

# Technical Briefing: Water Framework Directive

## **Summary:**

- The Water Framework Directive (WFD) will revolutionise the way that the water environment is managed and protected. It replaces today's piecemeal legislation with integrated management of water quality, quantity, physical habitat and ecology.
- The WFD has far-reaching implications for fisheries managers and the industry. Its main effect
  will be an improvement in environmental quality but it may also result in new controls on
  fishing and new duties for regulators.
- This technical briefing summarises the key feature of the WFD, highlights key issues, and gives the background information to help industry find out more about it.

#### **Background**

The WFD is the most substantial piece of environmental legislation ever produced by the European Commission (EC). It will provide the impetus for better water management in the UK and the other Member States for many years to come.

The WFD has far-reaching implications for fisheries and aquaculture in rivers, lakes, estuaries and coastal waters throughout the UK. The industry will benefit from a better environment – but the WFD might also create new controls for fishing and aquaculture to protect the environment.

The WFD introduces a revolutionary new approach to environmental management. It creates an integrated management regime so that impacts as diverse as industrial effluent discharges and diffuse pollution from rural areas will be addressed alongside physical impacts like coastal defences and aggregate extraction. The WFD will:

- Replace existing legislation with a single joined-up regime for managing all of the impacts within entire river basins;
- Set environmental targets, requiring all inland and coastal waters to reach "good ecological status" by 2015; and
- Require stakeholders and statutory bodies to work together to achieve "good ecological status" throughout Europe.

This Technical Briefing has been prepared to give a quick overview of the WFD and provide advice to the industry. It highlights the key dates for WFD implementation; identifies the potential problems that the WFD may cause; and sets out how the industry should get involved in the WFD.

## Five things you need to know

- The WFD aims to deliver "Good Ecological Status" for all rivers, lakes, estuaries, coastal waters and groundwater by 2015. The WFD will replace existing water quality legislation (such as the shellfish waters directive).
- Good ecological status will be measured by considering both the quality of the environment (plant and animal communities as well as water quality), and the pressures from human activities. 53% of UK estuarine and coastal waters are at risk of not achieving Good Ecological Status.
- River Basin Districts RBDs are the basis of WFD management. They include all surface waters including streams, lakes, rivers, estuaries and coastal waters up to 1nm offshore (3nm in Scotland). There are 16 RBDs in the UK.
- River Basin Management Plans RBMPs will be produced by the end of 2009. RBMPs will be statutory plans, drawn up by "competent authorities" (Environment Agency, SEPA, EHSNI) in collaboration with stakeholders. All public bodies will be required to help implement RBMPs.
- Fishing and aquaculture may be affected by RBMPs. Water quality improvements should bring benefits, but there is also a risk that the WFD will require restrictions on fishing and aquaculture in coastal and estuarine waters (see page 7 for more information).

More detailed information can be found inside this quide.

## **WFD: Frequently Asked Questions**

#### What will the WFD do?

The WFD will steadily improve the water environment throughout the EC. Unlike previous legislation, it considers the health of the flora and fauna in rivers, lakes, estuaries and the sea as well as water quality. It addresses any problems that prevent waters from achieving 'Good Ecological Status'".

## What happens to current laws?

The WFD will replace all existing water quality legislation (such as the shellfish waters directive) by 2013. Areas protected by these laws will become "sensitive areas" under the WFD, to ensure that water quality is maintained or improved.

#### Good or bad for fishermen?

Most of the effects of the WFD on the fishing industry should be good – such as improvements in water quality. 53% of UK estuaries and coastal waters are presently at risk of failing to make 'Good Ecological Status', and the WFD will address this problem. However the WFD may also introduce new constraints on any harmful fishing and aquaculture activities.

#### What area does it cover?

The WFD's full protection (for both ecology and water quality) extends to all freshwater bodies, and seawards for one nautical mile from baselines (3nm in Scotland). Water chemistry is protected even further offshore, out to 12nm from baselines. Under the WFD, water bodies will be managed as integrated "River Basin Districts", from source to sea.

#### How are problem issues identified?

The ecological status of all of the water bodies in the UK has been assessed to identify areas at risk of failing to achieve good ecological status, and the activities that may be causing problems. This information has helped the preparation of reports on "Significant Water Management Issues" for each River Basin.

