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# COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

**European Community Water Policy** 

# Commission Communication to the Council and to Parliament

# **European Community Water Policy**

# Contents

|   |              | page                      |
|---|--------------|---------------------------|
| 1. Introduction   |              | 1                         |
| 2. Water and water policy   |              | 1                         |
| 3. The objectives of a sustainable water policy   |              | 2                         |
| 4.1 Pollution  4.1.1 Point source pollution  4.1.2 Diffuse source pollution  4.1.3 Accidental pollution  4.1.4 Acidification  4.1.5 Eutrophication  4.2 Water Shortages  4.3 Other adverse anthropogenic influences  5. The principles of European Community water policy  5.1 High level of protection  5.2 Precautionary principle  5.3 Preventive action  5.4 Damage to be rectified at source  5.5 Polluter pays  5.6 Integration  5.7 The use of available scientific and technical data  5.8 The variability of environmental conditions in the reg  Community  5.9 Costs/benefits  5.10 The economic and social development of the Comm  balanced development of its regions  5.11 International cooperation | gions of the | 2 3 3 4 4 5 5 5 6 6 6 6 6 |
| 5.12 Subsidiarity   |              |                           |
| 6. Existing EC legislation  |              | 9                         |
| 7 Specific issues in water management   |              | (                         |

| 7.1 The Emission Limit Values approach and the Environmental Quality             |      |
|--|------|
| Objectives approach  | . 9  |
| 7.2 Designation of "Zones"   | . 11 |
| 7.3 Water quantity   |      |
| 7.4 Monitoring requirements  |      |
| 7.5 Reporting obligations  | . 13 |
| 7.6 Transparency, public participation and accountability                        | . 13 |
| 7.7 Integrated water resource management   |      |
| 7.8 River Basin Management   | 14   |
| 8. Discussion  | 15   |
| 9. Outline of a Water Resources Framework Directive                              | 17   |
| 10. The procedural implications  | 19   |
| Existing EC Legislation and Related Community Policy                             | 20   |
| 1. European Community water legislation  | 20   |
| 1.1 The Surface Water Directive  | . 20 |
| 1.2 The Bathing Water Directive  | . 20 |
| 1.3 The Dangerous Substances Directive   | . 21 |
| 1.4 The Information Exchange Decision  | . 22 |
| 1.5 The Fish Water Directive   | 23   |
| 1.6 The Shellfish Water Directive  | 23   |
| 1.7 The Groundwater Directive  |      |
| 1.8 The Drinking Water Directive   |      |
| 1.9 The Urban Waste Water Treatment Directive                                    |      |
| 1.10 The Nitrates Directive  |      |
| 1.11 The proposed Ecological Quality of Water Directive                          | 26   |
| 2. Closely related European Community legislation                                |      |
| 2.1 The Sewage Sludge Directive  |      |
| 2.2 The Reporting Directive  |      |
| 2.3 The proposed Integrated Pollution Prevention and Control Directive           | . 28 |
| 2.4 The Plant Protection Products Directive and the proposed Biocides  Directive | . 28 |
| 2.5 The Detergents Directives  |      |
| 2.6 The Major Accidents (Seveso) Directive                                       | . 29 |
| 2.7 The Habitats and Birds Directives  | . 30 |
| 2.8 The Environmental Impact Assessment Directive                                |      |
| 3. Other European Community policy with an impact on water management            |      |
| issues   | 3 :  |

#### 1. Introduction

In June 1995 the Council and the Environment Committee of the European Parliament called for a fundamental review of Community water policy.

This Communication concentrates on the Commissions approach to water protection, but should not be seen in isolation. In particular, it should be seen as a development of the water protection elements of the Commission's 5th Environment Action Programme<sup>1</sup>.

This concentration on environmental aspects of water policy is reflected in the main conclusion of the Communication; the need for a Water Resources Framework Directive. However, there are many other issues which could be dealt with under the title of "Water Policy" and which are not dealt with in any depth in this strategy paper. These include broader questions relating to the interface between water management and land-use planning, questions relating to the use of Community financing for water protection and water infrastructure, as well as the whole area of research in all these fields. These issues are important ones and any comments on them will be welcome, but they do not form the principal subject matter of this Communication.

#### 2. Water and water policy

Water is traditionally divided into a large number of categories. Distinctions are made between fresh water, marine water and brackish water, between groundwater and surface water, between rivers, lakes, estuaries, coastal waters and open sea etc. Distinctions are also made between waters identified for specific economic uses or having particular conservation value. Yet water does not recognise such distinctions; it flows freely between the various categories, and any attempt to manage water resources must recognise and come to terms with that fact.

Although it is useful to divide waters up for administrative purposes, it is important to bear in mind that water, whatever its form, performs a number of different functions, often simultaneously. Water is a basic human need for drinking, preparing food and washing. It is also an economic resource contributing to broader human needs in terms of fisheries, agriculture (including irrigation), industry (including use in processing and industrial cooling), transport and recreation. It is a vital element of every ecosystem and every landscape as well as forming distinctive environments in its own right. It can also represent a threat in the form of floods or, in the case of its absence, of droughts.

<sup>&</sup>lt;sup>1</sup> COM (92) 23 final, 27.3.1992

#### 3. The objectives of a sustainable water policy

A sustainable water policy must achieve a number of objectives and must do so in a costeffective and efficient manner:

- 1. It must provide a secure supply of drinking water. The drinking water must be safe and it must be provided in sufficient quantity and with sufficient reliability.
- 2. In addition to drinking water needs, water resources should be of sufficient quality and quantity to meet other economic requirements. They should be suitable for the abstraction needs of industry and agriculture and they should be able to sustain fisheries, transport and power generation activities as well as meeting recreational needs. In some cases these users are provided through the drinking water network and the water supplied must therefore meet drinking water standards.
- 3. The quality and quantity of water resources, together with the physical structure of the aquatic environment, should, in all but exceptional cases, be sufficient to protect and sustain the good ecological state and functioning of the aquatic environment as well as meet the water needs of wetland and terrestrial ecosystems and habitats. Provision should also be made to protect waters of exceptional quality or interest.
- 4. Water should be managed so as to prevent or reduce the adverse impact of floods and minimise the impact of droughts.

It is self-evident that these four objectives of water policy will not always be mutually compatible and that a sustainable water policy is therefore one which achieves a sensible balance between them. The third objective, that of environmental protection, is particularly vulnerable and in need of special attention.

#### 4. The challenges

Meeting the above objectives involves overcoming a number of challenges:

#### 4.1 Pollution

Pollution is defined (in the Integrated Pollution Prevention and Control Directive<sup>2</sup>, common position) as "the direct or indirect introduction as a result of human activity, of substances, vibrations, heat or noise into the air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment." Pollution

<sup>&</sup>lt;sup>2</sup> Not yet published in OJ.

is normally characterised as "point source" or "diffuse source"; these two categories and three specific variations are discussed below.

Dangerous substances and preparations are subject to classification based on an evaluation of risk to, *inter alia*, the aquatic environment. Progressive reduction in the emission of such substances will contribute to the protection of the environment and of the aquatic environment in particular. In some cases the best way to reduce the emission of certain particularly hazardous substances may be to reduce or prohibit their use.

#### 4.1.1 Point source pollution

Point source pollution usually refers to inputs of pollutants into the aquatic environment from individual, usually identifiable, discharge points. It can include discharges of industrial, domestic or municipal waste water, urban run-off, and, depending on the definitions used, leakage from storage tanks, industrial installations, farmyards and landfill sites. The problems caused will depend on the nature of the pollutant: they can make water unsuitable or less suitable for use as a source of drinking water; they can make it unsuitable for certain production processes or present a potential health hazard to the user of the water or to the consumer of products exposed to the water, or they can impact upon the ecosystem through their toxic effect on plants and/or animals or by disrupting the environmental balance. Such pollution can accumulate in the water body over many years or it can fluctuate depending on the nature of the pollution and the regenerative power of the water body concerned.

