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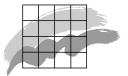
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European Policies and International agreements affecting Catchment Management

Report

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Abbreviations

AEI Agri-Environment Investment

CAP Common Agricultural Policy

CEC Commission of the European Communities

CIS Common Implementation Strategy

CM Council of Ministers of the European

Communities

DG Directorate General

ECJ European Court of Justice

EC European Community

EIA Environmental Impact Assessment

HELCOM Helsinki Commission

IO Interest Organisation

IPPC Integrated Pollution Prevention Control

MS Member State (of EC)

NGO Non-Governmental Organisation

RBA River Basin Authority

RDR Rural Development Regulation (CAP)

REACH Registration, Evaluation and Authorisation

of Chemicals (EC....)

RBMP River Basin Management Plan

SCF Social Cohesion Fund

SEA Strategic Environmental Assessment

(SEA) SEA is not used as an abbreviation for the

Single European Act in this report

SF Structural Funds

SPA Special Protected Area

WFD Water Framework Directive

1 Introduction

In the following an overview is provided of European policies and international agreements, which have affected and could be expected to affect the implementation of catchment management. The review looks at the European level, thus mostly excluding the National level and the transposition of directives/conventions. The review is meant as a first input to the Decision Support System of the EUROLIMPACS programme, and details on the individual policies and agreements can be developed and discussed further as the system requirements become clearer.

The overarching piece of legislation in the area is the European Water Framework Directive (WFD), which will be the focus of this report. The WFD has several characteristics, which breaks with traditional Water Policies in Europe, and at the same time it forms part of a general development in environmental regulation (Kaika and Page). The report will briefly go through this development.

Some of the main points are:

- **Decision making:** increased openness and transparency and strengthening of public and stakeholder participation (art. 14)
- **Administration:** Fit between biological and administrative units; Development of River Basin Authorities (art. 1, 15, art. 3)
- **Ecosystem approach**: Integration of surface and groundwater and other water types in one framework (art. 4)
- **Regulative tools:** Environmental externalities included in water pricing (art. 9), No deterioration clause, agreement on standards/parameters (art.)
- The 'combined approach' to pollution control (art. 16)

The European Water Framework Directive (WFD) was, as it says on DG Environment's WebPages, *finally* adopted on 23 October 2000. The final content was the result of a long discussion between the European Parliament (EP), the Commission of the European Communities (CEC) in the pro-environment and sustainability role, and the Council of Ministers of the European Communities, representing the Member States (MS) from a more traditional economic development standpoint, with pressure from IOs and NGOs (see discussion and further details in Kaika and Page).

The WFD will update or impact most of the existing water legislation in Europe. Thus, the Directive interacts with an enormous amount of legislation in environment, agriculture, development and infrastructure sectors, etc. Below the report looks at legislation and agreements in these sectors.

As part of the implementation of the Directive, a Common Implementation strategy has been formulated, which stipulates a timeframe and methods for implementation.

The WFD is flexible and contains different degrees of obligations in the implementation, which will be discussed briefly in relation to the agreements and directives presented below. It is likely that the greatest number of challenges to the implementation will be in

the transposition of the WFD to national law (which is not discussed here), as the final document has tried to balance different interests and principles. Thus it is likely that the flexibility will lead to many implementation variants.

The WFD has received critique for not making improvements compulsory and providing few means of sanctions towards MS and offenders as well as little financial instruments to ensure the implementation of the directive, for example in connection with the development of RBAs. Section 4 contains a brief description of which support can be found, for example in the Structural Funds and in the "second pillar" of the CAP, the RDR.

The report is divided into 4 main sections outlining main European policies and international agreements in the areas mentioned above. The text is divided into sections according to their framework and their relation to catchment management, and their geography and timing for implementation is discussed. At the beginning of each section there is a small discussion of the development and main points related to catchment management.

Section 1 discusses the general policy development in EU in the environmental regulation area, with particular attention to the regulation of water. Section 1 also looks at some of the key concepts in the WFD, and the treaties and agreements supporting these.

Section 2 provides a review of the agreements and treaties directly concerned with water in their main subject or sub-sections. For each of these a small description is provided. Some of these directives will be repealed and replaced by the WFD. However, it is a premise of the WFD that legal provisions are not weakened by the implementation of the WFD. Thus, existing agreements and directives must be adhered to. Section 2 also provides and overview of International River Basin Districts in the European Union and close neighbours, and sum up treaties related to handling conflicts and cross border co-operation in these areas specifically.

Section 3 addresses agreements and treaties related to management, administration and implementation in general, for example procedures for meetings and co-ordination etc at European and international levels.

Section 4 draws up main legislation and agreements from other sectors, including Agriculture, Industry, Tourism, Energy, etc. It briefly discusses the provisions in the financing instruments of the EU for minimising negative impacts on the water environment in investment and for direct investments in water quality improvements.

2 General policy development in EU in the environmental regulation

Catchment management and the WFD, and the framework provided for its implementation is influenced by the context of the development of European environmental policies in general. These provide a background for the implementation and understanding of regulative opportunities and possibilities, principles and concepts, as well as the relation to other sectors. In the preamble to WFD the dynamic environment is recognised stating that the community should "further develop principles and guidelines for protection and sustainable use of water". The relation to other sectors will be discussed in section 4, in the following, a brief review of the development of environmental policy in EU is presented.

The three main points in relation to the WFD is the development towards governance, including participation and decentralised implementation, the eco-system approach and the integrated approach to sustainability.

In general environmental policies in the EU can be split into three phases. Environmental policy in the EU as a separate concern can be said to start in 1972 at the Paris Summit, where support is given to the development of the first Environmental Action Programme. At this point policies are largely based on public health protection. In 1986 a new phase starts, as the Single European Act includes article 130 on environmental policy, thus including a commitment to the environment in the legal bases of the EU and moving towards environmental protection. This step has been strengthened in the Treaty on the European Union (Maastricht) (1993) and in the Amsterdam Treaty (1996).

From phase two we see a change from treatment/"end of pipe" solutions to integrated environmental management and preventive measures and subsidiarity (Kallis & Butler p. 126f, Jordan p.). Together with the concept of sustainability, these steps increasingly involve co-ordination with other sectors, and demand that environmental issues be mainstreamed, among other by improving co-ordination early in the decision-making process and ensuring environmental assessments of policies (For example through the Cardiff process and the SEA Directive).

In general environmental policies have developed from phase one being based on public health protection and avoidance of market distortion through environmental rules, towards environmental protection. These developments are all reflected in the WFD, requiring an integrated approach to understanding and solving issues, including the address of ecosystems as well as societal structures and behaviour. In addition the way the relationship between economic development, environment and sustainability is perceived at the local level is likely to influence the implementation.

The treaties and environmental action programmes provide the overall framework for the water policies in the European Union. **Environmental Action Programmes a**re developed by the Commission and provide a guide for environmental policy-making. The current 6th EAP runs from 2000 and forward. It encompasses an emphasis on sustainable development, integrated management and subsidiarity.

In general environmental governing has seen a move from 'government' to 'governance' in a quest to improve efficiency and effectiveness of environmental management by involving stakeholders more closely in the formulation, implementation and monitoring of activities and improved behaviour. (Durant *et al*, pp. 2ff). This is in line with general arguments for decentralising regulation and the principle of subsidiarity.

The WFD recognises limits of the top-down approach and seek to adopt a more flexible and co-operative implementation strategy. The WFD and daughter directives in EU Water policies, contain a mix of Command and Control regulative tools (standards, emission controls, etc.) and procedural guidelines (the development of River Basin districts and authorities, monitoring requirements, public information and participation, etc) (Kallis and Briassoulis, p. 8). For water policies and Catchment Management this means balancing overall standards with local contexts. This often includes negotiating between a stronger environmental protection interest at EU level (DG ENV) at times inconsistent with local development agendas. However, this also results in a weaker understanding of whether objectives **should be obtained** or MS **should aim to obtain them**. For example, procedures pertaining to the RBAs are compulsory, whereas the actual objectives need not be obtained. The MS are free to choose the allocation of powers, legal and economic instruments, planning process and content of the authorities (Kallis and Briassoulis, p.6)

The use of river Basin Authorities based on the ecosystem as opposed to political geography might be seen as an indicator for the growing interest in integrating policies both concerning groundwater and surface waters as well as development and environmental policies. This might be a way of trying to find a more adequate institutional form or "fit", which might be able to include more externalities and thus better address them. (Moss (2003), p. 207) Scholars have found that in countries with a policy style 'alien to negotiative and participatory governance', such as Germany and Spain, the WFD has posed severe problems of institutional adaptation (Moss (2004), p. 86, 2003)

In addition to the EU member states a number of countries in Eastern Europe have obliged themselves to comply with the 'acquis communautaire' (which also relates to environmental issues.