#### What activities does it cover?

Basically everything. Any activity that might harm the water environment could be tackled by the WFD – including any fishing or aquaculture activities that harm the water environment, and any discharges of waste or effluent into water bodies.

#### Who is responsible for it?

The WFD is being implemented by 'competent authorities' (EHSNI, Environment Agency, SEPA). These authorities will produce River Basin Management Plans. Responsibility for implementing these plans is shared by existing statutory bodies, all of which must 'have regard' to the plans. The WFD hasn't changed the responsibilities of current regulators, but it will give them new duties.

#### Will it restrict fishing activities?

It's possible. Restrictions on fishing already look quite likely in some areas – notably the Dee Estuary, where cockle fishing has been identified as a 'Significant Water Management Issue'. A total of 25 sites have been identified where shellfisheries threaten Good Ecological Status, and non native species are a concern in about 100 areas. Restrictions on both new and established fishing activities may be needed in some of these areas, but no decisions have been taken yet.

#### Will there be extra costs for industry?

Possibly. The WFD embraces the principle of 'the polluter pays', so businesses with adverse environmental impacts will be expected to contribute to the costs of clean-up. The Government is presently carrying out an economic assessment to establish how different industries will help to pay for protecting the environment.

#### When will this happen?

It's started. Various consultation documents are being produced in 2007 and 2008, with the first River Basin Management Plans due to be produced and implemented in 2009. (See page 3 for details).

#### Is the industry involved?

Commercial sea fishing and marine aquaculture interests have limited representation on *River Basin Management Liaison Panels* at present (though freshwater anglers are well represented, and aquaculture representation in Scotland). It is vital that the industry takes part in consultations and establishes close links with their local competent authority for the WFD (contacts are listed on page 8).

#### What should I do?

Make sure the industry is involved at the local level. Contact the local River Basin District Manger (see page 8). Make sure you respond to consultations, and that the industry doesn't get overlooked.

## WFD Facts: Laws and Plans

#### The law

The EC Water Framework Directive (WFD) has been brought into force in the UK through several different Acts, for each of the devolved administrations and for rivers that straddle national boundaries.<sup>1</sup>

The responsibility for implementing the WFD lies with specified 'competent authorities':

- Environment Agency for England and Wales:
- Scottish Environment Protection Agency in Scotland; and
- Environment and Heritage Service in Northern Ireland.<sup>2</sup>

#### Out with the old....

The WFD replaces old familiar legislation like the Bathing Waters Directive and Shellfish Waters Directive. These, and dozens of different UK water quality regulations are subordinate to the WFD, and will be phased out by 2013. The WFD will provide the same, or better, protection of the environment as this old legislation (see pages 7 and 8)

## ....in with the new

The WFD replaces piecemeal regulations with integrated 'River Basin Management Plans' (RBMPs). RBMPs will come into force in 2009. They will take account of the biology of water bodies as well as levels of pollutants, and will drive improvements in water quality, aiming to deliver 'Good Ecological Status' by 2015.

#### How will it work?

River Basin Management Plans (RBMPs) will be drawn up by the competent authorities, working in consultation with other statutory bodies and stakeholders.

RBMPs cover large areas – there are just 15 for the whole of the UK (including two that are shared with the Republic of Ireland). Work started on these RBMPs in 2004, and they are due to be published by the end of 2009.

RBMPs are being based upon national and EC standards, as well as the latest scientific information. This information allows the competent authorities to 'characterise' water bodies, and then identify the key management issues within an area. Each RBMP will set out a "programme of measures" that are the management actions required to tackle these issues.

The RBMP process is a six year cycle. Once the first plans are published in 2009, work will begin on revising them in 2010 (see Figure 1 below).

RBMPs are backed up by the full power of the law: competent authorities are required to implement RBMPs; and other public bodies are required to have regard to them. The Government also has the power to direct public bodies to ensure that RBMPs are implemented.



<sup>&</sup>lt;sup>1</sup> All of the relevant legislation is listed on page 8

<sup>2</sup> Contact information and web links for these organisations is at Annex 1.

