of the habitats of the wild flora and fauna species. Such measures should include planning and development policies, pollution control, education, and information dissemination. The Convention establishes a Standing Committee to monitor the provisions and update these as necessary.

The EC Birds Directive and the EC Habitats Directive provide the framework within which the provisions of the Bern Convention are applied in the European Union.

The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or the Bonn Convention) aims to conserve terrestrial, marine and avian migratory species throughout their range. Since the Convention's coming into force on 1 November 1983, its membership has grown steadily to 84 Parties.

Parties work together to conserve migratory species and their habitats by providing strict protection for the endangered migratory species listed in Appendix I of the Convention; by concluding multilateral Agreements for the conservation and management of migratory species listed in Appendix II; and by undertaking co-operative research activities.

A Secretariat under the auspices of the United Nations Environment Programme (UNEP) provides administrative support to the Convention. Their website provides more details at www.wcmc.org.uk/cms/.

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The Convention of Biological Diversity (CBD) was signed by 159 governments at the 1992 Earth Summit in Rio de Janeiro. It came into force on 29 December 1993 and it was the first treaty to provide a legal framework for biodiversity conservation. It called for the creation and enforcement of national strategies and action plans to conserve, protect and enhance biological diversity. The Convention was negotiated under the auspices of UNEP and the CBD secretariat is based in Montreal, Canada; their website is www.biodiv.org.

In 1993, the UK government consulted over three hundred organisations concerning the key issues raised by the CBD. The outcome was a 1994 report entitled 'Biodiversity: the UK Action Plan'. The report identified 59 broad activities for conservation work over the next 20 years (the '59' steps) and recommended that a steering group be created in order to take the work forward. The UK Biodiversity Steering Group was created and in 1995, published costed action plans to conserve 116 species and 74 habitats together with recommendations for future biodiversity action plans. There are now 436 Biodiversity Action Plans (BAPs), consisting of 391 Species Action Plans (SAPs) and 45 Habitat Action Plans (HAPs). Local Biodiversity Action Plans are now becoming increasingly important in implementation. These Local Plans focus resources by means of local partnerships to conserve priority habitats and species and locally important wildlife and sites. The content of the LBAPs are informed and guided by national targets so that their implementation is linked to national priorities. However, the plans seek to reflect the values of local people and provide a focus for local initiatives.

Defra supports a Biodiversity Secretariat to help implement the CBD in the UK. The Secretariat promotes the integration of biodiversity into policies, projects and programmes within Government and beyond. A website (www.ukbap.org.uk) supports the work of the Secretariat and provides information on species and habitat action plans.

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The **Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)** was adopted in Paris in 1992 and entered into force in 1998. It built upon and replaced two previous Conventions to address all sources of pollution, which might affect the maritime area, as well as matters relating to the protection of the marine environment. The two previous conventions are the **Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (the Oslo Convention)** adopted in 1972 and the **Convention for the Prevention of Marine Pollution from Land-Based Sources (the Paris Convention)** adopted in 1974 to address marine pollution by discharges of dangerous substances from land-based sources, watercourses or pipelines.

The OSPAR Commission (based in the UK) administers the Convention and develops policy and international agreements. The Commission has adopted five strategies for directing its work. Measures and programmes within the Biodiversity Strategy include the identification of ecological quality objectives of the North Sea, development of lists of species and habitats in need of protection, identification and selection of marine protected areas, and the prevention and control of adverse impacts from human activities. The official website of the OSPAR Commission is www.ospar.org where there are details of its strategies, including the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area. The other strategies address offshore activities, eutrophication and hazardous and radioactive substances.

The UK ratified OSPAR in 1998. Implementation in the UK is coordinated by the Marine and Waterways Division of Defra, with contributions to OSPAR Committees by a variety of government departments, the devolved administrations and agencies.

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9 The Water Framework Directive (WFD)

See section 2 for a description of the relationships between primary, secondary and European legislation.

With the exception of the WFD, European water legislation has been summarised in previous sections of this review; much of this consists of numerous individual directives, many with overlapping objectives. During 1995, requests for a fundamental rethink of Community water policy came from the European Parliament's environment committee and from the Council of environment ministers. The consensus view was that whilst directives such as the Drinking Water Directive and the Urban Waste Water Treatment Directive can be considered milestones, European water policy had to address the increasing awareness of citizens and other involved parties concerning water. This led to a consultation process, which concluded that current water policy was fragmented and that a single piece of framework legislation was required instead. In response, the Commission presented a proposal for a Water Framework Directive with the following key aims.

- Expanding the scope of water protection to all waters, surface waters and groundwater.
- Achieving "good status" for all waters by a set deadline.
- Water management based on river basins.
- Using a "combined approach" of emission limit values and quality standards.
- Sensible pricing.
- Public participation in decision-making.
- Efficient legislative procedures.

The **EC Water Framework Directive 2000** (Reference 15) came into force on 22 December 2000. The Directive has the following provisions.

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(1) Member States have to identify all the river basins lying within their national territory and assign them to individual river basin districts. By December 2003, a competent authority should be designated for each of the river basin districts.