Key concepts

A number of key concepts provide an important basis for understanding Catchment Management in the WFD. They are derived from different sources and guides to varying degrees the implementation process.

The following is a presentation of the main concepts used in the WFD, they are not static agreements, but are important parts of the understanding and implementation of EU Water policies. (REF)

Ecosystem based objectives

The management is based on an ecosystem approach parting from former policies, which have concentrated on a more compartmentalised approach to environment (Page *et al*, p. 331)

The WFD integrates these directives in its framework (see description below)

2.1.1 Subsidiarity

The concept of subsidiarity was institutionalised in the Maastricht Treaty (defined in protocol 30) "action should be taken at an EU level only when policy objectives can be best achieved at this level".

It also follow agreements entered at the 1992 Rio Conference and reconfirmed at the Johannesburg Conference in 2002, concerning Agenda 21 on enhancing local environmental regulation.

Subsidiarity relates to the level of decision-making and influences the understanding of the relationship between the EU institutions and MS institutions, centralisation and decentralisation/deregulation, and to what degree the WFD obliges the MS.

The WFD states that "the Community should provide common principles and the overall framework for action. This Directive should provide for such a framework and co-ordinate and integrate, and, in a longer perspective, further develop the overall principles and structures for protection and sustainable use of water in the Community in accordance with the principles of subsidiarity." (Preamble 18)

Further, preamble 13 emphasise that "There are diverse conditions and needs in the Community which require different specific solutions" and that "Decisions should be taken as close as possible to the locations where water is affected or used. Priority should be given to action within the responsibility of Member States through the drawing up of programmes of measures adjusted to regional and local conditions."

Most importantly the preamble to the WFD states that "Member States should **aim to achieve** the objective of at least good water status". This has been interpreted to tip the power relationship towards the MS, as it weakens the possibilities for the legal enforceability of the WFD. (Kallis and Briassoulis) For example a decision on derogation on demands and/or balance of development-environment trade-offs cannot be resolved from the top, but must be debated at basin level with the described procedural tools. In addition, although the MS has an obligation to form RBAs, the CEC cannot decide who is in the RB planning process and/or regional/rural development planning (Kallis & Briassoulis). Thus it becomes very important to work with co-ordination and stakeholder integration at the Catchment level.

Precautionary principle

The principle relates to the scientific uncertainties around "effect levels" in the natural environment, and whether action should be postponed until effects are clear or whether action should be taken on the suspicion that there might be an impact.

The strength of this principle is important in how environmental protection is weighed against other policy areas. In the WFD decisions should in principle be based on the precautionary principle:

"As set out in Article 174 of the Treaty, the Community policy on the environment is to contribute to pursuit of the objectives of preserving, protecting and improving the quality of the environment, in prudent and rational utilisation of natural resources, and to be based on the **precautionary principle** and on the principles that preventive action should be taken, environmental damage should, as a priority, be rectified at source and that the polluter should pay." (Preamble 11)

"In identifying priority hazardous substances, account should be taken of the **precautionary principle**, relying in particular on the determination of any potentially adverse effects of the product and on a scientific assessment of the risk." (Preamble 44)

Polluter Pays principle

There is an old divide between who should pay for environmental damage, those who damage or pollutes the resource, or those who want to use the resource. The discussion includes issues around valuation, what is fair, what is practical and economically viable etc. How different regulative tools should be used, is in part dependent on which principle or policy is followed.

The WFD is in general based on the polluter pays principle. As cited above in 1.1.3, "environmental damage should, as a priority, be rectified at source and that the polluter should pay."

A number of articles emphasises the principle and the relation to pricing of the water resources and their use.

"The principle of recovery of the costs of water services, including environmental and resource costs associated with damage or negative impact on the aquatic environment should be taken into account in accordance with, in particular, the **polluter-pays principle.** An economic analysis of water services based on long-term forecasts of supply and demand for water in the river basin district will be necessary for this purpose." (Preamble 38)

"Member States shall take account of the principle of recovery of the costs 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." (Article 9, 1)

"Member States shall ensure by 2010....

an adequate contribution of the different water uses, disaggregated into
at least industry, households and agriculture, to the recovery of the costs of
water services, based on the economic analysis conducted according to
Annex III and taking account of the polluter pays principle."

The new General Regulation of the Structural Funds, the revised Cohesion Fund Regulation and the new pre-accession instrument ISPA include provisions to apply the Polluter Pays Principle to the operations of the Funds.

Sustainability

Sustainability is an important driver of environmental policies and in particular its integration with other sectors. The concept was first put on the global environmental agenda by the Brundtland report in 1987, and has since developed to be an underlying principle of development policies.

Apart from the European Environmental Action Programmes and environmental policies per se, it is included in the Lisbon Strategy, the Treaty and the Strategy for Sustainable Development.

The WFD emphasises the need for sustainable management and use of water systems, and to ensure the environmental sustainability. However, it also recognises the need to balance this with sustainable human development (art. 4, 3.a.v, 7 and 7c), emphasising that sustainability comprises more than the environmental field.

However, though the concept might be widespread, the definition, clarity and power of the concept may vary.

2.1.2 BAT

The principle of BAT is not used. (art. 16.8) "Member States shall establish environmental quality standards for these substances for all surface waters affected by discharges of those substances, and controls on the principal

sources of such discharges, based, inter alia, on consideration of all technical reduction options."

3 Agreements and treaties in Environment and Water

International

At the international level, the EU has signed up to a number of important conventions aimed at regulating environmental issues and for nature protection. Below they are divided into groups by their main relation to the WFD.

Biological Diversity and Nature Protection

- Rio Convention on Biological Diversity (1992) (Council Decision 93/626/EEC of 25 October 1993 concerning the conclusion of the Convention on Biological Diversity
- Ramsar Convention on the Conservation of Wetlands (1971)
- Bonn Convention on Migratory Species (1979)
- Convention on the Protection of the Alps (1991)
- Bern Convention on the Conservation of European Wildlife and Natural Habitats
- the Cartagena Protocol on Biosafety to the Convention on Biological Diversity
- United Nations Convention to combat desertification (UNCCD)
- OSPAR Convention (1992), international co-operation on the protection of the marine environment of the North-East Atlantic

Sustainable development and climate change

- Rio Convention (1992), which established the principle of sustainable development.
- the Kyoto protocol to the United Nations Framework Convention on Climate Change (1997)
- Johannesburg World Summit of Sustainable Development (2002)

Transboundary issues

- Convention on Environmental Impact Assessment in a Transboundary Context (ESPOO) (1991). Large dams and reservoirs, infrastructure, WWTP, deforestation. Affected party can demand an EIA. Has adopted SEA protocol (Kiev 2003)
- the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal
- Convention on Transboundary Effects of Industrial accidents (UNECE)
- Helsinki Water Convention on the Protection and use of transboundary water courses and international lakes (UNECE) (1974, 1992)

HELCOM

Public participation and information

- Aarhus Convention on Access to Information, Public Participation in Decision-making and access to Justice in environmental matters (ECE/CEP/43) where article 7 and 8 refer to plans, programs, policies (UNECE)
- Agenda 21 of the Rio Convention

In addition, preamble 21 stresses that "The Community and Member States are party to various international agreements containing important obligations on the protection of marine waters from pollution, in particular;

- **Helsinki Water Convention** on the Protection of the Marine Environment of the Baltic Sea Area, signed in Helsinki on 9 April 1992 (1974) and approved by Council Decision 94/157/EC (1)
- Paris Convention for the Protection of the Marine Environment of the North-East Atlantic, signed in Paris on 22 September 1992 and approved by Council Decision 98/249/EC (2), and
- Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution, signed in Barcelona on 16 February 1976 and approved by Council Decision 77/585/EEC (3), and its Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-Based Sources, signed in Athens on 17 May 1980 and approved by Council Decision 83/101/EEC (4). This Directive is to make a contribution towards enabling the Community and Member States to meet those obligations." (authors bold and bullets)

And in preamble 35:

This Directive is to contribute to the implementation of Community obligations under international conventions on water protection and management, notably the United Nations Convention on the protection and use of transboundary water courses and international lakes, approved by Council Decision 95/308/EC (1) and any succeeding agreements on its application.