#### 4.1.2 Diffuse source pollution

Broadly speaking, diffuse pollution refers to inputs of pollutants into the aquatic environment from a number of widely scattered points which are often difficult to identify or control. This includes agricultural pollution and pollution which is precipitated from the atmosphere (though the original source might be a diffuse one such as traffic exhausts or it might be point sources such as power station emissions). Diffuse sources also include pollution caused by the consumption of products by industry or by the general public. The distinction between point sources and diffuse sources can sometimes be a subtle one and different authorities may disagree occasionally on the classification of a particular source of pollution. The problems associated with diffuse pollution are much the same as for point source pollution, the crucial difference lying in the choice of tools for tackling the pollution source.

#### 4.1.3 Accidental pollution

Accidental pollution is usually a release of pollutants from a point source at unintentionally high levels due to an accident or unforeseen circumstances. The impact on the environment and on the potential uses of the polluted water body is

much the same as for point source pollution generally, but with the potential for more dramatic effects and, possibly, catastrophic results.

#### 4.1.4 Acidification

Acidification is a particular form of diffuse pollution resulting from the emission of pollutants such as SO<sub>2</sub>, NOx and ammonia into the air. The resulting precipitation, which can fall thousands of kilometres from the source of pollution, is acidic and the impact on water bodies is to produce rivers and, particularly, lakes with a significantly reduced pH. This seriously disrupts the natural ecosystem and, in extreme cases, can lead to the death of the lake concerned. Acidification can also affect groundwater via the soil. There is a limit to the degree to which water management policy can tackle the sources of acidification and the solution to the problem must be addressed through measures to tackle air pollution. The Commission Acidification Strategy will address many of these issues.

#### 4.1.5 Eutrophication

Eutrophication is caused by pollution of water bodies with nutrients. The high level of nutrients can lead to an excessive growth of algae at the expense of the natural plant and animal community. The oxygen demand created by the algal biomass or resulting from its decomposition can disrupt the natural balance of the ecosystem. Extreme cases lead to high levels of mortality of aquatic organisms. It is possible that eutrophication may also contribute to blooms of toxic algae. The source of nutrients may be a variety of point and diffuse sources, including farming, urban waste water and atmospheric deposition

#### 4.2 Water Shortages

Water levels in rivers, lakes and groundwater aquifers fluctuate naturally. Some rivers and lakes, particularly in the southern part of the Community, dry out naturally during certain periods of the year. However, high levels of abstraction of water for drinking water, tourism, agricultural irrigation or industrial uses can dramatically reduce flows or prolong the periods of drying out. Some of these uses have strong seasonal fluctuations (eg summer tourism). In the case of groundwater, such activities can lower water tables to the point where there are acute shortages of water for all uses and where aquatic habitats are damaged or destroyed. Such lowerings of the water table can also lead to damage to the aquifer and to the encroachment of salt water into coastal aquifers and their resulting loss as sources of drinking/irrigation water. These effects can occur as a result of sustained high levels of abstraction or from changes in the demand for water due to new or increased economic activity. Artificial reductions in river flow rates can also have a significant impact on their value as habitats, either changing the nature of the plant and animal communities to ones that can survive on a lower flow or, in extreme cases, drying up river beds and completely destroying the aquatic environment. Low water levels, either in groundwater or in surface water also impact on non-aquatic environments and can have

effects ranging from the drying out of wetlands to soil erosion and desertification.

It should not be forgotten that climate change has the potential to cause large changes in the pattern of precipitation and that this can exacerbate the problems discussed in the preceding paragraph.

#### 4.3 Other adverse anthropogenic influences

The physical characteristics of rivers, lakes and coastlines have often been altered by man for a variety of reasons; flood protection, the creation of waterways for transport, the building of docks, bridges and roads, dredging, land reclamation etc. In addition, of course, there are surface water bodies which are totally artificial; reservoirs (for water storage and for hydro-electric power), canals, drainage ditches etc. Furthermore, certain economic activities which take place in the aquatic environment can also have an impact on that environment, for example fisheries, aquaculture, shipping and offshore activities. Sometimes these activities have been undertaken to help achieve one or more of the objectives of water policy mentioned in section 3 (eg the building of reservoirs to provide a secure drinking water supply), but they are not without environmental impacts of their own, particularly on the habitat potential of the waters concerned.

# 5. The principles of European Community water policy

Community policy, and environmental policy in particular, aims to achieve sustainability. The principles underlying that policy are set out in Article 130r of the Treaty and, for the sake of clarity, they are set out below, together with a non-authoritative discussion of each principle and how it applies to water policy.

#### 5.1 High level of protection

In the context of water management, this requires that the level of protection of human health, of water resources and of natural ecosystems should be ambitious, aiming at a high level of protection rather than set at the minimum acceptable level.

# 5.2 Precautionary principle

So much of the science underlying our understanding of water systems and, in particular, of the impacts of pollution on human health and the health of the environment is incomplete. The precautionary principle therefore requires that policy should always be based on recognised scientific knowledge, but that it should err on the side of caution whenever there are doubts or insufficient information

#### 5.3 Preventive action

This principle recognises the moral duty to prevent damage to the environment. It also

recognises the difficulty and cost of reversing or rectifying damage to the environment. For example, once a sensitive aquatic ecosystem is destroyed, in certain cases, it may be impossible to restore it. Once an aquifer is contaminated with pesticide residues, in certain cases, it will take decades to cleanse itself and, in the meantime, it may be unsuitable for use as a source of drinking water unless expensive treatment facilities are installed.

#### 5.4 Damage to be rectified at source

This principle follows logically from that of "preventive action", but applies once environmental damage has been identified. Wherever possible, action should be taken to discontinue the damaging activity rather than seeking technical solutions to solve the problem "downstream".

#### 5.5 Polluter pays

This principle establishes that the cost of measures to prevent pollution should be borne by the potential polluter. As such, it helps prevent distortions in competition by ensuring the internalisation of environmental costs. It also establishes that, where damage occurs, the polluter is liable for the costs of any damage and it therefore acts as an incentive towards the effective control of pollution at the source. As such, the "polluter pays" principle is clearly linked to the principles of "preventive action" and "rectification of damage at source".

#### 5.6 Integration

Water policy is an area which illustrates the need to have a coherent and effective coordination of all relevant Community policies. However, integration is not just a Community responsibility. Perhaps the most important aspect of integration is that the implementation of water policy at a local or national level should be done in a coherent and fully integrated way with structures established to ensure that this takes place. In particular, it is vital that activities such as land use planning and river management should integrate all the various requirements of different policies and policy objectives and reconcile them in a logical and consistent way, taking into account local circumstances. Considering that agricultural pollution and water abstraction for irrigation are currently major issues to be addressed in order to achieve the objectives of water policy, the integration of water policy concerns into the agricultural policy area is particularly essential.

#### 5.7 The use of available scientific and technical data

The importance of this has already been mentioned in the context of the precautionary principle. All efforts should be made to make the best use of the available knowledge base on the state of the environment and the impact of human activity when developing political decisions in this area. Similarly, one should make use of the most accurate information on best available techniques and on the various processes involved in the

prevention and treatment of environmental problems.

#### 5.8 The variability of environmental conditions in the regions of the Community

Where it is necessary for the protection of human health or where particularly dangerous or persistent pollutants are concerned, it is clear that common Community standards must apply. However, Community water policy must be sufficiently flexible to avoid the imposition of inappropriate or unnecessarily strict requirements simply for the sake of "harmonisation". Such flexibility would also ensure that, where a problem (such as eutrophication, acidification or susceptibility to drought) is regionally specific, measures appropriate to that particular area can be taken. The range of environmental conditions in the Community is very wide and Community policy must take this into account.

#### 5.9 Costs/benefits

In determining the specific objectives of environment policy, the Treaty requires that both the costs and the benefits of action or inaction are taken into consideration. This implies proportionality between the measures proposed and their impact on the environment.