(2) By December 2004, Member States must complete an analysis of the characteristics of each river basin district, a review of the impact of human activity on the water, an economic analysis of water use and a register of areas requiring special protection. All bodies of water used for the abstraction of water intended for human consumption providing more than 10 m³ a day as an average or serving more than 50 persons must be identified.

(3) By December 2009, a management plan and programme of measures must be produced for each river basin district, taking account of the results of the analyses and studies provided for in (2) above. These plans should seek to: -

- prevent deterioration, enhance and restore bodies of surface water, achieve good chemical and ecological status of such water and reduce pollution from discharges and emissions of hazardous substances;
- protect, enhance and restore all bodies of groundwater, prevent the pollution and deterioration of groundwater, and ensure a balance between abstraction and recharge of groundwater;
- preserve protected areas.

(4) The above-mentioned objectives have to be achieved by 2015, but this deadline may be extended or relaxed under certain conditions laid down by the Directive.

(5) By 2010, Member States must ensure that water pricing policies provide adequate incentives for users to use water resources efficiently and that the various economic sectors contribute to the recovery of the costs of water services including those relating to the environment and resources.

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(6) Measures to reduce, stop, or eliminate discharges, emissions and losses of priority substances. This list forms Annex X to the Directive.

The WFD takes over the operative provisions of seven old directives, allowing these to be repealed. By December 2007, the **EC Surface Water Abstraction Directive 1975** (Reference 2) will be repealed along with two related directives on measurement methods, sampling frequencies and exchange of information on fresh water quality. By December 2013, the following will be repealed.

- The EC Freshwater Fish Directive 1978 (Reference 6).
- The EC Shellfish Waters Directive 1979 (Reference 7).
- The EC Groundwater Directive 1979 (Reference 8).
- The EC Dangerous Substances Directive 1976 (Reference 5).

Implementation of the WFD raises a number of scientific, technical and practical challenges within an extremely demanding timetable. A Common Implementation Strategy (CIS) was thus agreed in May 2001 between Member States, Norway and the Commission. Under the CIS, a series of Community working groups have developed informal and non-legally binding guidance on how to action the technical parts of the WFD. The common strategy will also support the Commission in delivering its obligations for further policy development (Daughter Directives on groundwater and on priority substances). Information on these aspects is provided on the European Commission's website at <http://europa.eu.int/comm/environment/water/water-framework/implementation.html>

In the UK, much of the implementation work will be undertaken by the 'Competent Authorities', which will be the UK environment agencies (the EA in England and Wales; SEPA in Scotland; and EHS in Northern Ireland). Defra, the Welsh Assembly Government, the Scottish Executive and the Department of Environment, Northern Ireland have supported the establishment of a UK WFD

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Technical Advisory Group (UKTAG) comprised of experts from the UK environment and conservation agencies. Experts from the Republic of Ireland are also members of UKTAG to represent the cross-border issues with Northern Ireland. Further information is available from the Defra website at www.defra.gov.uk/environment/water/wfd/index.htm.

For England and Wales, the Government is transposing the WFD through secondary legislation using powers in section 2(2) of the **European Communities Act 1972**. At the time of writing, this secondary legislation is in draft form with the intention of coming into force on 22nd December 2003 and is cited as follows.

The Water Framework Directive (Implementation) (England and Wales) Regulations 2003

In Scotland, the WFD is being transposed by the **Water Environment and Water Services (Scotland) Act 2003**. This Act sets out the general purpose of protection of the water environment, defines the water environment, and sets out the duties of public authorities, including the Scottish Ministers and the Scottish Environment Protection Agency (SEPA), in respect of its protection. The Act

- provides for the establishment and characterisation of river basin districts;
- establishes a register of protected areas and waters used for the abstraction of drinking water;
- requires an environmental objective to be set for each body of water in a river basin district and that monitoring of the status of the water environment in each river basin district is carried out;
- requires the preparation of river basin management plans;
- describes the procedures for preparation, approval and review of these plans including the requirements for publicity and consultation;

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- requires the creation of river basin district advisory groups and allows for the creation of sub-basin plans
- places a duty on public authorities, including the Scottish Ministers, to have regard to river basin management plans, where relevant
- enables provision to be made, by regulations, for or in connection with regulating any activity, and in connection with the fixing of charges for water services, for the purposes of protecting the water environment;
- enables provision to be made, by regulations, for or in connection with remedial and restoration measures necessary for the purposes of achieving the environmental objectives; and
- provides for amendment to the Town and County Planning (Scotland) Act 1997 to the effect that local authorities will be given planning control over marine fish farms.

Withdrawn - available on request

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10 References

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 4. European Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water. Official Journal L 31, 05/02/1976.
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 6. European Council Directive 78/659/EEC of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life. Official Journal L 222, 14/08/1978.
 7. European Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters. Official Journal L 281, 10/11/1979.
 8. European Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances. Official Journal L 20, 26/01/1980.
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9. European Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. Official Journal L 375, 31/12/1991.
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14. European Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal L 206, 22/07/1992.
15. European Council 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. Official Journal L 327, 22/12/2001.

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