Most of the Conventions have been ratified and put into force, but with exceptions, especially the Aarhus Convention and the Cartagena protocol have not been ratified or put into force by a large number of MS.

For many of the transboundary rivers basins in Europe regional agreements have been made between the involved countries, for example regarding water quality, flood risk management and transfrontier protection plans. Main agreements are listed below;

European International River Basin Agreements	Countries	Year*	Subjects	Actions in WFD
Rhine Basin (downstream Lake Constance); Internationale Kommission zum Schutze des Rheins (IKSR) Replaces the Bern Convention from 1963	Germany, European Community, France, Luxembourg, Netherlands, Switzerland	1999 (2003)	Sustainable development of the entire Rhine ecosystem, Guarantee the use of Rhine water for drinking water production, Improvement of the sediment quality in order to enable the use or disposal of dredged material without causing environmental harm, Overall flood prevention and environmentally sound flood protection, Improvement of the North Sea quality	Supports all countries in the Rhine watershed which are obliged to implement the WFD, which provide input to the 2020 Programme for Sustainable development of the Rhine and especially in Flood Risk Management Joint RBMP
Rhine Basin (Saar & Moselle) Internationale Kommissionen zum Schutze der mosel und der saar (IKSMS)	Germany, France, Luxembourg	1961 (1962)	From 1990: Improvement of Habitats, securing Drinking Water, protection of the North Sea, use of sediments	From 2000 the action programme has included obligations from the WFD Joint RBMP
Rhine Basin (Lake Constance), internationale gewässerschutzkommission für den Bodensee (IGKB)	Switzerland (St. Gallen, Thurgau and Graubünden), Austria, Germany (Bayern, Baden Würtenberg), Liechtenstein	1959	Monitoring, warning system, pressure, recommendation and co-ordination of preventive and remediation activities, advisor to member states, public information	Joint RBMP

Oder, International Commission for the Protection of the Odra River against Pollution	Poland, Germany, Czech Republic, European Community	1996	Pollution Prevention and reduction, achieve the most natural aquatic and littoral ecosystems possible, ensure use for production of drinking water from bank filtrate and the use of its water and sediments in agriculture, Flood risk management, co-ordination of the implementation of the Water Framework Directive in the Oder river basin.	Joint RBMP
Danube, International Commission for the Protection of the Danube river (ICPDR) Implementing "Convention on the Protection and Sustainable Use of the Danube River" (Danube River Protection Convention, DRPC)	Austria, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, the Slovak Republic, Slovenia, Ukraine and the Federal Republic of Yugoslavia.	1998 (DRPC)	Rehabilitation of wetlands, wastewater treatment plants, process-related measures, development of a unified River Basin Management Plan, harmonised methodology for arriving at the water balance of the riparian States	Development of joint River Basin Management Plan (RBMP) River basin characteristics, impact of human activities and economic analysis required under Article 5, Annex II and Annex III, and inventory of protected areas required under Article 6, Annex IV of the WFD
Elbe, Internationale Kommission zum Schutz der Elbe (IKSE)	The Czech Republic, Germany, the European Community	1990	Improve water use for drinking, and agriculture, ensure natural eco-systems and decrease impact on North Sea, Flood risk management, monitoring,	Analysis and characteristics of the River Basin

Rhone Basin (Lake Geneva), Internationale Kommission Zum Schutz Des Genfersees	France, Switzerland	1962	To survey the evolution of the water quality of Lake Geneva and its tributaries Advises on pollution, co-ordination of Water policies, promotes public awareness	
Rhone Basin (Scheldt), internationale Scheldecommissie (ISC)	France, Wallonnese Region, Flemish Region, Bruxelles-Capital Region, and the Netherlands	1995 (1998)	Water Quality improvement and protection	Joint RBMP
Meuse, Commission Internationale pour la Protection de la Meuse (CIPM) Replaces the Charleville-Mézières Agreement from 1994	Wallonne Region, Netherlands, France, Federal Republic of Germany, the Flemish Region, the Brussels Capital Region, Belgium and Luxembourg	2002	Co-ordination of obligations under the WFD Flood Risk management and Warning system.	Co-ordination of obligations under the WFD Joint RBMP
Shannon, North Western and Neagh Bann	Irland, North Ireland		No Commission	Three joint RBMP for the individual River Basins
England Scotland Crossborder	England, Scotland		No Commission	Joint RBMP

Douro, Tejo, Guadiana, Minho-Lima	Spain, Portugal	1998	Commission Convention about the co-operation for the protection and sustainable use of the waters of Portuguese-Spanish hydrological basins and additional protocol	
Tenojoki-Paatsjoki	Finland, Norway, Russia			
Vuoksi/Lake Ladoga-Neva River	Finland, Russia	1972		Separate RBMPs
Narva River/Lake Peipsi	Estonia, Latvia, Russia	1997		Separate RBMPs
Kemijoki	Finland, Russia	1964		Separate RBMPs

^{*} Year signed

Sources: WebPages of the individual River Commissions (see References), Atlas of International Freshwater Agreements and Nielson *et al* (2004)

Trilateral Co-operation on the protection of the Wadden Sea	Netherlands, Germany and Denmark	1978	Co-ordination of policies and activities, and integration of nature conservation and human use on the basis of the common targets and the catalogue of measures for achieving the targets	Implementation of Bird Directive, Habitat Directive, Ramsar Convention and the UNESCO Man and Biosphere Reserves (MAB) programme, OSPAR, IMO, etc.
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Source: Wadden Sea http://cwss.www.de/

The WFD will help to mitigate the effects of floods and to establish monitoring and information centres to improve the preparedness of the national authorities.

As a part of the WFD the MS, according to Art. 3, 8 "shall provide the Commission with a list of their competent authorities and of the competent authorities of all the international bodies in which they participate at the latest six months after the date mentioned in Article 24. For each competent authority the information set out in Annex I, shall be provided."

3.1 European Union

3.1.1 Water Framework Directive

The WFD is laid out in Directive 60/2000/EEC. Council of the European Communities. 2000. Directive 2000/60/EC of the European Parliament and of the Council Establishing a Framework for Community Action in the Field of Water Policy. (OJ L 327, 22/12/2000, p. 1) as amended by European Parliament and Council Decision 2455/2001/EC (OJ L 331, 15/12/2001, p.1).

In addition, a number of official documents, comments and daughter directives support its implementation.

The European Water Directors developed an Implementation Strategy for the WFD, in recognition that MS would face some similar problems, however emphasising that the document is for guidance and that MS have the full competence in the implementation. The co-ordination agreed by the EU Water Directors is carried out in 1. Strategic co-ordination groups, 2. Working groups (Analysis pressure and impact, Heavily modified water bodies, REFCOND rivers and lakes, Reference conditions coastal waters, Intercalibration) and 3. Advisory bodies (Economic analysis, Monitoring, Assessment and classification of groundwater, Best practice in River Basin Planning, GIS).

The timeframe for the Implementation of the WFD (WebPages of DG Environment, Jan 12th 2005):

- Directive enter into force (2000) (art. 25)
- Transposition (2003) (art. 23)
- Define basins, appoint Competent Authorities (2003) (art. 3)
- Characterisation of basins: pressures, impacts and economic analysis, review impact of human activity (2004-2005) (art. 5)
- Monitoring network (2006) (art.8)
- Public Consultation (2006) (art. 14)
- Commence monitoring programmes (2007)
- Present draft RBMP (2008) (art. 13)
- Derive Programme of Measures, finalise RBMP (2009)
- Introduce pricing policies (2010) (art. 9)
- RBMP operational (2012)

- Plan reviewed (2014 –2016)
- Initial deadline for meeting Environmental Objectives (2015) (art. 4)
- First and second management cycles (2021, 2027) (art. 4 and 13)

As some of these deadlines are now approaching and several countries appear to not have met their obligations, the coming period might see a number of court cases against MS. These will also help interpret the obligations laid on the MS.

3.1.2 Administration & Implementation Structures

As noted above, the WFD recognises the differences among MS and the principle of subsidiarity. However, it also describes the need for a common framework of principles and standards, as well as the need to comply with international conventions.

As a *Directive* the WFD is based on EU primary legislation (mainly the treaties). They "bind Member States as to the objectives to be achieved within a certain time-limit while leaving the national authorities the choice of form and means to be used. Directives have to be implemented in national legislation in accordance with the procedures of the individual Member States" (EUR LEX)

In the preamble (14) it is emphasised that the "success of this Directive relies on close cooperation and coherent action at Community, Member State and local level as well as on information, consultation and involvement of the public, including users", and that "the Community should provide common principles and the overall framework for action. This Directive should provide for such a framework and coordinate and integrate, and, in a longer perspective, further develop the overall principles and structures for protection and sustainable use of water in the Community in accordance with the principles of subsidiarity." (18)

Thus one of the important issues in the administration and implementation is the balance between the European level institutions and the national/local institutions.

3.1.2.1 EU level institutions

The co-ordination of the implementation of the WFD and the decision-making on 'daughter' directives are bound by current mechanisms for administration and decision-making. The following give a very brief account of the most relevant procedures and institutions.

First, the relationship between the EP, EC and CEC is guided by the Treaty, and currently negotiated in relation to the Constitution. In relation to the WFD, it is likely to be mostly relevant to the decision on daughter directives including Pollution and Water Use Directives and the negotiation of lists of substances, for example under REACH (see

below). It might also be important in enhancing the direct relationship between the CEC and the MS in the implementation process.

Second, the co-ordination and decision-making in the Commission in relation to environment and more specifically the implementation of the WFD and ensuring the integration of policies.

The review of the co-ordination will be deepened and detailed by the interviews with policy makers planned for later implementation. The analysis of the attempts to establish better co-ordination and integration of environmental polices in the Commission has so far been rather pessimistic. (Jordan *et al*, p.9)

In the CEC, DG Environment is responsible for ensuring that the MS comply with the legal requirements of the water directives and they meet international obligations, and they can check deadlines and procedural requirements. The CIS further state that;

"...DG Environment will pursue a further integration into other Community Policies of the specific requirements of the Water Framework Directive as well as the general perspectives of Community water policy." (CIS, 2.7)

This formulation risks a continuation of the alleged one-sided commitment to integration.

The Community is responsible for a number of framework developments in the WFD and "must develop common principles and co-ordinate MS efforts (Preamble 23) and pursue art. 174 of the Treaty." (on Community Policies on the Environment).

In relation to the CIS, the Commission the Commission established three multistakeholders' Consultative Fora, one on priority substances, one on groundwater and one on reporting. These fora include participants from Member States, stakeholders, NGO's and outside experts. (CIS2, p.4)

The Commission / DG ENV will be the leader of WG 2.D (Reporting). It will be assisted by a European Steering Team involving the following bodies: COM / JRC, COM / EUROSTAT, EEA. The DG Env also participates in the Steering group together with WG 2B (Spain and France) for the Joint Research Centre (JRC) of the European Commission, which acts as a focal point for the pilot river testing and will report to the WG about the progress

The MS are responsible for monitoring and reporting, and for ensuring the content and accuracy of data.

3.1.2.2 River Basin approach

The WFD devices the design of River Basin Authorities (RBAs) based on ecosystems (that is river basins or catchment areas). The implementation of the WFD implies that the

administration of water and wetlands are divided between *catchment* or *river basins*. This in principal changes traditional approaches to water planning and regulation toward an integrated approach, and push forward a broad understanding of all the factors affecting ecological quality, and the behaviour of water within catchment areas (Griffiths). Although this kind of administrative structure is not entirely new in Europe (e.g. UK had a similar structure for several years, but has now abandoned it) it will affect many existing structures and institutions. In addition, some of the catchment areas cross national borders, requesting joint RBMP (See section 2.1 above).

One of the advantages of the River Basin approach is that it integrates different interests and externalities in one planning institution. WFD is designed to integrate water-related goals into development decisions and introduces a number of new instruments at MS/RBA-level: Costing/pricing, zoning (protected areas (Bathing, drinking sources, habitats, euthorphication/nitrates sensitive zones), permitting and authorisation of all activities impacting water quality). (Kallis and Briassoulis)

Article 3.1 states that "member states shall identify the individual river basins lying within their national territory and, for the purposes of this Directive, shall assign them to individual river basin districts". Furthermore, article 3.2 says: "Member states shall ensure the appropriate administrative arrangements, including the identification of the appropriate competent authority, for the application of the rules of this Directive within each river basin district lying within their territory". This means that each member state has an obligation to construct an administrative structure in accordance with these demands. These *river basin districts* must fulfil the following demands:

- they must be organised around one or more river basins
- they must have a size that make them able to accomplish the tasks that are stated in the WFD

Besides from these demands it is left to the single Member State to decide how to organise the districts. Furthermore, if such authorities already exist a member state is fully entitled to appoint the tasks of the WFD to these authorities (i.e. the member states do not *have to* create new authorities). It is even considered to be in accordance with the directive if one single authority is given the full responsibility of the fulfilment of the demands. The deadline for the appointment of the responsible authority was December 22, 2003. The member states are obliged to inform the Commission about the appointment on June 22, 2004 at the latest.

The directive imposes several tasks to the MS and RBAs in the river basin districts. The MS must provide a characterisation of the river basin, including pressures impacts and economic analysis (art. 5), Establish monitoring network (art. 8) and Public consultation (art 14), etc

Draft river basin management plan (2008) art. 13

If necessary to achieve objectives, the WFD framework allows the development of stricter permit standards, water demand management programmes, and requirement of 'good farming practices', etc.

3.1.2.3 Qualitative or quantitative

The WFD has the main objective to "maintain and improve the aquatic environment in the Community" (preamble 19) and achieve a "good" status of all water bodies avoiding deterioration of ecosystems. The directive is primarily concerned with water quality and less with quantity. The latter has been interpreted as a water resource management question, where the Member States have veto power in the European Council on all decisions, whereas most other decision in environment can be agreed with majority voting. (Barth p. 103, Kaika and Page)

3.1.2.4 Participation and stakeholder involvement

The WFD stresses the importance of public information and involvement in the decision-making process, demanding changes to the decision-making system of a number of MS. "Member States shall encourage the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the river basin management plans." (Art. 14)

"To ensure the participation of the general public including users of water in the establishment and updating of river basin management plans, it is necessary to provide proper information of planned measures and to report on progress with their implementation with a view to the involvement of the general public before final decisions on the necessary measures are adopted." (Preamble 46)

In terms of local implementation, because the strength of the directive to a large degree depend on the MS, the pressure from IOs and NGOs becomes important. The WFD however do not have any provisions in terms of funding for the implementation of procedures, and the compositions of the RBAs are also up to the MS (Kallis and Briassoulis). Only the Commission Conferences mentions specific participants:

"The Commission shall convene when appropriate, in line with the reporting cycle, a conference of interested parties on Community water policy from each of the Member States, to comment on the Commission's implementation reports and to share experiences. Participants should include representatives from the competent authorities, the European Parliament, NGOs, the social and economic partners, consumer bodies, academics and other experts." (Article 18, 5)

3.1.3 Regulation

The preamble of the WFD states that "Full implementation and enforcement of existing environmental legislation for the protection of waters should be ensured. It is necessary to ensure the proper application of the provisions implementing this Directive throughout the Community by appropriate penalties provided for in Member States' legislation. Such penalties should be effective, proportionate and dissuasive" (53).

The WFD outlines several tools for regulation water use and pollution, applying both market based and more control based tools for example through water pricing and setting of standards. Below the report look at some of the main directives related to the WFD in EU legislation.

3.1.3.1 Water pricing

One of the issues that were debated vigorously during the negotiation of the directive was the role of economics and water pricing. (Page and Kaika) During the last decade valuation and pricing of environmental goods have been increasingly debated as a mean to integrate environment and economics, for implementing international environmental trade permits (Kyoto), and for example as part of the important underlying polluter pays principle. As noted in the Preamble WFD should apply the "principle of recovery of cost for water services, cost associated with damage or negative impact on the aquatic environment" (38)

The water pricing is connected to the 'combined approach' to estimating pollution and the monitoring set-up. It also conflicts with a number of interests in the water user sectors.

By 2010 "Member States shall take account of the principle of recovery of the costs 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" (Art. 9.1).

An important document for the general implementation of Water pricing is the Communication on Pricing Policies for Enhancing the Sustainability of Water Resources, COM(2000)477.

3.1.3.2 Standards and controls

The WFD (Articles 1, 4.1 (a) and (b)) obliges Member States to refrain from actions that would lower the ecological, chemical or quantitative status of any water body. This includes not only the new standards set by the WFD, but also all existing water standards provided or required by other EU legislation. This is normally known as the "no-deterioration" duties of the WFD.

The WFD defines different status for water that should be obtained in the Catchment areas (art. 4, 7, 16 and Annexes). Water quality should at least meet standards developed in the Drinking Water Directive and the 1998 amendment. In relation to decision-making water quality is decided by majority vote, whereas water quantity requires unanimity.

The WFD combines two traditionally separate approaches to pollution control named the 'combined approach' (art. 16), the environmental quality standards, which determine upper levels of pollution in eco-systems and emission limit values which determines limits for release of pollutants. Emission limit values are laid out in the Nitrates Directive, the IPPC directive, the Urban Wastewater directive and the dangerous Substance Directive. In addition, a list of 32 priority substances is defined as part of the WFD. The monitoring systems to be implemented through the RBAs are important in ascertaining the development in status.

The amendment Decision No 2455/2001/EC has been adopted as Annex X to WFD, establishing "the list of priority substances including substances identified as priority hazardous substances, provided for in Article 16(2) and (3) of Directive 2000/60/EC". This replaces part of the Dangerous Substances Directive (see below).

The main directives influencing or affected directly by the WFD are listed below, including their geographic context and timeframe as well as the institution responsible for implementation and regulative tools used. (The Water Framework Directive is included for comparison)

	Geographic extension	Time frame	Notes
Water Framework Directive (60/2000/EEC)	River Basins/Catchments	2015 (Objective s reached)	MS and Commission (DG ENV)
Surface Water (75/440/EEC)	Surface fresh water used or intended for extraction of drinking water	2007 (repeal)	Strongly linked to Nitrates and Drinking Water Directives as well as 79/869/EEC on methods
Bathing Water (76/160/EEC)	Bathing water, except therapeutic and swimming pools Meaning running or still fresh waters or parts thereof and sea water, in which:		Include demand for public information
	- bathing is explicitly authorised by the competent authorities of each member State, or		
	- bathing is not prohibited and is traditionally practised by a large number of bathers		
Dangerous Substances	Inland Surface Waters, including:	2013	Linked to Conventions on

(76/464/EEC)		(non a a 1)	wissen must sation a
(76/464/EEC)	 territorial waters internal coastal waters Groundwater 	(repeal)	river protections List I: Substances except, harmless or fast converted bio-substances (to be eliminated) List II: substances with deleterious effect but confined (to be reduced)
Fish Water (78/659/EEC)	Fresh waters designated by MS Not natural or artificial fish ponds for intensive fish farming	2013 (repeal)	
Birds Directive (79/409/EEC)	SPAs for bird habitat, as part of the Natura 2000 network		Completely harmonised with Habitat Directive
Shellfish Water (79/923/EEC)	Shellfish waters designated by MS	2013 (repeal)	Include list of parameters and link to Dangerous substances Directive
Protection of Groundwater (80/68/EEC)	All groundwater: water below surface and in contact with soil Not domestic effluents from isolated dwellings with small list I+II content	2013 (repeal)	List I (direct discharge): automatically prohibited List I (other): prevent discharge and demand authorisation List II: limit discharge
Drinking Water (80/778/EEC, 98/83/EC)	Water intended for drinking water, regardless of origin. 1998 amendment includes water for the food industry Not including mineral water and water intended for medical uses		
Environment Impact Assessment (85/337/EEC)	Annex I and II		(See discussion in section 4)
Sewage Sludge (86/278/EEC)	Sludge from treatment used in agriculture and effect on environment		Regulates use of sewage sludge in agriculture 75/442/EEC and 78/319/EEC
Council Directive on the deliberate release into the environment of genetically modified organisms (90/220/EEC)			
Urban Wastewater (91/271/EEC)	Waters recipient of Urban Wastewater Specific regard to s to 'Sensitive areas' as id by MS (Annex II) Includes the Sea		Disposal of sludge to surface waters phased out
Hazardous wastes (91/689/EEC)			Concerns sludge from water purification plants and substances which interacts with water

Plant Protection Products (91/414 (EEC)	Export and import, use and control of plant protection products		Aim is to protect plants from weeds but also from plant products List of active substances Directive 90/220/EEC
Nitrates (91/676/EEC)	Vulnerable Zones around Waters affected by pollution and waters which could be affected by pollution of nitrogen compounds from agricultural discharge Includes Territorial Waters and protection of North Sea		Waters included in 75/440, 79/869, 80/778 Pollutant resulting from livestock effluents and excessive use of fertilisers.
Habitats (92/43/EEC)	Same as WFD (Natura 2000 sites)		(see description below)
Integrated Pollution Prevention Control (96/61/EC)	Environment as a whole Integrated control of emission into different recipient environmental media Annex I (Principles for Industrial activity)		Sustainable Development Polluter pays principle Environmental Quality standard Emission limit value BAT
Major Accidents (Seveso) (96/82/EC)	Establishments where dangerous substances are present (Annex I). Include whole area under control also infrastructure, e.g. pipelines		Preserve and protect environment from major accidents Risk and accident management
Directive 2003/4/EC on public access to environmental information	Environmental information in EC	repeal of 90/313/E EC	Information transfer Access to and right to information Dissemination
In addition the following agree	ements:		
REACH EU Chemicals policy	To replace existing chemical legislation		REACH is currently being negotiated
HELCOM	Marine environment of the Baltic Sea		Protect from all sources of pollution
OSPAR	Marine Environment of north-east Atlantic		Council Decision 98/249/EC Includes pollution carried by rivers, accidental or deliberate marine pollution, Oil and gas, eutrophication, hazardous substances
Barcelona	Mediterranean Sea		Dumping and pollution from ships and aircraft, land-based pollution and exploration/exploitation
Stockholm POP Convention			Aim to eliminate the production and use of the internationally recognised

	POPs (Persistent Organic
	Pollutants

A number of these directives are replaced by the WFD (as listed in art. 22). The repeal is phased to ensure that at least the same level of protection is afforded to water quality. Below is an overview of directives to be repealed and the planned date of repeal with a link to the process in the WFD.

Directive	Planned date of repeal	Coverage in WFD
Surface Water (75/440/EEC),	2008	
Dangerous Substances (76/464/EEC),	2013	Annex 10 (Decision No 2455/2001/EC)
Fish Water (78/659/EEC),	2013	
Shellfish Water (79/923/EEC),	2013	
Protection of Groundwater (80/68/EEC),	2013	
In addition:		
Council Decision establishing a common procedure for the exchange of information on the quality of surface fresh water in the Community (77/795/EEC)	repeal 2007	
Council Directive 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)	repeal 2007	

The WFD differentiate requirements for the quality of water and the interventions based on areas designated as protected areas. The WFD protected areas are mainly based different criteria as listed below related to the relevant Directives.

Regulation	Protected areas
The Water Framework Directive	
The Bathing Water Directive (76/160/EEC)	Areas that are appointed/selected as bathing water areas
The Birds Directive (79/409/EEC)	Areas that are appointed/selected as SPAs (Natura 2000)
The Drinking Water Directive (80/778/EEC) as amended by	Areas that are appointed/selected for drinking water reclaiming

Directive (98/83/EC)	
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	Areas that are appointed/selected as being <i>nutrient</i>
Directive (91/271/EEC)	sensitive (Sensitive areas)
The Plant Production Products	
Directive (91/414/EEC)	
The Nitrates Directive (91/676/EEC)	Areas that are appointed/selected as being <i>nutrient</i>
	sensitive (Vulnerable areas)
The Habitats Directive (92/43/EEC)	Areas that are appointed/selected within Natura 2000
	zones (see description below)
The Integrated Pollution Prevention	
Control Directive (96/61/EC)	

Annex IX outlines the following directives to establish emission limit values and environmental quality standards:

- The Mercury Discharges Directive (82/176/EEC) (1);
- The Cadmium Discharges Directive (83/513/EEC) (2);
- The Mercury Directive (84/156/EEC) (3);
- The Hexachlorocyclohexane Discharges Directive (84/491/EEC) (4); and
- The Dangerous Substance Discharges Directive (86/280/EEC) (5)

3.1.4 Brief description of the directly related directives

3.1.4.1 Water use Directives:

The directive concerned with water use are generally based on Quality objectives.

Council of the European Communities (CM) (1975). Directive concerning the quality of surface waters intended for the abstraction of drinking water (75/440/EEC). Official Journal, L194, 26.

• The WFD replaces this directive. The repeal is phased.

Council of the European Communities (CM) (1976a). Directive concerning the quality of **bathing waters** (76/160/EEC). Official Journal, L31, 1.

10 % of EU coastal bathing waters and 28 % of EU inland bathing beaches still do not meet (non-mandatory) guide values even though the EU Bathing Water Directive was adopted almost 25 years ago. (Europe's environment: the third assessment Summary, EEA, 2003, p. 45. (Accessed 17th January 2005 on http://reports.eea.eu.int/environmental_assessment_report_2003_10-sum/en/kiev_sum_en.pdf

Council of the European Communities (CM) (1978). Directive concerning the quality of fresh waters needing protection or improvement in order to support fish life (**Fish waters**) (78/659/EEC). Official Journal, L222, 1.

• The WFD replaces this directive. The repeal is phased.

Council of the European Communities (CM) (1979). Directive concerning the quality of **shellfish waters** (79/923/EEC). Official Journal, L281, 47.

• The WFD replaces this directive. The repeal is phased.

Drinking Water Directive, Council of European Communities (CM) (1980a). Directive concerning the quality of **water for human consumption** (80/778/EEC). Official Journal, L229, 11. Amended 98/83/EC

3.1.4.2 Water Pollutant Directives:

Based on permissible levels of discharges

Two lists of harmful substances: List 1 where emission limits and quality standards were to be agreed by EC ministers and List 2 where MS should come up with a programme for reduction. For ground water rules where more stringent and List I substances were prohibited from reaching aquifers.

According to Annex I, 1.4 of the WFD "collect and maintain information on the type and magnitude of the significant anthropogenic pressures to which the **surface water** bodies in each river basin district are liable to be subject".

Point sources:

- (i) Articles 15 and 17 of Directive 91/271/EEC;
- (ii) Articles 9 and 15 of Directive 96/61/EC (1);
- (iii) Article 11 of Directive 76/464/EEC; (initial RBMP)
- (iv) Directives 75/440/EC, 76/160/EEC, 78/659/EEC and 79/923/EEC (initial RBMP)

Diffuse sources:

- (i) Articles 3, 5 and 6 of Directive 91/676/EEC (4);
- (ii) Articles 7 and 17 of Directive 91/414/EEC;
- (iii) Directive 98/8/EC;
- (iv) Directives 75/440/EEC, 76/160/EEC, 76/464/EEC, 78/659/EEC and 79/923/EEC. (first RBMP)

Council of the European Communities (CM) (1976b). Directive concerning pollution caused by **dangerous substances** discharged into the aquatic environment (76/464/EEC). Official Journal, L129, 32.

- Has been the major Community instrument for the control of point and diffuse discharges of dangerous substances.
- The WFD replaces this directive. The repeal is phased. The WFD amendment Decision No 2455/2001/EC as Annex X to WFD, establishes the list of priority substances, including the priority hazardous substances required by the WFD, taking into account the recommendations referred to in Article 16(5) of WFD.
- similar provision to those of this directive are made in the WFD, an in addition:
 - instead of the parallel approach of 76/464/EEC, where member states could choose between using Environmental Quality Standards or Emission Limit Values, they are know required to apply both
 - "de minimus" provision"
 - procedure for specifying priority list and replacing 76/464/EEC substances
 - MS will set the general physio-chemical parameters to protect biological conditions in the specific context, but for toxicity chemicals the list of substances will be set according to EU wide protocol similar to lists under 76/464/EEC

Council of the European Communities (CM) (1980b). Directive concerning the **Protection of groundwater** against pollution caused by certain dangerous substances (80/68/EEC). Official Journal, L20, 43.

The WFD replaces this directive. The repeal is phased. The following Directive was put forward in 2003:

Commission of the European Communities (CEC) (2003) 550 final, Directive of the European Parliament and of the Council on the protection of **groundwater** against pollution.

The WFD introduces, for the first time, quality objectives, obliging Member States to monitor and assess groundwater quality on the basis of common criteria and to identify

and reverse trends in groundwater pollution. The Directive is to ensure that ground water quality is monitored and evaluated across Europe in a harmonised way. In the words of the Commission "the proposed approach to establishing quality criteria takes account of local characteristics and allows for further improvements. It represents a proportionate and scientifically sound response to the requirements of the Water Framework Directive related to the assessment of the chemical status of groundwater and the identification and reversal of significant and sustained upward trends in pollutant concentrations". (Presentation on http://europa.eu.int/comm/environment/water/water-framework/groundwater.html accessed on January 17th 2005)

Sewage Sludge (86/278/EEC), Council of the European Communities. Directive on the protection of the environment and in particular of the soil, when sewage sludge is used in agriculture (86/278/EEC)

Council of the European Communities(CEC) (1991a). Directive concerning **urban** wastewater treatment (91/271/EEC). Official Journal, L135, 40–52.

- Tries to tackle one of the main sources of water quality deterioration: pollution from Urban Wastewater.
- Sets clear infrastructure targets for wastewater treatment for all European urban settlements for different classes of sensitivity of the receiving waters
- Sets minimum standards of treatment for sewerage systems ad sewage treatment works
- Pollution prevention control

Council of the European Communities(CEC) (1991c). Directive concerning the placing of **plant protection products** on the market (91/414/EEC). Official Journal, L230.

- Indirect effect on water quality and management
- Art. 16,6 "Where product controls include a review of the relevant authorisations issued under Directive 91/414/EEC and Directive 98/8/EC, such reviews shall be carried out in accordance with the provisions of those Directives."

Nitrate Directive (Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources). European Commission: Brussels. Official Journal, L375, 1.

• Targets one of the main sources of water quality deterioration; pollution form pollution from nitrates from agricultural run-off.

• Focus on establishing best agricultural business programmes to control the use of nitrates in agriculture

Council of the European Communities. Directive concerning **Integrated Pollution prevention and control** (96/61/EEC)

- Key regulatory initiative controlling emissions from major industrial sectors to all environmental media. Does not cover infrastructure projects.
- WFD integrates and build on this Directive and also advocates a combined approach to pollution prevention and control
- Indirect effect on water quality and management

Directive 98/8/EC concerning the placing of biocidal products on the market

Art. 16,6 "Where product controls include a review of the relevant authorisations issued under Directive 91/414/EEC and Directive 98/8/EC, such reviews shall be carried out in accordance with the provisions of those Directives."

3.1.4.3 Environmental Protection

EU Nature conservation policy is based on two main pieces of legislation - the Birds directive and the Habitats directive - and benefits from a specific financial instrument - the LIFE-Nature fund.

Habitats (92/43/EEC), Council of the European Communities(CEC) (1992). Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC). Official Journal, L206, 7–50. ("Habitats Directive")

- The Habitats Directive aims to protect wildlife species and their habitats. Each Member State is required to identify sites of European importance and to put in place a special management plan to protect them, combining long-term preservation with economic and social activities, as part of a sustainable development strategy.
- Indirect effect on water quality and management
- Article 6 of the Habitats Directive requires Member States to establish the necessary conservation measures involving, if need be, appropriate management plans.
- Natura 2000, the Habitat sites, together with those of the Birds Directive, make up the Natura 2000 network. The Natura 2000 network is split up in 7 biogeographical regions and comprises more than 18 000 sites, covering

over 17% of EU territory. The requirements of the WFD are related to the Natura2000 sites

• Natura2000 is co-financed through the Commission's LIFE programme (set up in 1992 to develop EU environmental policy) and other Community finance instruments.

Council of the European Communities. Directive on the conservation of wild birds (79/409/EEC)

The "**Birds Directive**" identifies 181 endangered species and sub-species for which the Member States are required to designate Special Protection Areas (SPAs). Over 3 000 SPAs have been designated. The Directive is completely harmonised with the Habitats Directive

3.1.4.4 Other

For the following three directives, please see discussion in section 4 below.