The cost effectiveness of individual policy options in order to achieve those objectives is also important. Requirements for investment by individuals, private companies and/or public authorities in order to comply with environmental policies must be targeted to the objectives of water policy and with a view to the cost-effectiveness of the measures. Long term benefits and long term environmental consequences of non-action must be fully taken into account, as must the precautionary principle. This has been the case in recent legislation such as the Urban Waste Water Treatment Directive<sup>3</sup> and the Nitrates Directive<sup>4</sup>. It is further acknowledged in the use of framework directives which allow local solutions to local problems and often allow a higher ratio of benefits to costs.

A cost-effective strategy implies the need to assess from an economic perspective the advantages and disadvantages (in terms of emission reduction, or quality improvement, per unit of cost) of the three basic sets of policy instruments:

- regulations and standards (the traditional EC approach)
- new technology (related to the above)
- internalization of external pollution costs through pricing and market-based incentives.

These sets of policy instruments are not mutually exclusive and can be used as complementary or alternative measures depending on their relative cost-effectiveness to address water pollution as well as water scarcity issues

<sup>&</sup>lt;sup>3</sup> OJ No L 135, 21.5.1991, p. 40.

<sup>&</sup>lt;sup>4</sup> OJ No L 375, 31.12.1991, p. 1.

# 5.10 The economic and social development of the Community and the balanced development of its regions

This principle is tied in closely with the principle of integration. It confirms that water policy is not to be seen in isolation, but as a contributory element in the wider search for a balanced and sustainable economy.

It should be emphasised that economic and social issues relating to regional development are of crucial relevance for water policies, since water is a crucial factor in creating favourable conditions for a sustainable development. However, a sustainable increase in the quality of fresh water reserves and a long term capacity to meet the demand for water require a global, forward-looking management of river basins, surface waters and groundwater.

This Communication does not, and can not, deal fully with the whole range of issues which could be considered in the relationships between water policy and the wider need for economic and social development. These issues fall outside the immediate scope of this paper, but are important nonetheless and the Commission will welcome any comments on them.

#### 5.11 International cooperation

The need for international cooperation in environmental policy is recognised by the Treaty, both in terms of Community action and in terms of cooperation with third countries. This is particularly true of water management policy where the coordination of actions within international river basins and for the protection of marine waters is vital for the efficient management of those resources.

#### 5.12 Subsidiarity

The principle of subsidiarity is established in Article 3b of the Treaty. It requires that measures which can be undertaken most effectively at Member State level should not be undertaken at Community level. This refers not only to the question of whether particular issues should be dealt with by the Community, but also, when Community action is necessary, how much of the details of implementation should be left to Member States.

In the field of water policy, the reasons for Community action can include the possibility of market distortions due to widely varying standards in the implementation of policy. They can also include the necessity for environmental data to be comparable across the Community and the consequent need for transparency. Most importantly, they can be for operational reasons to ensure the coordination of measures to deal with international waters and transfrontier pollution.

#### 6. Existing EC legislation

The principles set out in the Treaty underlie all EC water legislation. The Annex to this Communication sets out a short outline of the objectives and key features of each piece of existing and proposed Community legislation with a major impact upon water policy and provides some commentary on them. The comments in the Annex should therefore be read together with the main text of this Communication. The references in the Annex to the "Framework Directive" refer to the proposal outlined in Section 9.

The legal framework for water management policy in the Member States of the Community consists of a combination of measures derived from Community legislation and national measures. The Community measures have been adopted over a period of time since the early 1970s, originally under Articles 100 and 235 of the Treaty, but, more recently, under Article 130s. All existing EC water legislation pre-dates the Treaty on European Union and was adopted by unanimity under Articles 100 and 235 or under the previous version of Article 130s.

It is worth noting that, since the Treaty on European Union, Article 130s contains three different procedures depending on the nature of the subject matter of the proposed action. Article 130s1 covers most water legislation and requires cooperation with Parliament and a qualified majority in Council. Article 130s2 covers *inter alia* the "management of water resources" and requires consultation of Parliament and unanimity in Council. Article 130s3 covers general action programmes and requires codecision with Parliament and a qualified majority in Council.

#### 7. Specific issues in water management

This section of the Communication will look at some of the wider issues which emerge from the comments in the Annex and the application of the principles set out in Section five.

7.1 The Emission Limit Values approach and the Environmental Quality Objectives approach

Point source pollution control is one of the most developed elements of water management simply because point source pollution is one of the easiest problems to recognise and the easiest to take action against. The details vary from country to country, but the basic principle has been to require industries or activities which are known to contribute to water pollution to be licensed in some manner and to make pollution control a condition of that licence. This is normally expressed in terms of "emission controls" setting limits on how much pollutant may be discharged into the water body.

Questions begin to arise when trying to establish what is the required level of emission control. Historically, this has led to lengthy debates in which the two extreme viewpoints

might be described as the "environmental quality objectives approach" and the "emission limit values approach". The first approach is to estimate the pollution concentration which is tolerable or acceptable in the particular body of water and set emission limits designed to ensure that the threshold is not breached. The second approach is to estimate the maximum level of reductions which could reasonably be expected given current technology and a certain level of costs and to set the emission limit values accordingly. The emission limit value approach is often linked to the use of "Best Available Techniques" (BAT), though the degree of flexibility in interpretation of what is "best" and what is "available" can be considerable.

In practice, neither of the two extremes offers an ideal solution. Environmental quality objectives alone are often insufficient to tackle serious pollution problems and can be abused as a "licence to pollute" up to a defined level. Likewise, a strict emission limit values approach based on BAT can in some circumstances lead to unnecessary investment without significant benefits to the environment.

More recent Community legislation takes the emission limit value approach as its point of departure. This is consistent with the precautionary principle and establishes that industry should be responsible for reducing emissions as far as reasonably possible. However, there will be occasions when such measures are inadequate to protect the environment and in those circumstances reductions of emissions beyond BAT, as described above, will be necessary. On the other hand, there will also be occasions when the environmental benefits of applying the generally applied BAT norms can not justify the cost.

The Community approach can be illustrated using the Urban Waste Water Treatment Directive and the proposed Integrated Pollution Prevention and Control Directive. The first of these establishes a high level of treatment for urban waste water based on technical considerations, but when the plant is discharging into a "sensitive" area it requires even stricter measures and when it is discharging into a "less sensitive" area it allows a simpler and cheaper solution. The common position on the Integrated Pollution Prevention and Control Directive requires the competent authorities to establish emission limit values for the industries concerned "based on the best available techniques." However, when this is not sufficient to meet environmental quality standards "additional measures shall be required". Conversely, when local circumstances allow less stringent measures whilst maintaining a high level of protection for the environment, the emission limit values can take into account the "geographical location and the local environmental conditions."

The different elements of this approach have not always been combined in a single directive. For example, the Bathing Water Directive and the proposal for an Ecological Quality of Water Directive do not set emission limit values, but are principally concerned with identifying the occasions when additional measures are necessary in order to meet established quality criteria.

In practical terms, the existence of environmental quality objectives allows authorities to judge the effectiveness or otherwise of the emission limit values adopted and whether they

need to be tightened. Conversely, controls on emissions (usually based on BAT) are the key element of any strategy to ensure compliance with environmental quality objectives. The two approaches are therefore complementary and not contradictory.

Pollution control in Community water policy therefore has elements of the environmental quality objectives approach and of emission limit values derived from an assessment of what is technologically possible.

It should be underlined that quality objectives can be expressed in different ways. One approach, which has been generally followed in EC legislation in the past (eg the Fishwater Directive), is to set common parametric values at a Community level which are implemented by all the Member States. The second approach is to set common criteria to be used for the establishment of parameters and values at a national and local level. These common criteria would prescribe a high level of protection as laid down in the Treaty, but would allow flexibility to adapt to the very different environmental conditions in different parts of the Community. This was the approach adopted in the proposed Ecological Quality of Water Directive and is the Commission's preferred approach for the Water Resources Framework Directive described in section 9 of this Communication. The Member States would have a clear obligation to comply with the criteria defined at Community level and this approach does not, therefore, represent a lowering of standards in any way.