## WFD Facts: Timetable and progress

The WFD sets out a detailed timetable for implementation. Starting in 2000, EC Member States were given 3 years to prepare for the WFD, 6 years to develop plans and a further 3 years to put them into practice.

#### 2003: Define the areas

16 River Basin Districts have been defined in the UK. These cover all rivers, lakes and ground water as well as estuaries and coastal waters. In England and Wales the seaward boundary of the WFD for ecological standards is 1 nautical mile offshore, and in Scotland it extends out to 3 nautical miles (for chemical standards the boundary is 12nm throughout the UK).



Figure 2: River Basin Districts in the UK

#### 2004-05: Characterise water bodies

A massive effort has gone into the process of 'characterising' all of the water bodies in the UK. Scientists have analysed all of the available information describing the chemistry and ecology for thousands of water bodies, and then assessed the various human impacts on them (such as non native species, pollution, water abstraction, and physical alterations).

The conclusion of this work was that across the UK, 58% of all water bodies were at risk of failing to meet 'good ecological status', with 53% of estuaries and coastal waters in this category (Scotland 31% at risk; Northern Ireland 96%; England and Wales 93%).

#### 2006-07: Identify issues

The UK's competent authorities have been working together and with their colleagues in Europe to define environmental standards. Using these standards and the results of 'characterisation', they have produced reports of 'Significant Water Management Issues' for each River Basin District. These reports are being published in 2007, and the consultation period for them ends in January 2008. The reports have all been published on the internet.

#### 2008-09: Develop plans

River Basin Management Plans (RBMPs) will create a strategic, long-term approach to the management of water bodies. They will set out environmental objectives, and provide a framework for more detailed decisions to be made.

Draft RBMPs are due to be published for comment in December 2008. These will contain proposed environmental objectives and programmes of measures required to achieve them. Final plans will be drawn up by the end of 2009.

RBMPs are being developed by the competent authorities and River Basin District Liaison Panels. These Panels have been chosen to represent key stakeholders.

#### 2009: Programmes of Measures

Programmes of Measures (POMs) are the management actions that will be taken to achieve the objectives of RBMPs. They will be implemented at the national or local level to address specific issues. POMs must be fully operational by 2012.

Proposals for POMs, including their justification and alternative measures, will be included in the draft RBMPs published in 2008.

#### 2015: Achieve good status

The aim of the WFD is that all waters should achieve 'Good Status' (ecological and chemical) by 2015.

#### 20010-15: Make new plans

RBMPs are based upon six-year cycles of planning and action. Once the first RBMPs are produced in 2009, work will begin on the second RBMPs, due for publication in 2015.

# Building the foundations: 2004-09 Characterising water bodies and making plans

The WFD requires all Member States to gather baseline information and report on 3 aspects of water body 'character' by 2004:

- **Environmental** the ecological and chemical character of water bodies;
- Impacts the effect of human activities on the ecology of water bodies; and
- Economic an analysis of the economic uses of water bodies.

Information about human impacts and environmental character will determine whether or not a water body is likely to achieve "Good Ecological Status"; and the economic information will help to guide management decisions. This information is the raw material for RBMPs.

## **Environment and impacts**

Each of the competent authorities have characterised water bodies according to their environmental character and the human impacts on them. The thresholds that distinguish 'Good' status from poorer quality are set out in the Annexes to the WFD, covering dozens of criteria.

More than half (58%) of all water bodies are at risk of failing to achieve *Good Ecological Status*, including 53% of estuaries and coastal waters. Detailed information about the characterisation process and its results are available via *competent authority* websites.

#### **Economic characterisation**

The economic characterisation of water bodies shall identify important uses; determine the scope for recovering management costs from users (the 'polluter pays' principle); and allow the economic impacts of management measures to be assessed to ensure that costs and benefits of management measures are not disproportionate.

National Governments have responsibility for this area of work, and have published initial reports on their websites. These seem to overlook sea fishing interests.

#### Making plans

The Characterisation process will inform the production of RBMPs.

- Water management issues reports of the main issues that each RBMP will address are being published during the summer of 2007. Comments are being sought on them right now.
- Draft RBMPs these will identify how the management issues are addressed through management actions. They will be published for consultation during 2008.

