



WATER AND WETLAND INDEX

ASSESSMENT OF 16 EUROPEAN COUNTRIES

Issue 1 - April 2001

Europe's rivers and wetlands ready for revival



What is the Water and Wetland Index (WWI)?

WWF's Water and Wetland Index is a pan-European initiative assessing the state, pressures and management of key freshwater ecosystems (rivers, lakes, wetlands) as well as national policy action on freshwater issues. During the first phase 16 European countries were assessed (10 EU, 5 Accession and Switzerland).

What is assessed?

The Index is carried out in two phases. The **first phase (reported here)** assesses: the "ecological status" and fragmentation of rivers; the main pressures on freshwater ecosystems (e.g. agriculture, industry, households and tourism); the condition of threatened freshwater species; aspects of sustainable management of water resources; and, the quality of monitoring programmes.

During the **second phase** (to be launched in 2002), the Index will focus on the response of national authorities in managing their freshwater ecosystems. After 2002, the Water and Wetland Index will become a regular WWF survey covering most European countries.

How are the data collected?

The Index has been developed in close collaboration with WWF offices and partner organisations in all 16 countries. These offices were also in charge of data collection, using national monitoring data and other data sources (including EEA and OECD). A Working Document provided detailed guidelines on how to score and final scores were accompanied by explanatory comments. WWF's European Freshwater Programme was in charge of overall coordination. The project started in August 1999 and the first phase data collection period (reported here) ran from May to December 2000.

The Water and Wetland Index - a basis for determining priorities for action

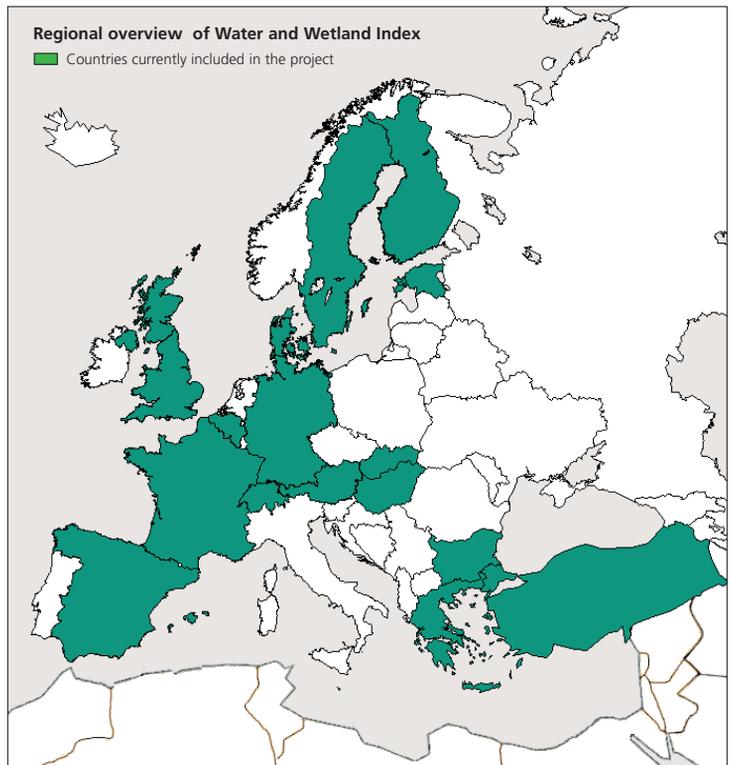
The Water and Wetland Index provides a "snapshot" of the current ecological status of wetlands in Europe and of the preparedness of governments to effectively manage their water resources, thus serving as a basis for **determining priorities for action**.

The Index uses the requirements of the new **EU Water Framework Directive** (adopted by the EU in 2000), which replaces and strengthens existing EU water legislation, as a guide; specifically, the demands requiring governments to implement **integrated river basin management**, and achieve and maintain **'good ecological status'** of all water bodies.

The Index is a **unique tool for identifying the strengths and weaknesses of government actions** in water and wetland management across Europe and to lobby for change. It helps WWF offices and partner NGOs, who compile the results, to understand: the key freshwater issues in their countries (in comparison with others); to determine where and on what issues particular action is needed; and to aid the implementation of river basin management.

Finally the Index provides transparent, comprehensible, and accessible **environmental information on freshwater issues to the general public**.

Assessment of 16 European countries (19 regions)



Austria	Estonia	Greece	Spain
Belgium (Wallonia)	England & Wales	Hungary	Sweden
Belgium (Flanders)	Finland	Northern Ireland	Switzerland
Bulgaria	France	Scotland	Turkey
Denmark	Germany	Slovakia	

Are countries doing enough to safeguard their wetlands and water resources?

50 out of 69 river stretches in Europe are of poor ecological quality due to the impacts of canalisation, dams, pollution and altered flow regimes.

Only 5 out of the selected 55 rivers are considered to be almost pristine considering biological, chemical and hydro-morphological characteristics. They are: the Teno in Finland, Wye and Usk in Wales, Derwent in England and Coe in Scotland.

"Good ecological status" as required by the EU Water Framework Directive, is only currently fulfilled in the upper sections of the 14 largest rivers in Europe such as the Rhône, the Seine and the Loire in France.

