ARTIFICIAL & HEAVILY MODIFIED WATER BODIES

SOME WATER BODIES have been constructed (AWB – Artificial Water Body) or have been physically modified (HMWB – Heavily Modified Water Body) to support navigation, flood defence, hydropower and other valuable uses.

Article 5 of the WFD has required a review of the impact of human activity on the status of surface water bodies. A high percentage of surface water bodies have been provisionally identified as HMWB. In addition, the reports on risk analysis of the Member States have shown that hydromorphological changes are the most important pressures, resulting in a high percentage of surface water bodies likely to fail the good ecological status.

The WFD allows for the continuation of specified uses, while at the same time allowing mitigation measures to improve ecological conditions.

Implications of the WFD for the use and management of inland waterways

THERE ARE ABOUT 5000km OF INLAND WATERWAYS IN BRITAIN (see map). By waterways we mean canals, rivers or lakes that are, or have been, navigable to powered craft. An integral part of the network are the water resources used to supply water to canals – British Waterways owns 89 reservoirs, 6 boreholes, and many pumps and feeder channels transferring surface water into its canals. These waterways are managed by a variety of organisations that are collectively known as navigation authorities. The biggest of these is British Waterways (BW), a public corporation responsible for a total of 3200km of waterways in England, Wales and Scotland.

Waterways were constructed originally to move goods, but nowadays their chief use is for leisure and tourism. BW have estimated that people spend about £1.5 billion each year on boating and other leisure activities on its waterways. Goods are still moved on some of the larger waterways. This mode of transport has many environmental benefits and the government is encouraging it by offering grants for new wharfage and other infrastructure.

Waterways also have an important role to play in urban regeneration. Brindley Place in Birmingham is an example of how BW has worked with the local authority to improve the local waterway and use it as a focus for wider regeneration of the area

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In addition, canals play an important role in providing a raw water supply for industrial use and for public water supply. BW have over 400 contracts to supply water to third parties.
Waterways are widely recognised for their environmental and heritage value and their accessibility for people. BW are the third largest owner of listed buildings in the UK and own 60 SSSI.

How the WFD might affect inland navigation authorities

BRITISH WATERWAYS, like all inland navigation authorities, is dependent on water resources of sufficient quantity and quality to maintain water levels and to provide a quality environment for its boaters and other customers. BW therefore supports the aims of the Directive and is pleased that controls will be broadened to include diffuse pollution. However, BW is concerned about the impact on its operating costs and on its ability to develop and expand the network.

Those of BW’s activities that will be most affected are channel maintenance (mostly dredging and bank protection), water supply to canals and restoration of disused waterways (see photo). Even the use of the waterway by boats could be affected, since the amount of boat traffic on a canal is often the most significant factor determining the ecological quality of the water body, especially in narrow canals.

Government policy is that waterways should be developed for wider public benefit where this can be shown to be sustainable.

(Waterways for Tomorrow’, DETR, 2000). This means balancing environmental objectives with social and economic benefits and the Directive is flexible enough to allow this, through the use of exemptions. BW and other navigation authorities will need to be engaged with the process of river basin planning to ensure these wider social benefits are considered.

Most of BW’s network is likely to be designated as artificial (AWB) or heavily modified (HMWB). This is because the modifications or artificial characteristics (weirs, bank protection, etc) required for navigation are likely, in many cases, to prevent the achievement of Good Ecological Status. The default ecological objective will therefore be Good Ecological Potential. This is a ‘slightly’ lower quality than Maximum Ecological Potential, which requires all feasible mitigation to be put into place. BW already do quite a bit of mitigation - for example it often uses reeds and coir rolls to protect banks from erosion rather than steel piles - but will this be enough? UKTAG have a R&D project underway to develop an ecological classification scheme for canals (WFDG1) and once this has finished the authorities may have a better idea.

The waterways and navigation sector has been actively engaged in the implementation of the Directive because it will have a major impact on its activities. A working group has been set up by the sector to share experiences and to provide a single voice to government and the competent authorities.

The changing legislative and regulatory regime in the UK places a greater onus of responsibility on navigation authorities to quantify and justify their demands for water.

This guidance note is designed to help navigation authorities ensure that adequate water supplies are made available to meet the current and future needs of their waterways. The use of the methods outlined in this guidance note will help all navigation authorities, particularly the smaller ones with limited resources, determine the reliability of their water resources and demonstrate their needs for water.

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**MANDATE FOR AN ACTIVITY ON ‘WATER FRAMEWORK DIRECTIVE AND HYDROMORPHOLOGICAL PressURES’.
**

**FIRST PHASE: Resulting from Hydropower, Navigation and Flood Defence Activities.**

**Phase I: 2006**

The main hydromorphological driving forces identified in risk analysis are hydropower, flood protection, navigation and agriculture. Other activities such as urbanisation, gravel and water abstractions (e.g. for irrigation), outdoor recreation activities and fisheries are also of some importance. Hydromorphological alterations are often undertaken for more than one reason, e.g. a multi-purpose dam for hydropower generation, flood protection and water abstraction or river channelisation for navigation and flood protection.

Therefore the Water Directors agreed at their meeting in Luxembourg in June 2005 to start a new activity referring to hydromorphological alterations as one of the most important pressures on surface water bodies, resulting in a high percentage of surface water bodies likely to fail the good ecological status.