'Liaison Panels' have been set up to provide expert guidance to the authorities during the planning stage. Sea fishing interests have very little representation on these Panels.

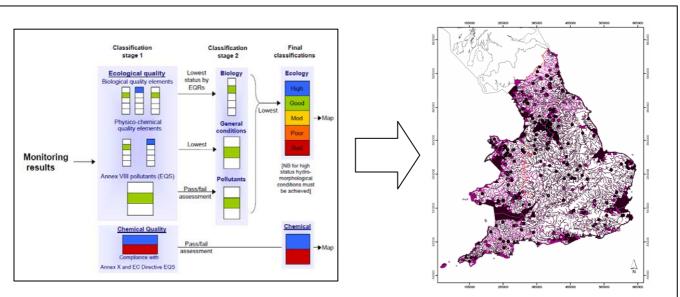


Figure 3: Characterising water bodies (surface waters in England and Wales illustrated on map – darker colours show water bodies at risk of not achieving Good Ecological Status.)

## Implications for fishing and aquaculture

## WFD and fisheries management

Marine fishing and aquaculture activities can have adverse impacts on the marine environment. These impacts range from the effect of dredges on the seabed to the risk of introducing non native species to coastal waters.

These impacts have been assessed during the characterisation of ecological status for the WFD. 53% of the UK's estuaries and coastal waters are at risk of failing to achieve *Good Ecological Status*. This includes 25 sites where shellfisheries cause a risk in themselves - in large parts of the Thames Estuary, the Solent, Wash and Burry Inlet. (See page 7 for information on the areas where fishing issues are a concern).

If fisheries or aquaculture impacts are confirmed during the production of *RBMPs*, the *Programme* of *Measures* may require that new fisheries regulations are introduced.

## New and established activities

Under the WFD, new regulations might be required for both established activities as well as new ones. As with other environmental laws, the WFD is concerned with the impact of an activity, not its antiquity. The WFD might require the regulation or prohibition of both new and established fishing activities if they cause unacceptable environmental damage.

Where new management measures are required, they would be introduced and enforced by existing regulatory bodies. The WFD does not transfer responsibility for fisheries management; it simply gives new duties to existing managers.

#### **Setting and monitoring standards**

The WFD will be based upon environmental standards and supported by a monitoring programme. These will ensure that it addresses the right problems and that the ecological status of waters is improving.

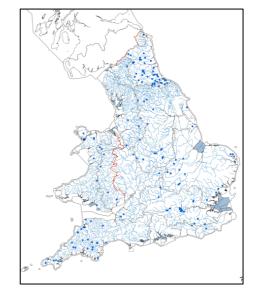
The environmental standards to be monitored include estuarine fisheries and benthic marine invertebrates. It's important to note that coastal fish stocks aren't assessed under the WFD – although the WFD might still restrict fishing to protect environmental features.

Member States are still agreeing which species should be monitored, and what standards should be achieved. Commercial species might be included among the species that are monitored to determine ecological status. The full implications of this are not completely clear at present.

#### **Protected areas**

The WFD identifies 'protected areas' that are protected for their use (such as for drinking water or fisheries), or because they support important habitats and species.

Protected areas include sites designated under the shellfish waters directive – so the WFD will maintain the protection already given to these sites. They also include EC wildlife sites – so the WFD will bolster the protection of SACs and SPAs.



**Figure 4**: WFD "protected areas" will include existing "shellfish waters".

#### Get involved

The WFD is the biggest ever change that has been made to the management of the water environment. Marine fisheries and aquaculture are relatively small but important uses of the water environment, and it's important that the industry and associated organisations play an active role in the WFD revolution:

- Nationally regulators and representative bodies must make sure that marine fishing and aquaculture is part of WFD planning;
- Regionally regulators and the industry should get involved in the River Basin Management Planning process; and
- Locally individual operators should make sure that the WFD 'competent authority' is aware of their activities.

## **Background information**

## **River Basin Districts: Issues of concern**

The table below identifies, as far as possible, the RBD where fishing and aquaculture issues have been identified as potential problems, either during the characterisation process, or within the *Significant Water Management Issues* reports being produced during 2007.