Of course, the above arguments also apply, *mutatis mutandis*, for other water policy issues such as water abstraction or activities having a physical impact upon the environment.

#### 7.2 Designation of "Zones"

The principle mentioned in section 5.7, that Community policy should take into account the environmental conditions in the various regions of the Community, argues against uniform controls applicable in all circumstances and in all places. In the case of water, and particularly in the case of water resource management, it may make sense to designate water resources which are worthy of particular protection in terms of quality or quantity. This may be because they are sources of drinking water or irrigation water, or it may be that they are particularly sensitive to certain types of damage. It is also recognised that certain habitats are particularly valued for their rarity, their beauty or for some other characteristic worthy of protection. In these areas controls may be stricter.

There is perhaps less agreement about areas which are "less sensitive" for one reason or another, but such measures have been adopted in Community legislation (see the example of the Urban Waste Water Treatment Directive in section 7.1) and can be of value in giving lower priority to certain areas and, hence, by implication, giving higher priority to areas where more urgent action is needed. However, this approach is open to the possibility of abuse and must be used with care. The concept that different areas can have differing levels of protection can be formalised in a system of zoning.

#### 7.3 Water quantity

Integrated water management would be incomplete without taking water quantity issues into account. Water quality is intimately linked to water quantity. Whether water is abstracted for drinking water purposes or for other reasons, the quality and quantity of the available water are of equal importance. Equally, water abstraction has an impact on the water quality in the remaining water body by reducing the dilution capacity of the water body. Indeed, when water supply is low it is more important than ever to ensure a high level of protection of the water available.

Obviously, artificially low water levels also have a more immediate impact on the natural environment. Quite apart from their obvious economic disadvantages, low levels of surface water and groundwater can seriously reduce the quality of the environment.

A further argument in favour of Community action in this area is the transboundary nature of many of the problems associated with water quantity issues. There is not very much difference from a philosophical point of view between activity in one Member State that pollutes waters downstream in another Member State and activity that leads to very low flows in such waters.

#### 7.4 Monitoring requirements

Water management is not possible without reliable data upon which to base decisions. Most EC water legislation includes obligations to monitor the quality of the relevant waters and/or to monitor the relevant activities. Member States incorporate such requirements into their national or regional monitoring networks.

As each monitoring requirement in EC legislation relates to the specific subject matter of the Directive concerned, it is perhaps inevitable that the different monitoring requirements might give the impression of being at odds with each other. However, this is largely a question of perception and there is relatively little by way of duplication or contradictory requirements. This is an area which might be examined in order to streamline the requirements, but it is not an area which actually seems to cause too many problems for Member States on a day to day basis. However, if the concept of a wider water framework directive mentioned in Section 9 is accepted, there are arguments in favour of drawing the various monitoring requirements together into it as well.

A further argument in favour of such an approach is the need for comparability of data across Europe. The European Environment Agency is examining ways in which this can be improved and the Commission will work closely with the Agency when considering the monitoring implications of the Framework Directive.

There is also scope for including more information on water quantity in the monitoring data, and in particular on the amount of water abstracted and used for various purposes.

Data on water quantity and water quality should be provided on a river basin basis (see also section 7.8).

#### 7.5 Reporting obligations

Member States are obliged to report to the Commission on the implementation of EC legislation and on the results of some of the monitoring undertaken under it. This is an instrument for ensuring compliance, but it also provides an overview of the state of the aquatic environment in the Community. This information is required so that it can inform policy making and assist in a useful exchange of information and experience between the authorities in different Member States.

Much, though not all, of the reporting of EC water legislation comes under the Reporting Directive<sup>5</sup> and there is therefore already a mechanism in place to streamline reporting where necessary.

#### 7.6 Transparency, public participation and accountability

There is no justification for keeping information about the state of the environment secret or, equally, for making access to such information difficult or prohibitively expensive. The general public should have a right to know the results of monitoring of the environment and to have it presented to them in an understandable manner. They should have a right to be informed, in good time, about the policies adopted to protect the environment and to have an informed input into the decision-making process. This right of access applies equally to the industries concerned by regulation and to interested parties representing environmental or consumer interests.

It is necessary to ensure that, within a broad common framework of legislation, Member States have a considerable amount of flexibility. Public participation and accountability help ensure that such flexibility does not need to lower standards. Furthermore, a programme of measures implemented with the support of the interested parties to tackle problems which they understand and appreciate has a greater chance of success than one which is imposed without explanation or justification.

<sup>&</sup>lt;sup>5</sup> OJ No L 377, 31.12.1991, p. 48.

#### 7.7 Integrated water resource management

The Commission's proposal for an Ecological Quality of Water Directive<sup>6</sup> contains a requirement for Member States to draw up integrated programmes containing all those measures required to implement the Directive together with those measures required under other EC and national water legislation. The idea is to achieve an overview of the measures needed to achieve all the various policy objectives in relation to a particular body of water. This approach allows a degree of rationalisation and coordination of the different measures being taken, sometimes by different authorities, to improve the same body of water.

The integrated approach also helps make clear that measures taken to improve surface waters for environmental reasons contribute to ensuring that the rivers and lakes are better able to purify themselves and therefore ensure the protection of water as an economic resource.

The concept of integrated programmes found in the Ecological Quality of Water proposal can be extended to a broader concept of integrated management which would include a greater degree of integration of the various monitoring and objective setting elements of water policy.

#### 7.8 River Basin Management

Rivers and lakes do not respect political or administrative frontiers (though they often form them). The only logical unit for the administration or coordination of river management is the river basin, that is to say the area of land from which all surface run-off flows through a sequence of streams, rivers and lakes into the sea at a single river mouth or delta. River basins are referred to by a wide variety of names (eg catchment area, drainage basin, hydrographic basin etc.), but the underlying principle is much the same. Many Member States already organise their water management to a lesser or greater extent in administrative units corresponding to one or more river basins. Most of the larger transfrontier European rivers are subject to international conventions which allow for a greater or lesser degree of coordination of water policy between the authorities in the different countries involved.

River basin management can be administered by single authorities responsible for one or more river basins, or it can be organised by coordinating authorities which oversee and coordinate the activities of the various administrative bodies within the river basin.

Groundwater aquifers do not always form such easily identifiable units and there is no obvious "natural" administrative unit for the management of their water resources. Moreover, their catchment areas do not always coincide with river basins. However, for

<sup>&</sup>lt;sup>6</sup> OJ No C 222, 10.8.1994, p. 6.

most practical purposes, and given the importance of integrating the management of groundwater and surface waters, it would seem logical to incorporate them both, together with coastal water near river mouths, under the direct or coordinating control of a river basin authority.

This would appear to be a desirable objective which would allow the most efficient use of resources and the most effective planning of water management measures.

#### 8. Discussion

This Communication has looked at the objectives of water policy and the challenges that policy makers face. It has examined the principles of environmental legislation as laid down in the Treaty and it has looked in a little more detail at some of the issues which arise in trying to implement those principles in the water sector. The Annex to the Communication contains a summary of the main pieces of relevant existing or proposed legislation, together with a commentary on each one containing some suggestions for its future.

What conclusions can be drawn from the above?

Firstly, it is clear that Community water legislation has had, and continues to have, a positive effect on the nature of measures being taken to protect the environment and upon the level of protection which has resulted. The Dobříš Assessment<sup>7</sup> carried out by the European Environment Agency found that there still remained much to be done to protect the aquatic environment in Europe, but it also pointed to recent improvements in many areas where EC legislation has had an impact. In other areas, such as excessive water abstraction or the pollution of surface water and groundwater by nutrients and pesticide residues, the trends continue to be worrying, and the relevant EC legislation is too recent to have led to improvements. However, it is important to note when considering what improvements can be made to the policy and, where there have been failures, that EC legislation has, on the whole, had a positive impact on water quality in the Community. Nevertheless, there is, of course, room for improvement.