Environment Impact Assessment (85/337/EEC)

Major Accidents Council of the European Communities. Directive on the control of major-accident hazards involving dangerous substances (96/82/EEC)

The SEA Directive (Directive 2001/42/EC) has strengthened the provisions for ex-ante environmental evaluation programmes. SEA is mandatory in the areas of Water Management. Critique that Guidelines provided for profiling and conducting the SEA are optional and the exact procedures to follow are not specified (Kallis)

4 Decision and co-ordination mechanisms at EU level

4.1.1 Co-operation/Integration between sectors

There has been a number of moves towards stronger co-operation and integration of environmental policies with other sectors at the EU level. The three main ongoing frameworks or processes include the article 6 of the Treaty, the Cardiff Process and the Lisbon Agreement. Their processes are ongoing and might strengthen or hinder the implementation of the WFD.

4.1.1.1 Art. 6 of EC-treaty

In the Amsterdam treaty it was underlined that "environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development."

4.1.1.2 Cardiff and Open Method of Co-operation (OMC)

A process on environmental policy integration and review of environmental policy, started in Cardiff. The agreement requires different Council formations to integrate environmental considerations into their respective activities, putting article 6 of the EC Treaty into practice. It is split into three waves (Jordan *et al*, p.9);

- First wave Agriculture, Energy and Transport; (June 1998)
- Second wave Development, Industry and Internal Market; (December 1998)
- Third wave Ecofin, General Affairs (or GAC) and Fisheries. (June 1999)

The integration of the water policies with these sector policies or activities are discussed briefly in section 4 below.

4.1.1.3 Lisbon agreement

The Lisbon agreement focuses on society and economy, environment was not initially involved, but was included by the Swedish Presidency. The Lisbon Strategy "is a commitment to bring about economic, social and environmental renewal in the EU. In March 2000, the European Council in Lisbon set out a ten-year strategy to make the EU the world's most dynamic and competitive economy. Under the strategy, a stronger economy will drive job creation alongside social and environmental policies that ensure

sustainable development and social inclusion" (CEC, http://europa.eu.int/comm/lisbon_strategy/index_en.html, Jan. 17th 2005)
Results include initiatives for building environmental lifecycle policies and an action plan for development of environmental technologies.

The Lisbon Strategy will be reviewed in 2005. The situation of the sustainable development leg of the strategy is expected to get some attention.

4.1.1.4 The WFD

The WFD further in the Preamble 16 stresses that + preamble 12 "integration of protection and sustainable management of water into other Community policy areas such as energy, transport, agriculture, fisheries, regional policy and tourism is necessary. This Directive should provide a basis for a continued dialogue and for the development of strategies towards a further integration of policy areas. This Directive can also make an important contribution to other areas of co-operation between Member States, inter alia, the European spatial development perspective (ESDP)".

In terms of reversed integration. One of the important moves is the increased demand for economic analysis and cost-recovery within the environmental sector. This is reflected in the WFD in art. 9, which requires cost recovery from water services and cost effectiveness.

5 Legislation and agreements from other sectors

Catchment management is based on a system approach to the management of water resources. The mainstreaming of policies and their integration with and relation to other sectors are important for the successful implementation. They are influenced by a large number of directives and funding possibilities as well as several agreements and policies relating to sustainable development.

5.1.1 CAP (Common Agricultural Policy)

Until recently the largest post on the EU budget: 55% in 1998 to 46% in 2006 and in Agenda 2007 for the first time not the largest spending post proposed. Focus has shifted from production to rural development, at the same time the reform of CAP agreed in June 2003 means that more money will be available for the Rural Development programme (RDP), as direct payment for bigger farms is reduced. (COM(2003), Natura 2000). This pillar is still a quite small part of the budget though.

It has a significant influence on Catchment Management how resources are prioritised, and the structure and conduct of the agricultural sector is important as pollutants from agricultural production has surpassed other sources (ENDS (2005a & 2000b), Spanish Government)

Until now the CAP has encouraged agricultural intensification, spatial expansion, and high-irrigated crops as the payment as they have a higher yield per hectare, which payments are based on together with land area. The industrialisation and specialisation resulting from the intensification of agriculture is considered to be responsible for most of the damage to the environment (Pezaros, p. 1). Subsidised investments in waterworks and kept cost of water low leading to overuse (Kallis and Briassoulis)

In the 2003 reform of CAP the vast majority of the CAP's direct payments will no longer be linked to production. Instead a 'single farm' payment will replace most of the existing payments under the CAP as of 2005. (Natura 2000)

In addition the subsidies will be reduced and cross-compliance will be demanded (see below). The WFD will influence development with the requirement of permits for using water, permits for using agrochemicals that pollute waters, water charges, and investments in reducing nitrates. Also the possibility of instituting "good farming practises" may support regulation.

The River Basin Planning and Management approaches require that most physical interventions funded through CAP and CSP must have authorisation and are included in the River Basin Plan

5.1.1.1 Rural Development Policy

The scope of rural development support will be widened to introduce new measures and to strengthen existing ones. These changes will apply as of 2005, but it will be for Member States and regions to decide which measures they wish to take up in their national or regional Rural Development Programmes.

Member States have also been given an opportunity to increase the EU co-financing rates for agri-environmental measures up to 85% for the new Member States and Objective 1 areas of the EU-15, and up to 60% in the rest of the EU (the maximum co-financing rate used to be 75% and 50% respectively). This could help to address the problems of insufficient matching funds from national or regional budgets.

It will also be possible to provide temporary and digressive support to cushion the effects of complying with particularly demanding environmental, hygiene and animal welfare standards imposed by EU legislation. Aid will be payable on a flat rate basis (max €10,000 a year per holding) and will be digressive for a maximum of 5 years.

Article 16 aims to support farmers to meet the provisions of the Birds and Habitats Directives, for instance in maintaining or adjusting their farming practices to the conservation needs of the Natura 2000 sites. The flat rate for AERs in the past was €200/ha per year, but, as a result of the CAP reform, it is now possible to increase the premium to up to €500/ha/year in duly justified cases. This payment will also be digressive starting at €500 and ending at €200, spread over a period of 5 years. (Sources: Natura 2000 and

http://europa.eu.int/comm/agriculture/capreform/indes en.htm)

5.1.2 Regional Development and Infrastructure

In addition to the agricultural policies, the question of integration of the WFD concerns in other sector areas is dependent on Regional development and planning of infrastructure. This includes highways, water transfers, dams, networks, urbanisation, tourism development, water demand and pollution.

The current framework for the European Regional Policy runs from 2000 to 2006.¹ It is based on three priority objectives for increasing cohesion between the regions:

- **Objective 1**: aid to regions behind in development, Outermost regions, Northern Ireland: Peace II Programme (2000-2004)
- Objective 2: re-launch of regions in conversion
- **Objective 3:** support for the education, training and employment policies and systems

¹ CEC (1999) Council Regulation (EC) no 1260/1999 laying down general provisions on the Structural Funds, Council of the European Communities, Official Journal of the European Communities, L 161/1 (26.6.1999)

(For instruments see section 4.1.4.2 below on Structural Funds)

Regional policy is divided into different spatial systems of reference: administrative regions based on the NUTS system (Nomenclature of Territorial Units for Statistics system). NUTS is sub-divided into 3 levels of territories with 1381 units². This division has been used since 1988 in allocation of the Structural Funds.

In terms of social impact the WFD might, by eliminating subsidies and as it entails significant implementation costs, impact negatively on Cohesion as lagging regions are often in worst "initial situations", and thus have many more tasks at hand (Kallis and Briassoulis)

5.1.2.1 Agenda 2000

Agenda 2000 is a reform of the structural funds (see below). The main objectives of the Agenda 2000 programme are to strengthen Community policies and to give the European Union a new financial framework for the period 2000 - 2006 relating to the following priority areas:

- continue of the agricultural reform, including taking environmental considerations into account
- increase the effectiveness of the Structural Funds and the Cohesion Fund by greater thematic and geographic concentration of projects
- strengthen the pre-accession strategy through ISPA and SAPARD
- adopt a new financial framework for the period 2000-06

Agenda 2007 is the up-coming financial perspective running from 2007 to 2013. First draft was launched in 2004 and must be approved before the end of 2005. One of the significant changes so far is the downsizing and restructuring of the support for agriculture.

² 78 NUTS level 1 territorial units: the German Länder, regions in Belgium, Denmark, Sweden, Ireland, Wales and Scotland, the areas included in the spatial planning study ZEAT in France, and other large regions.