District	Characterisation Issue: Risk of Failing Good Ecological Status			Significant Water Management Issue	
	Fishing / Aquaculture Impacts	Shellfishing	Non native species*	Marine Fishing / Aquaculture	Other Marine Issues
English and Welsh RBDs					
Anglian		<b>√</b>	<b>√</b>		Ballast water and non native species
Dee		✓	✓	Cockle Fishery	
Humber			✓	-	Chinese mitten crab
Northwest		✓	✓	-	-
Severn			✓	-	-
South-East	✓	✓	✓	-	-
South-West	<b>√</b>	✓	✓	Commercial Fisheries	Non native species
Thames	<b>√</b>	✓	✓	-	Chinese mitten crab
West Wales	✓	✓	✓	-	Non native species
Cross-Border RBD	s (England – S	cotland)			
Northumbria			<b>√</b>		Chinese mitten crab; Slipper limpet
Solway-Tweed			✓	tbc	tbc
Scottish RBD					
Scotland	✓		✓	tbc	tbc
Irish River Basin D	istricts				
North Eastern NI	✓		✓	-	Protecting high quality areas
Shannon	٧	/			Protecting high quality areas
North Western	٧	/			Protecting high quality areas
Neagh Bann	٧	/			Protecting high quality areas

#### **Key**

☑ At risk

✓ Probably at risk

\* Non native species generally not associated with fishing activity

tbc To be confirmed (report not yet published)

### **Further information**

## Legislation

#### EC:

The Water Framework Directive (EC Directive 2000/60/EC)

#### UK:

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.

The Water Framework Directive (Implementation) Regulations (Northern Ireland) 2003.

The Water Environment and Water Services (Scotland) Act 2003.

The Water Environment (Water Framework Directive) (Northumbria River Basin District) Regulations 2003.

The Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004.

## Competent authorities' sites

Environment Agency (England and Wales)
www.environment-agency.gov.uk/wfd.
Environment and Heritage Service Northern
Ireland

www.ehsni.gov.uk/water/wfd.htm Scottish Environment Protection Agency www.sepa.org.uk/wfd/index.htm

#### **Government sites**

England / UK Government: DEFRA www.defra.gov.uk
Northern Ireland Executive www.doeni.gov.uk
Scottish Executive www.scotland.gov.uk
Welsh Assembly Government new.wales.gov.uk

#### Other organisations / links

WFD Information Centre
www.euwfd.com/index.html
UK Technical Advisory Group
www.wfduk.org
EC Water Framework Directive site
ec.europa.eu/environment/water/waterframework/implrep2007/index\_en.htm

## River basin management plans

Contact information for the plans:

#### **England and Wales**

- Anglian: David Whiles, 01733-464269
   AnglianRBD@environment-agency.gov.uk
- **Dee**: Damian Crilly, 029-2046-6150 DeeRBD@environment-agency.gov.uk
- Humber: Viki Hurst, 0113-2312392
   HumberRBD@environment-agency.gov.uk
- **Northwest**: Sarah Pemberton, 01925-542192 sarah.pemberton@environment-agency.gov.uk
- Severn: Mark Scott, 0121-711-5915 severnRBD@environment-agency.gov.uk
- **South-East**: James Farrell, 01903-8322039 southeastRBD@environment-agency.gov.uk
- **South-West**: Ben Bunting, 01392-352264 ben.bunting@environment-agency.gov.uk
- Thames: Myles Thomas, 01707-632315 myles.thomas@environment-agency.gov.uk
- West Wales: Damian Crilly, 029-2046-6150 WesternWalesRBD@environment-agency.gov.uk