Water policy in the Community is an area of mixed competence. The four objectives of water policy listed in Section 3 must therefore be achieved through a combination of measures taken at a Member State level and at a Community level. Community legislation can only contribute to meeting those objectives and does so when transposed into national legislation and supplemented by other national measures. This partly explains why Community legislation may, on occasion, give the impression of being piecemeal and patchy; the Community only takes action where it is better placed to do so than the Member States and therefore Community legislation does not have universal coverage of

<sup>&</sup>lt;sup>7</sup> Europe's Environment; The Dobris Assessment, ISBN 92-826-5409-5

all the objectives or all the problems.

Whilst some pieces of water legislation are best left as freestanding legislation, the Commission has come to the conclusion that much of the quality objective related legislation could be drawn together into a Framework Directive on water resources. This would help give greater coherence to the legislation and make clear how the "patchwork" fits together. This idea is looked at in more detail in Section 9.

A second conclusion is that more effective Community controls are needed in some areas. In particular, this relates to the third of the four objectives, the protection of the natural ecological state and functioning of the aquatic environment, and to the management of water quantity issues. The current proposal for an Ecological Quality of Water Directive would meet the first concern, but should be incorporated into the Framework Directive. Quantity issues for both groundwater and surface water, including the quantitative relationships between the two, also need to be addressed and should be incorporated into the Framework Directive.

Thirdly, the analysis of existing Community legislation has revealed that some of it is outdated and that its objectives might be equally or better met in some other way, such as through a Framework Directive.

There is therefore scope for the repeal of certain existing Directives, but the Commission will not propose such steps unless it is clear that the level of environmental protection is not diminished.

Perhaps the clearest issue which emerges is that there is a need for greater integration in the practical implementation of water legislation. Integration is required between;

- water quantity issues and water quality issues,
- surface water management and groundwater management,
- water use and environmental protection,
- control of pollution through emission controls and through quality objectives, and, not least,
- water policy and other policies.

The Commission believes that this can be improved through the adoption of a Framework Directive on Water Resources which would require integrated water management plans (see section 7.7). The plans would contain an assessment of the overall situation in the water body including its environmental quality, its resource potential and the environmental pressures impacting upon it. It would also establish the specific objectives of water policy in relation to that body of water and a programme of measures designed to achieve those objectives within a specified timetable.

Integrated water management plans would be even more effective if established on a river basin basis, especially for dealing with transfrontier river basins.

The analysis of existing legislation suggests that there is scope for drawing together some of the measures required under the various pieces of water quality legislation, particularly in respect of monitoring obligations. It might also be sensible to bring together the various definitions found in the legislation. This could be done in the Framework Directive.

EC water policy needs transparency and public accountability, and this should be built into the Framework Directive.

#### 9. Outline of a Water Resources Framework Directive

Drawing upon the above conclusions, the Commission is considering making a proposal for a Water Resources Framework Directive and would welcome the views of Council, Parliament and all interested Parties...

The following Directives would remain largely unaffected by this proposal, although the Commission will consider the scope for transferring some of their definitions, monitoring requirements and other relevant elements into the Framework Directive:-

- The Bathing Water Directive
- The Dangerous Substances Directive<sup>8</sup> (and any successor Directive)
- The Drinking Water Directive<sup>9</sup>
- The Information Exchange Decision<sup>10</sup>
- The Urban Waste Water Treatment Directive
- The Nitrates Directive
- The Reporting Directive
- The proposed Integrated Pollution Prevention and Control Directive

The following Directives would be repealed and replaced by the Framework Directive:-

- The Surface Water Directive<sup>11</sup> (and the related 79/869/EEC Directive<sup>12</sup>)
- The Fish Water Directive<sup>13</sup>

<sup>&</sup>lt;sup>8</sup> OJ No L 129, 18.5.1976, p. 23.

<sup>&</sup>lt;sup>9</sup> OJ No L 299, 30.8.1980, p. 11.

<sup>&</sup>lt;sup>10</sup> OJ No L 334, 24.12.1977, p. 29.

<sup>&</sup>lt;sup>11</sup> OJ No L 194, 25.7.1975, p. 26.

<sup>&</sup>lt;sup>12</sup> OJ No L 271, 29.10.1979, p. 44.

<sup>&</sup>lt;sup>13</sup> OJ No L 222, 14.8. 1978, p. 1.

- The Shellfish Water Directive<sup>14</sup>
- The Groundwater Directive<sup>15</sup>
- The proposed Ecological Quality of Water Directive

The Framework Directive would be based on the objectives and principles established in this Communication and will respect proportionality between costs and benefits and a high level of Community water protection. It would establish common definitions for use in all EC water policy. It would require:

- the integration of water resource management with the protection of the natural ecological state and functioning of the aquatic environment
- the integration of water quality and water quantity management (including provisions for the establishment, where necessary, of a water abstraction licensing scheme)
- the integration of surface water management (including coastal waters) with groundwater management
- the integration of measures, such as emission controls, with environmental objectives

The Framework Directive would require integrated water management planning on a river basin basis. This would involve:-

- monitoring of water quantity and quality
- an assessment of the water needs of society and of the impact of human activities on the water bodies concerned
- the setting of objectives (including any objectives arising out of other pieces of EC legislation not incorporated into the Framework and any objectives arising out of national or local policies)
- the establishment and implementation of a programme of measures designed to achieve the objectives (including any measures required under other pieces of EC legislation not incorporated into the Framework, as well as national and local measures)
- transparency and public consultation in the decision making process
- monitoring and reporting on the implementation of the Directive

Within the river basin, and particularly within larger basins, the nature of the objectives and measures may vary spatially.

The Framework Directive would set guidelines for the above to ensure comparability of effort and results, but much of the detail of the implementation would be left to Member

<sup>&</sup>lt;sup>14</sup> OJ No L 281, 10.11.1979, p. 47.

<sup>&</sup>lt;sup>15</sup> OJ No L 20, 26.1.1980, p. 43.

States.

The Framework Directive would also establish a Committee responsible for the management and updating of the Directive. The Committee would be charged with ensuring the coordination of the implementation of this Directive and other EC water legislation.

#### 10. The procedural implications

There are currently four Commission proposals pending before Council and Parliament (the Integrated Pollution Prevention and Control and Ecological Quality of Water proposals and the proposed amendments of the Drinking Water<sup>16</sup> and Bathing Water<sup>17</sup> Directives). In addition, the Commission is committed to presenting a Groundwater Action Programme.

The Commission believes that the Integrated Pollution Prevention and Control proposal and the two proposed amendments are largely unaffected by the proposals in this Communication and that Council and Parliament can continue their scrutiny of the texts.

Likewise, work will continue on the Groundwater Action Programme.

The Ecological Quality of Water proposal would be absorbed into the new Framework Directive. All the main elements of the current proposal would be transposed into the new framework and there would be no substantial alterations to the approach to ecological quality currently being discussed.

The Commission invites comments on these ideas from the Council and from Parliament. Comments from other interested parties would also be welcome and should be sent to Mr D G Lawrence, Head of Unit D1, Directorate General XI, Boulevard de Triomphe 174, B-1160 Brussels, Belgium.

<sup>&</sup>lt;sup>16</sup> OJ No C 131, 30.5.1995, p. 5.

<sup>&</sup>lt;sup>17</sup> OJ No C 112, 22.4.1994, p. 3.

#### Annex

#### Existing EC Legislation and Related Community Policy

#### 1. European Community water legislation

The following is a list of EC legislation dealing directly and exclusively with water management issues. The legislation is listed in chronological order.

# 1.1 The Surface Water Directive (75/440/EEC)<sup>18</sup>

Objective - to help ensure clean drinking water by protecting those rivers, lakes and reservoirs used as drinking water sources.

Key Features - The Directive requires Member States to identify, classify and monitor such waters and to establish action plans in order to ensure compliance with a series of water quality parameters. A related Directive (79/869/EEC<sup>19</sup>) establishes the methods of sampling and analysis to be used.

Comments - This is an old Directive, adopted before the Drinking Water Directive. The parameters and classifications are now out of date and it makes little or no contribution to the safety of drinking water now that the Drinking Water Directive exists. Its value in protecting future sources of drinking water is unproven and it could more usefully be replaced by a general obligation in the Framework Directive to protect the quality of surface water and groundwater.

#### 1.2 The Bathing Water Directive (76/160/EEC)<sup>20</sup>

Objective - to safeguard the health of bathers and maintain the quality of bathing waters.

Key Features - The Directive requires Member States to identify marine and fresh water bathing waters, monitor them and take "all appropriate measures" to ensure compliance with a series of water quality parameters. The Commission reports on the implementation of the Directive and on the quality of Community bathing waters every year, the most

<sup>&</sup>lt;sup>18</sup> OJ No L 194, 25.7.1975, p. 26.

<sup>&</sup>lt;sup>19</sup> OJ No L 271, 29.10.1979, p. 44.

<sup>&</sup>lt;sup>20</sup> OJ No L 31, 5.2.1976, p. 1.

recent report being that for the 1994 season<sup>21</sup>. Despite a popular misconception, the Directive does not result in the award of "Blue Flags" for beaches which meet the parameters; this scheme is organised by the Foundation for Environmental Education in Europe. In 1994 the Commission published a proposal to update the Directive<sup>22</sup>; this proposal is currently being considered by the Council and by Parliament.

Comments - The Directive is a very popular one with European citizens and nobody questions its value in protecting the health of swimmers and bathers. At the time of its adoption there was little other legislation regarding the protection of waters from urban waste water and the Directive therefore had a secondary purpose of requiring Member States to take action to deal with the worst cases of pollution by urban waste water. The Urban Waste Water Treatment Directive now sets certain standards for such effluent, but these are directed at different environmental issues and do not coincide with the environmental quality standards set in the Bathing Water Directive. The Directive, together with the amendments proposed in 1994, will remain a freestanding piece of legislation, but the actions taken by Member States to improve bathing waters will be coordinated with the integrated programme of measures under the Framework Directive.

# 1.3 The Dangerous Substances Directive (76/464/EEC)<sup>23</sup>

Objective - to control the pollution of surface water with dangerous substances.

Key Features - The Directive applies to all surface waters and requires Member States to control emissions of a number of substances (listed in an annex to the Directive), primarily by means of permits issued to industrial installations and by improved urban waste water treatment. The conditions for permits for the more dangerous substances (those in List I) are established at Community level by a series of "daughter Directives" (82/176/EEC<sup>24</sup>, 83/513/EEC<sup>25</sup>, 84/156/EEC<sup>26</sup>, 84/491/EEC<sup>27</sup> and 86/280/EEC<sup>28</sup>). The Directive contains two alternative methods for setting these condition; Member States have the choice between applying emission "limit values" based the best available techniques or they can

<sup>&</sup>lt;sup>21</sup> Quality of bathing water, ISBN 92-827-4046-3.

<sup>&</sup>lt;sup>22</sup> OJ No C 112, 22.4.1994, p. 3.

<sup>&</sup>lt;sup>23</sup> OJ No L 129, 18.5.1976, p. 23.

<sup>&</sup>lt;sup>24</sup> OJ No L 81, 27.3.1982, p. 29.

<sup>&</sup>lt;sup>25</sup> OJ No L 291, 24.10.1983, p. 1.

<sup>&</sup>lt;sup>26</sup> OJ No L 74, 17.3.1984, p. 49.

<sup>&</sup>lt;sup>27</sup> OJ No L 274, 17.10.1984, p. 11.

<sup>&</sup>lt;sup>28</sup> OJ No L 181, 4.7.1986, p. 16.

base their permits on the limits required to meet specified "quality objectives" in the receiving body of water. List II substances are dealt with by Member States which have to produce reduction programmes. The Commission reported on the implementation of this Directive in 1993<sup>29</sup>.

Comments - The Directive has assisted in the improvement of surface water quality in the Community, but is now rather old. The procedure for producing daughter Directives for the List I substances has proved burdensome and slow, whilst the performance of most Member States in producing reduction programmes for List II substances has been negligible. The Directive has also been criticised for not considering the ever growing list of substances of potential concern and for not addressing cumulative toxic effects. Many of these criticisms are answered by the proposed Integrated Pollution Prevention and Control Directive (IPC), though controls of some sort will still be required for those industries not covered by the IPC. This Directive will be reviewed in the light of the Integrated Pollution Prevention and Control Directive, when it is adopted, and in connection with the drawing up of the new Framework Directive.

#### 1.4 The Information Exchange Decision (77/795/EEC)<sup>30</sup>

Objective - to help provide an overview of the quality and quantity of river water in the Community in order to inform policy formulation.

Key Features - The Decision establishes a network of 124 monitoring points (EC12) with a monitoring regime covering 19 different parameters. The information is exchanged between Member States and the Commission publishes a synthesis report<sup>31</sup>.

Comments - This Decision was a laudable attempt to obtain an overview of the status of the aquatic environment in the Community, but, arguably, its role has now been taken over by the European Environment Agency and by the various monitoring requirements in subsequent Directives. There may be some value in continuing the time series of data which has been built up since the Decision came into effect, but the Commission considers that, if so, it would be more appropriate incorporate the various monitoring requirements into the Framework Directive.

<sup>&</sup>lt;sup>29</sup> Administrative structures and implementation of the community directives on the dangerous substances discharged into the aquatic environment. Not yet published.

<sup>&</sup>lt;sup>30</sup> OJ No L 334, 24.12.1977, p. 29.

<sup>&</sup>lt;sup>31</sup> Quality of surface freshwater, ISBN 92-826-9396-1.

# 1.5 The Fish Water Directive (78/659/EEC)32

Objective - to protect fresh water bodies that are capable, or should be capable, of supporting fish life, particularly those species which are fished commercially or for recreational purposes.

Key Features - The Directive requires Member States to designate Fish Waters, to establish water quality standards for them, to monitor the waters and to establish "pollution reduction programmes" in order to ensure compliance with the quality standards. The Commission reported on the implementation of this Directive in 1995<sup>33</sup>.

Comments - The Directive gives Member States discretion in the designation of Fish Waters and therefore is implemented very differently across the Community. As such, it is arguable that there is no need for any requirements to be established at a Community level. However, the Directive has been of value in some Member States in forcing through improvements to relevant waters and the Commission feels that these merits should not be overlooked. The existing Commission proposal for an Ecological Quality of Waters Directive proposes to set general obligations for the protection of surface waters as habitats including, obviously, their capacity to support fish populations and it was intended that the good qualities of the Fish Water Directive should be incorporated into those requirements. The Framework Directive would incorporate the main elements of the Ecological Quality of Water proposal and the Fish Water Directive could therefore be repealed without lowering environmental standards.

# 1.6 The Shellfish Water Directive (79/923/EEC)<sup>34</sup>

Objective - to protect coastal and brackish waters in order to support shellfish populations and to prevent contamination of the harvested product.

Key Features - The Directive is similar in form to the Fish Water Directive, but also has some specific controls on certain discharges into shellfish waters. The Commission reported on the implementation of this Directive at the same time and in the same report as the Fish Water Directive.

Comments - Many, if not all, of the comments on the Fish Water Directive also apply to the Shellfish Water Directive. In addition, there is now in place a Directive (91/492/EEC) laying down the health conditions for the production and the placing on the

<sup>&</sup>lt;sup>32</sup> OJ No L 222, 14.8. 1978, p. 1.

<sup>&</sup>lt;sup>33</sup> Quality of fresh water for fish and of shellfish water, ISBN 92-826-9111-X.

<sup>&</sup>lt;sup>34</sup> OJ No L 281, 10.11.1979, p. 47.

market of live bivalve molluscs<sup>35</sup>. The Shellfish Water Directive can therefore be repealed without lowering environmental standards.

#### 1.7 The Groundwater Directive (80/68/EEC)<sup>36</sup>

Objective - to control the pollution of groundwater with dangerous substances.

Key Features - The Directive requires Member States to control the direct and indirect discharge of certain substances (listed in an annex to the Directive) into groundwater, primarily through an authorization system for direct discharges. They shall monitor compliance with the authorization conditions and monitor the impact upon groundwater.

Comments - The Directive started life as a sister Directive to the Dangerous Substances Directive, designed to apply similar rules to groundwater protection. Since its adoption it has become clear that the long-term challenges facing groundwater are increasingly related to diffuse pollution and to unsustainable levels of water abstraction, neither of which is adequately covered by the Directive. The Commission is currently working on a Groundwater Action Programme which looks at the whole range of problems associated with groundwater and sets out actions required at local, national and Community level. At a Community level it will suggest that the Groundwater Directive needs a complete revision. However, in order to ensure a greater integration of groundwater and surface water protection, the revision of the Groundwater Directive would be incorporated in the new Framework Directive covering all Community waters and the original Directive should therefore be repealed.

### 1.8 The Drinking Water Directive (80/778/EEC)<sup>37</sup>

Objective - to safeguard human health by establishing strict standards for the quality of water intended for human consumption.

Key Features - The Directive requires Member States to establish strict quality standards for more than 60 parameters, to monitor drinking water quality and to take the necessary steps to ensure compliance with the established values. In 1995 the Commission published a proposal to update the Directive<sup>38</sup>; this is currently being considered by Council and by Parliament.

<sup>&</sup>lt;sup>35</sup> OJ No L 268, 24,9,1991, p. 1.

<sup>&</sup>lt;sup>36</sup> OJ No L 20, 26.1.1980, p. 43.

<sup>&</sup>lt;sup>37</sup> OJ No L 229, 30.8.1980, p. 11.

<sup>&</sup>lt;sup>38</sup> OJ No C 131, 30.5.1995, p. 5.

Comments - The impact of this Directive has been significant and it is generally recognised that it has been the driving force behind the overall improvement in drinking water quality which has taken place in the Community over the past decade. The Directive has provided governments and water suppliers with a stable and predictable base for their investment programmes, and consumers can now expect to receive water complying with explicit Community-wide quality standards. The Directive is rather different to other pieces of water legislation in than it sets product standards. The Directive should not be incorporated into the Framework Directive, but should stand alone, and work should continue on the adoption of the Commission's proposal to revise the Directive.

# 1.9 The Urban Waste Water Treatment Directive (91/271/EEC)<sup>39</sup>

Objective - to reduce the pollution of surface waters with nutrients (particularly nitrates and phosphates) from urban waste water; one of the major sources of nutrient pollution and, hence, of eutrophication. It also has the objective of reducing nitrate concentrations in water abstracted for the provision of drinking water.

Key Features - The Directive establishes conditions for the collection, treatment and discharge of urban waste water and waste water from certain industrial sectors. It establishes a timetable for the provision of waste water collecting systems and treatment plants as well as establishing the level of treatment required of the plants. The timetable and requirements vary depending on the size of the agglomeration and the sensitivity of the receiving waters, which must be established by monitoring.

Comments - This Directive is in the process of being implemented and it is too early to tell whether the standards required will be adequate to tackle the problem. The Directive is a good example of combining the use of the environmental quality objectives approach and the emission limit values approach. This ensures a high level of environmental protection whilst making most efficient use of limited financial resources. The Commission may propose changes to ensure coherence with the monitoring and programme requirements of the Framework Directive.

#### 1.10 The Nitrates Directive (91/676/EEC)<sup>40</sup>

Objective - to complement the Urban Waste Water Treatment Directive by dealing with nitrate pollution from agricultural sources; another major source of pollution with nitrates.

<sup>&</sup>lt;sup>39</sup> OJ No L 135, 21.5.1991, p. 40.

<sup>&</sup>lt;sup>40</sup> OJ No L 375, 31.12.1991, p. 1.

Key Features - The Directive has a general requirement on Member States to produce and promote Codes of Good Agricultural Practice in order to reduce the level of nitrate loss to surface water and groundwater from agriculture. It contains monitoring requirements and, in areas identified as being vulnerable to nitrate pollution, it imposes Action Programmes with legally enforceable constraints on agricultural practices together with limits on the spreading of organic manure.

Comments - Like the Urban Waste Water Treatment Directive, this Directive is in the process of being implemented. It is worth pointing out, however, that Member States are generally failing to meet their obligations on time. Again, like the Urban Waste Water treatment Directive, the Nitrates Directive combines the two approaches to water management, requiring stricter measures where they are necessary. The Commission may propose changes to ensure coherence with the monitoring and programme requirements of the Framework Directive.

# 1.11 The proposed Ecological Quality of Water Directive (COM (93) 680 final)<sup>41</sup>

Objective - to maintain and improve the habitat potential of surface waters and, by doing so, to improve the quality of such waters generally and increase their potential value as sources of water for drinking and other purposes and to increase their amenity value.

Key Features - The proposed Directive would require Member States to monitor the ecological status of their surface waters, identify sources of pollution or adverse anthropogenic influence, establish "operational targets" for the achievement of "good ecological quality" and implement "integrated programmes" in order to reach those targets. The proposed Directive also includes requirements for public consultation on the contents of the integrated programmes. The proposal is currently being considered by the Council and by Parliament.

Comments - The Commission considers that the general structure of the Ecological Quality of Water proposal would also be appropriate for the Framework Directive on Water Resources. This would mean making changes to the proposal which would go considerably beyond the scope of amendments. The Commission therefore intends to make a proposal for a new Framework Directive and will withdraw the current proposal at the same time. The new proposal would extend the Ecological Quality of Water framework to cover different uses of water, to cover groundwater as well as surface water and to include quantity issues as well as quality.

<sup>&</sup>lt;sup>41</sup> OJ No C 222, 10.8.1994, p. 6.

#### 2. Closely related European Community legislation

The following is a list of those pieces of legislation which have a less direct influence on water management issues or which only deal with such issues *inter alia*.

# 2.1 The Sewage Sludge Directive (86/278)<sup>42</sup>

Objective - to regulate the use of sewage sludge in agriculture to prevent harmful effects on soil, vegetation, animals and man.

Key features - the directive establishes limit values for the concentrations of heavy metals in sludge to be spread on arable land and the maximum annual quantities of those metals which may be introduced into the soil, taking into account limit values for the concentrations of heavy metals in the soil. It also specifies conditions for the spreading of sludges such as treatment, periods of application and precautions to be taken.

Comment - the principal aim of the directive is soil protection, but it also indirectly prevents groundwater pollution. The Commission considers that the use of sewage sludge in agriculture will probably increase in the next few years for reasons such at the implementation of directive 91/271/EEC on Urban Waste Water, the adoption of directive on landfilling (scheduled for September 1996) and the Waste Strategy (landfills less and less accepted, incineration of sludges with energy recovery not possible). The Commission is thus considering a revision of that directive.

# 2.2 The Reporting Directive (91/692/EEC)<sup>43</sup>

Objective - to simplify and coordinate the obligations under many environmental Directives for Member States to make regular reports on implementation to the Commission.

Key Features - The Directive establishes a three year reporting cycle for a number of Directives covering, in each cycle, water-related, air-related and waste-related legislation. The water report covers the Surface Water Directive, the Dangerous Substances Directive (and daughters), the Fish Water Directive, the Shellfish Water Directive, the Groundwater Directive and the Drinking Water Directive.

Comments - The Reporting Directive recognises the need to coordinate some of the measures in the various pieces environmental legislation by drawing together most of the

<sup>&</sup>lt;sup>42</sup> OJ No L 181, 8.7.1986, p. 6.

<sup>&</sup>lt;sup>43</sup> OJ No L 377, 31.12.1991, p. 48.

reporting obligations into a single piece of legislation.

In the Water sector, many of the Directives which report via the Reporting Directive will be repealed or incorporated into the Framework Directive. However, the reporting obligations in the Framework Directive will be incorporated into the three year cycle of the Reporting Directive. The Commission does not therefore intend to suggest any significant changes to the Reporting Directive.