The document is included as Annex 8 in the summary of the Workshop in Prague (see page 2):

(http://www.ecologic-events.de/hydromorphology/documents/967_summary.pdf)

**SNIFFER Project WFD39: HMWB IN SCOTLAND – IDENTIFICATION, DESIGNATION AND ENVIRONMENTAL OBJECTIVES**

This project (or series of projects) will build on the previous work undertaken, testing the guidance under realistic conditions in the Scottish context and informing policy related to such designation work for the future.

**SNIFFER Project WFD61: CANAL CLASSIFICATION TOOL**

The main aim of the project is to produce a tool that will enable the environment agencies in the UK to classify canals in accordance with the requirements of the WFD and which will support operational and surveillance monitoring.

More details on both Projects can be found on the SNIFFER website:

(http://www.sniffer.org.uk/active_further_info.asp?&location=research_areas)

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**Latest on the WFD**

**CONSULTATION ON RIVER BASIN PLANNING GUIDANCE**

Defra and the Welsh Assembly Government propose to issue guidance to the Environment Agency on river basin planning, setting out their expectations and principles for the river basin planning process. This draft guidance is written for a regulatory audience, rather than for members of the public.

This Guidance will be complemented by the Agency’s ‘Framework for River Basin Planning’ to be published shortly.

Consultation responses should be returned by 7 March 2006.

A copy of the document can be downloaded from Defra’s website:


**The River Basin Planning Strategy for the Scotland River Basin District is available at SEPA’s website:**

(http://www.sepa.org.uk/wfd/rbmp)

**WISE Newsletter**

**Issue No 2 – Dec 2005**

(former ‘WFD Newsletter’)

Latest information bulletin of the Water & Marine unit of the DG Environment of the European Commission.

(http://europa.eu.int/commission/environment/water)

**The 1st International Ports and the Environment Conference Antwerp, 22-23 February 2006**

Environmental issues are coming to the centre of the port development debate. It is no longer financial and engineering concerns that drive port development. Rather, it is achieving consent to development that is critical. Time delays and increased costs have become a major brake on trade growth.

GreenPort 2006 is a forum for the discussion of these issues – it is the first meeting of port developers and specialists and will chart a way forward for the responsible and environmentally-literate development of new port capacity.

(http://www.green-port.net/)

**The International Conference and Exhibition on Small Hydropower and its Role in the Future of Renewable Energy:**

7-9 June 2006, Crieff, Scotland, UK

Hidroenergia, the major European Conference on small hydropowers, is organised by European Small Hydropower Association (ESHA) and British Hydropower Association (BHA) and will cover environmental factors including the significance of the WFD for the hydropower industry.

(http://www.esha.be/)
The work of the Information Centre continues . . .

News from the Information Centre
continues . . . vigorously with new Information Notes now on the website entitled Sources of Pollution covering the two descriptions of pollution, point source and diffuse (non-point) pollution. (see below, ‘New on www.euwfd.com’).

Commonwealth People’s Forum, Malta, November 2005:
The Commonwealth People’s Forum and Exhibition centred very much on the need for improved networking among the Commonwealth countries.

The debate in this forum and other events, including the Commonwealth Human Ecology Council (CHEC) forum, centred on global issues (climate change and water being quite a substantial part of the agenda) and formed the basis of a Communiqué sent into the Commonwealth Heads of Government Meeting (CHOGM). The FWR stand featured the Water Framework Directive Information Centre and generated considerable interest at the exhibition.

The official opening of CHOOGM was a spectacular occasion with messages for unity and networking being delivered by HM Queen Elizabeth II and the Commonwealth Secretary General Don McKinnon.

New on (www.euwfd.com)

Information Notes on Sources of Pollution have been posted on the website. They include an Overview (FWR WFD Note 16-0), Diffuse Pollution (Note 16-1), Useful Links giving links to websites relevant to sources of pollution (Note 16-2) and Reference Library of selected relevant publications (Note 16-3). As with all the other Notes on our website, these are available directly on the page in HTML format and in pdf file format, better suited for printing.

Neil Tytler demonstrates the work of the WFDIC to Swedish delegates at the EU Environmental Research Conference in Brussels.

The Latest News together with the Conferences & Events sections of the website continue to be updated frequently with hard copies being mailed out every two months.

Presentations have been given to the Welsh Assembly Government, to two CIWEM branch meetings that focused on the WFD and we were invited by DFID to give a presentation on the background and implementation of the WFD to a study tour of water officials from South Africa.

As part of the continuing strategy to inform people about the Information Centre and its work in raising public awareness about the Directive, the Centre has been the major theme of our stands at the following events: IWA Conference, Calgary; WaPUG Conference, Blackpool; EU Environmental Research Conference, Brussels; EWA Conference, Brussels, Commonwealth Peoples Forum, Malta, and the Environment Agency Annual Conference in London.

In addition, the Centre continues to provide help and advice on WFD and related environmental matters to a large number of enquirers who have contacted us both by email and telephone.

Neil Tytler, Manager WFDIC

Top:
The Secretary General of the Commonwealth, Don McKinnon with Caryll Stephen, Chief Executive of FWR;

Right:
Malta Girl Guides.

Below:
Delegates from Africa visiting the FWR exhibition stand.