#### Scotland

 Scotland: Callum Sinclair, 01671 402618 callum.sinclar@sepa.org.uk

#### **Northern Ireland**

 North Eastern: Cate Murphy Catriona.Murphy@doeni.gov.uk

#### Multinational

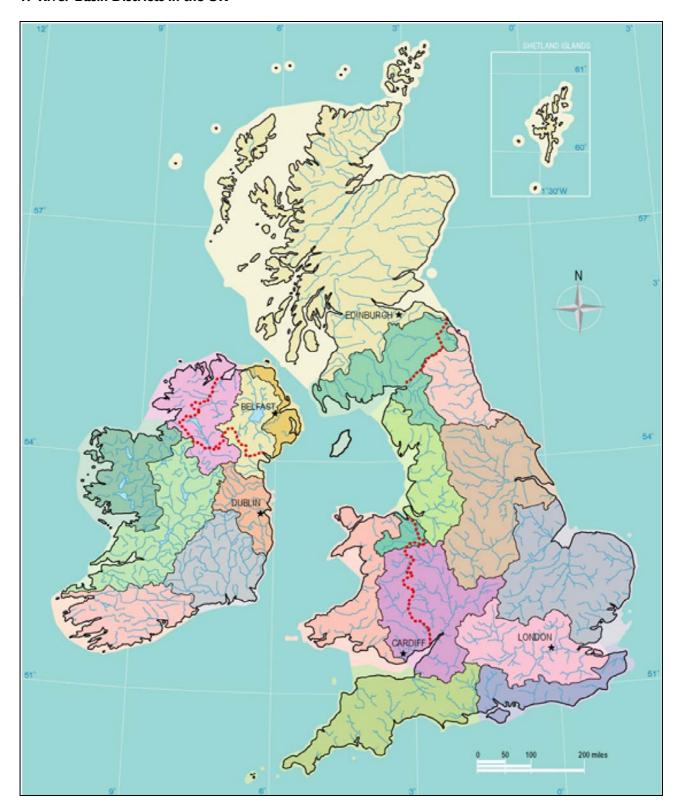
- Northumbria: Ellie Simpson 0191-203-4072 NorthumbriaRBD@ environment-agency.gov.uk
- Solway-Tweed: Jeremy Westgarth, 01768-215730 jeremy.westgarth@environment-agency.gov.uk
- Shannon: Cate Murphy / Enda Thompson Catriona.Murphy@doeni.gov.uk info@shannonrbd.com
- North Western: Cate Murphy / Tony McNally Catriona.Murphy@doeni.gov.uk tmcnally@monaghancoco.ie
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#### Disclaimer

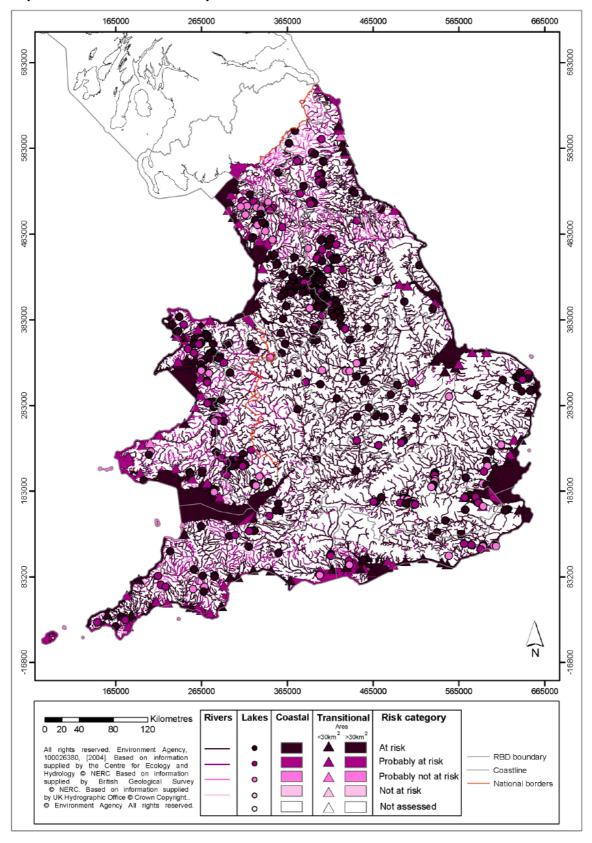
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## **APPENDICES: DETAIL OF FIGURES USED IN THIS DOCUMENT**

## I. River Basin Districts in the UK



## 2. Surface waters in England and Wales: characterisation of risk of failing to meet WFD objectives from all pressures on each water body.



## 3. England and Wales – map showing economically important areas for aquatic species (including areas designated under Shellfish Waters Directive).