2.3 The proposed Integrated Pollution Prevention and Control Directive (COM (93) 423 final)<sup>44</sup>

Objective - to prevent or minimise pollution of water, air and soil from large polluting industry.

Key Features - The proposed Directive would require the relevant competent authorities in the Member States to issue integrated permits to industrial activities, covering emissions to water, air and soil, which would include constraints on emissions of pollutants based on "Best Available Techniques", taking into account local environmental and technical considerations. All existing Community emission limits and quality objectives must be met as a minimum requirement. The proposal is currently being considered by the Council and by Parliament. Council adopted a common position on the text on 27 November 1995<sup>45</sup>.

Comments - This proposed Directive seeks to integrate the pollution controls on the most polluting industries to ensure a coherent approach in dealing with emissions to air, soil and water. This is a logical and sensible proposal, but one which necessarily takes the legislation out of the realms of water protection alone. There is therefore no benefit in attempting to integrate the proposal into any water framework other than by ensuring consistency between the proposals and including any cross-references that might prove necessary or useful.

2.4 The Plant Protection Products Directive and the proposed Biocides Directive (91/414/EEC, <sup>46</sup> COM (93) 351<sup>47</sup> and COM (95) 387 - COD 465<sup>48</sup>)

Objective - to regulate the placing on the market of plant protection products in order to

<sup>&</sup>lt;sup>44</sup> OJ No C 311, 17.11.1993, p. 6 and C 165, 1.7.1995, p. 9.

<sup>&</sup>lt;sup>45</sup> Not yet published in OJ.

<sup>&</sup>lt;sup>46</sup> OJ No L 230, 19.8.1991, p. 1. -

<sup>&</sup>lt;sup>47</sup> OJ No C 239, 5.9.1993, p.1.

<sup>&</sup>lt;sup>48</sup> OJ No C 261, 6.10.1995, p. 5.

ensure, *inter alia*, that their use does not lead to pollution of groundwater or surface water. The proposed Biocides Directive is designed to do the same for biocides.

Key Features - The Plant Protection Products Directive requires the authorization of all plant production products to ensure, *inter alia*, that they meet certain basic criteria laid down in the Directive and its associated "Uniform Principles" Directive<sup>49</sup>. It also includes requirements for the labelling and packaging of such products. Similar requirement are proposed in the Biocides Directive.

Comments - These Directives deal with substances of great and direct concern to water quality management. They also address other issues and therefore can not be considered as candidates for inclusion in any water framework legislation, but it must be ensured that they are consistent.

# 2.5 The Detergents Directives (73/404/EEC<sup>50</sup> and 73/405/EEC<sup>51</sup>)

Objective - to reduce river pollution by foaming persistent detergents.

Key Features - The Directives set performance standards for detergents on sale in the Community, requiring at least 90% biodegradability. The Commission is currently reviewing the Directives in order to update and improve the assessment methods.

Comments - These are two rather old pieces of legislation addressing a specific issue which is clearly best dealt with by product performance standards.

# 2.6 The Major Accidents (Seveso) Directive (82/501/EEC)52

Objective - to minimise the incidence and impact of major accidents on man and the environment.

Key Features - The Directive imposes requirements on installations and establishments where a major accident could cause significant damage to man or the environment. The requirements cover the identification of hazards, control of the associated risks and the provision of measures which would mitigate the effects of a major accident.

<sup>&</sup>lt;sup>49</sup> OJ No L 227, 1.9.1994, p. 3.

<sup>&</sup>lt;sup>50</sup> OJ No L 347, 17.12.1973, p. 51.

<sup>&</sup>lt;sup>51</sup> OJ No L 347, 17.12.1973, p. 53.

<sup>&</sup>lt;sup>52</sup> OJ No L 230, 5.8.1982, p. 1.

Comments - This is a generic 'major accident hazard' Directive which stipulates controls relevant to the protection of man and the environment in a generic manner. The measures apply to 'major accident' water pollution in the same way as to any other type of major accident. There is no need to consider any integration into the water framework as such, other than the general need to ensure consistency between these policy areas.

# 2.7 The Habitats and Birds Directives (92/43/EEC53 and 79/409/EEC54)

Objective - to ensure the maintenance of biodiversity within the Community.

Key Features - The Directives require the selection and appropriate management of protected areas. This includes the avoidance of pollution and, where relevant, the maintenance of water levels and water quality.

Comments - The integrated water management plans required under the Framework Directive would have to recognise areas designated under these Directives and similar national legislation.

# 2.8 The Environmental Impact Assessment Directive (85/37/EEC55)

Objective - to ensure that the impact of new development projects on the environment is assessed before planning consent is given.

Key Features - The Directive requires that certain projects considered to be likely to have a significant effect on the environment should be assessed for their impact upon a wide range of environmental factors (including, *inter alia*, human beings, flora, fauna and water). The relevant authorities must take all such information, together with the views of the public and interested bodies, before granting development consent.

Comments - The Commission has proposed a revision of the Directive (COM (93) 575 final<sup>56</sup>) designed to extend the scope of the annexes. Council reached a common position on this proposal on 18 December<sup>57</sup>. The Commission is also considering making a proposal to extend the principles of the Environmental Impact Assessment Directive to cover the impact of certain environmentally significant plans and programmes.

<sup>&</sup>lt;sup>53</sup> OJ No L 206, 22.7.1992, p. 7.

<sup>&</sup>lt;sup>54</sup> OJ No L 103, 25.4.1979, p. 1.

<sup>&</sup>lt;sup>55</sup> OJ No L 175, 5.7.1985, p. 40.

<sup>&</sup>lt;sup>56</sup> OJ No C 130, 12.5.1994, p. 8.

<sup>&</sup>lt;sup>57</sup> Not yet published.

#### 2.9 Legislation covering the classification, labelling and risk assessment of chemicals

Objective - to evaluate the risk and to regulate the placing on the market of industrial substances which might cause pollution.

Key Features - The legislation includes several Directives and Regulations establishing the framework requirements for the classification and labelling of dangerous substances (67/548/EEC<sup>58</sup>, 793/93/EC<sup>59</sup>, 78/631/EEC<sup>60</sup> and 88/379/EEC<sup>61</sup>). It also includes two measures on the evaluation of risks for new and existing chemicals (Directive 93/67/EEC<sup>62</sup> and Regulation 1488/94<sup>63</sup>). The information and test results of the evaluation obtained through this legislation often triggers action in a range of other legislation dealing with pollution, including pollution of water and aquatic ecosystems.

Comments - This body of legislation is unaffected by the issues discussed in this Communication.

# 3. Other European Community policy with an impact on water management issues

Clearly, in addition to the above legislation, there is a wide range of policies at the European, national and regional level which can have a substantial impact on water management practices. Within environmental policy, legislation on air quality and waste will have an impact, as will "horizontal" measures dealing with integrated initiatives or new kinds of measures etc. Other policy areas such as industrial policy, regional policy, transport, energy and land-use planning are also important. Two key policy areas in this regard are the Common Agricultural Policy and the Common Fisheries Policy. According to the Treaty (Article 130r), environmental policy shall be integrated fully into all other EC policy areas; this principle is better established in some areas than in others and requires continuing efforts.

It is a key element of integrated water management that the impact and demand for water of all such activities should be considered. The Framework Directive will include such an assessment as a basic obligation under the Directive.

<sup>&</sup>lt;sup>58</sup> OJ No L 196, 16.8.1967, p. 1.

<sup>&</sup>lt;sup>59</sup> OJ No L 84, 5.4.1993, p. 1.

<sup>60</sup> OJ No L 206, 29.7.1978, p. 13.

<sup>&</sup>lt;sup>61</sup> OJ No L 187, 16.7.1988, p. 14.

<sup>62</sup> OJ No L 227, 8.9.1993, p. 9.

<sup>&</sup>lt;sup>63</sup> OJ No L 161, 29.6.1994, p. 3.

Furthermore, in the context of its research policy the Commission has set up a Task Force on water and water-related environmental issues.