²¹⁰ NUTS level 2 territorial units: the autonomous regions in Spain, French regions and overseas departments (DOM), the Belgian and Dutch provinces, the Italian regions, the Austrian Länder, the German 'Regierungsbezirke' (primary administrative sub-division of a Länd) etc.

¹⁰⁹³ NUTS level 3 territorial units: the Nomoi in Greece, the Maakunnat in Finland, the Län in Sweden, the Kreise in German, the French departments, and the Spanish and Italian provinces etc. (Source: InfoRegio http://europa.eu.int/comm/regional policy/funds/prord/guide/gu111 en.htm)

5.1.3 Assessment and Cross-compliance

Two of the tools in integrating environment and the different policy sectors are the different Assessment tools and requirements for Cross-compliance.

5.1.3.1 Cross-compliance with environmental legislation

The Structural Funds art. 12, art. 26, art. 41b and art. 36 require that Operations financed by the "...financial instrument shall be in conformity with the provisions of the Treaty, with instruments adopted under it and with Community policies and actions, includingon environmental protection and improvement" and for major projects the Commission shall "appraise... compliance with other Community policies"

In the reform of the CAP the 'single farm' payment will be conditional upon keeping farmland in 'good agricultural and environmental condition' and will be linked to the respect of a number of statutory environmental, food safety and animal welfare standards (i.e. cross-compliance). Thus, only those farms that respect these legal requirements and maintain their farms in 'good agricultural condition' will receive payments. If cross-compliance is not respected, direct payments will be reduced in proportion to the risk or damage caused. Cross compliance becomes compulsory for all payments, all farms receiving direct payments from CMOs should in principle comply with all statutory EU Water standards. (Natura 2000)

However, it will be important to see what the definition of 'good agricultural and environmental condition' will finally be. The role of the farm audits set up to help establish and control cross-compliance at individual farm level will also be central to the success of this measure.

Another consequence of cross-compliance is that Member States are also allowed to make additional payments of a maximum of 10% of the 'single farm' payment, to encourage their farmers to adopt specific types of farming which are important for the environment or for yielding quality products.

5.1.3.2 Assessment

According to article 5, the MS should carry out an analysis of human impact at the latest in 2004. The main Directives in environmental assessment are the EIA Directive, the SEA Directive and the stipulation in the Habitat Directive on "Appropriate Assessment", as well as requirements in the IPPC, and Seveso Directives and the EMAS regulation. (the IMPEL project seeks to integrate the IPPC, EIA and Seveso Directives transposition)

Annex VI of the WFD stipulates that measures required under the EIA Directive (85/337/EEC (amended in 1997 and 2001), is to be included in the programme of measures. The EIA Directive covers activities ranging from industrial to infrastructure projects. It presents procedural elements to be followed such as consultation with the public and relevant authorities and for presenting an environmental impact statement.

The "SEA Directive", Directive 2001/42/EC on the assessment of the effects of certain and programmes on the environment complements EIA at the planning level. The SEA Directive is likely to apply to most RBMP as well as national and Regional Water Resource Strategies. In addition it applies to a number of Land Use planning activities, which should be integrated with the WFD (Sheate *et al*, p.77). A SEA is mandatory for "programmes and plans co-financed by the European Community", but though funds have been withheld, it has been in an ad hoc and inconsistent manner (WWF)

The Structural Fund articles 41b and 26g require "..an ex-ante evaluation of the environmental situation of the region concerned" and that major projects provide "information allowing an evaluation to be made of the environmental impact and the implementation of the precautionary principle and the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay and compliance with the Community rules on the environment"

Below we look at how policies and priorities of the Structural Funds allocation might influence implementation of the WFD.

In addition, Article 16, 2b requires a "targeted risk-based assessment (following the methodology of Regulation (EEC) No 793/93) focusing solely on aquatic ecotoxicity and on human toxicity via the aquatic environment.

5.1.4 Funding

In addition to the assessment tools, the financial frameworks and the incentives given by these are important for the implementation prioritisation of activities and behaviour. The funding of initiatives for implementing the WFD is dependent on the general Community funding tools and national investments. A number of changes have been made over the past decade to improve an environmental beneficial funding. (REF)

In the following some of the main EU funding instruments are briefly reviewed. Especially in countries where national environmental investments are small and environmental policy enforcement is weak, the influence of the community funding in terms of successful implementation is important. However, the different sources of funds all have their own conditions and constraints, which are designed to ensure they deliver against their objectives which are not necessarily along the WFD objectives.

5.1.4.1 Structural Funds

European Regional Development Fund (ERDF): funds projects to improve communications and services. This offers possibilities for co-financing environment programs, and schemes for nature conservation, training and studies/planning, especially in Objective 1 regions (around 70% of the fund's resources). Objective 2 and 3 regions

may partially benefit for limited type of actions like training, promotion of employment opportunities, etc.

European Social Fund: Funds projects in relation to employment and labour market (linked to EQUAL) financial tool for strategic employment policy

European Agriculture Guarantee and Guidance Fund: funds projects in the agriculture sector

The funding instrument for the CAP is the EAGGF (The European Agricultural Guidance and Guarantee Fund). The fund is administered by a committee with representatives of the MS and the CEC.

The Guarantee section support agricultural market organisations and rural development measures outside Objective 1 areas (see below). The Guidance section finances other rural development measures. Especially under the second pillar (rural development support) as discussed above, environmental concerns and investments are taken into account. Through Rural Development, the fund offers support for environmental farming and forestry practices in rural areas, all over the EU territory.

Financial Instrument for Fisheries Guidance: funds projects in the fisheries and aquaculture and reforms of the fisheries sector. The 2000-2006 framework in addition to modernisation and product promotion also places emphasis on the balance between exploitation and resources and especially environmental protection, however it is largely dependent on initiatives with in the sector.

Further smaller Community initiatives under Structural Funds:

URBAN II: sustainable development in the troubled urban districts of the European Union

Although with focus on social and economic regeneration of lacking urban areas it also looks at tackling the concentration of problems in urban areas including environmental problems and for example developing environmentally friendly public transport systems.

EQUAL: transnational programme, which tests new ways to reduce inequality in the labour market

LEADER+: This fund allows for the implementation of integrated rural development programs for selected areas. These programs can include management planning as well as promotion measures for the Natura 2000 sites.

INTERREG III +IIIC: This Initiative allows for transboundary co-operation between Member States and other non EU countries and has been used for the promotion of enhanced management of transboundary sites between Member States and Member States and non-EU countries. It has proved to be an important source of funds although time-limited.

Link between funds and objectives:

	Uniective I	Outside Objective 1 regions	Objective 2	Objective 3	Interreg III	<u>Urban II</u>	<u>Leader +</u>	<u>Equal</u>
ERDF	X		X		X	X		
ESF	X		X	X				X
EAGGF	X	X					X	
FIFG	X	X						

(Source: European Commission Website)

Other Funds

The Cohesion Fund is included under Structural Funds. This fund is available only to four countries, Spain, Portugal, Greece and Ireland and aims to assist these countries making progress in areas like environment and transport. The fund provides support to projects rather than programs. It has also been used to a lesser extent for facilitating some restoration and management projects for Natura 2000 in Ireland.

LIFE III: The LIFE instrument includes three parts LIFE-Environment, LIFE-Nature and LIFE-Third countries. Although the resources available for LIFE are limited compared to ERDF and EAGGF, the instrument has been used by all Member States, and a great number of stakeholders.

5.1.4.2 New member states and applicant countries

The new member states and applicant countries have/have had access to the following funds as well:

- Social Cohesion Funds/ISPA
- SAPARD
- PHARE

6 References

In addition to the review of the official documents and papers as noted throughout the report, the following links and texts have been used in the analysis in accordance with the references given in the text. All legal documents have been downloaded from the Commission of the European Communities Web-site: http://europa.eu.int/comm/

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Links to organisations:

EEA maintains a biodiversity information system at http://eunis.eea.eu.int/ that provides information on species, habitats and sites in the context of European legislation.

Atlas of International Freshwater Agreements http://www.transboundarywaters.orst.edu/publications/atlas/

Danube www.icpdr.org

Elbe Basin http://www.ikse/mkol.de

Geneva (Lake) www.cipel.org

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Meuse Basin, Commission Internationale pour la Protection de la Meuse http://www.cipm-icbm.be

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