Governments are in a weak position to protect biodiversity of freshwater ecosystems within Europe's "nature network".

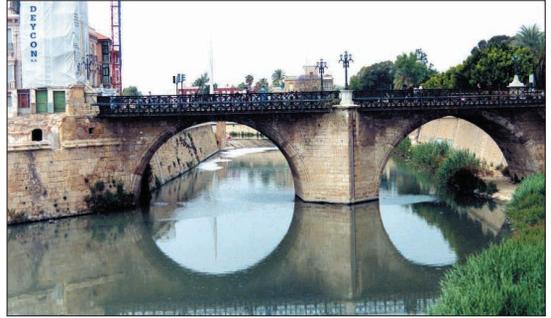
11 out of 16 countries have insufficient information to assess the medium-term effects of human activities on freshwater biodiversity (threatened species). National Red Lists of threatened species are inadequate, out of date or non-existent in Hungary, Slovakia, Greece, Spain, Bulgaria and Turkey.

Negative trends in freshwater biodiversity (threatened species) were reported in Sweden, Austria and Belgium (Flanders). Stable conditions were reported in Belgium (Wallonia) and Finland, while a positive trend was reported in Denmark.

Most European countries have inadequate environmental monitoring systems to properly safeguard their water resources.

Austria, Belgium (Flanders), Denmark, Hungary, Estonia, England and Wales are the leading countries for national monitoring programmes on water use and how various sectors cause water quantity stress and/or water quality problems.

Information on sector (e.g. agriculture, industry, households, tourism) contribution to water quality and quantity impacts is insufficient in Belgium (Wallonia), France, Greece, Northern Ireland, Scotland, Spain, Bulgaria, Slovakia and Turkey.



Over half of European countries have severely fragmented rivers. 37 out of 55 rivers are strongly affected by fragmentation in their main channels and tributaries.

Photo of Segura river/WWF/Miguel Murcia



None of the 10 EU Member States have fulfilled the Natura 2000 (European network of protected sites) requirements for the designation process. France has serious data gaps.

Photo of Spoonbills at Doñana. WWF/Jorge Sierra



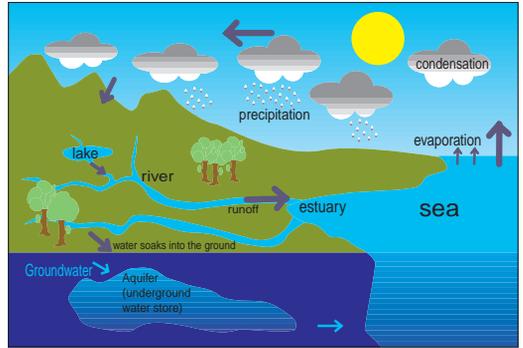
Reliable data on diffuse pollution (nitrates, phosphates, pesticides and other contaminants) is seriously lacking in Belgium, France, Greece, Spain, Switzerland, UK and the five accession countries.

Photo of reduced water level in Lake Koroneia in Greece/WWF/Ch. Paschoudis

The future challenge - integrated water resource management

River basin management

In most European countries, the management of wetlands and water resources is still carried out according to national administrative or political boundaries. However, this is about to change. The implementation of the new EU Water Framework Directive, which replaces and strengthens existing EU water legislation, obligates all EU Member States, and candidate countries, to implement what is called 'Integrated Water Resource Management'. Rather than manage according to man-made boundaries, management of rivers will have to be carried out according to the natural boundaries of a river basin. River basin management is also a goal of other international bodies such as the World Bank/GEF, World Conservation Union, Ramsar Convention on Wetlands and the World Water Council.



The water cycle

A river basin (or catchment): all the land area between the source and the mouth of the river that drains into the river (or lake).
River basin management: integration of policies and activities that affect the river basin; for example agriculture, human settlements, water supply systems, water treatment, industrial discharges and tourism. Integrated river basin management takes into account the viewpoints and interests of those living and working in the basin and balances them with environmental needs.

"Good" or "high" ecological quality in all water bodies



Photo of eel fishing in Evros river in Greece/WWF/ G. Tektonidis

An equally important goal of the EU Water Framework Directive, is that EU countries must prevent further deterioration of their waters, as well as protect, enhance and restore them in order to achieve "good" or "high" ecological status in all their water bodies by 2015. In order to achieve this goal, countries must begin developing river basin management and monitoring programmes; by 2004, countries must have analysed the natural characteristics, pressures, impacts and water use on a river basin level, and by 2006 have implemented an effective monitoring programme. Candidate countries will have to comply to the same regulations and deadlines by their date of accession, while non-EU countries are adopting a similar approach.

"Good" or "high" ecological status: defined by the EU Water Framework Directive as a measure of how much (or how little) the status of a body of water deviates from "undisturbed" conditions. Water quality (the chemical status) itself is a necessary but not a sufficient requirement to achieve "good status". For example, a river can have good water quality, yet be so engineered that it no longer provides essential services to people such as flood control, fisheries and recreation, and much of its biodiversity has been lost.

More information can be obtained from:
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www.panda.org/europe/freshwater

The WWF European Freshwater Programme's overall goal is to conserve and restore the functions and integrity of freshwater ecosystems for the benefit of all life.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption