The EU Water Framework Directive (WFD) promotes a new approach to water management through river basin planning. It aims to prevent deterioration in water quality; improve and protect inland and coastal waters and groundwater; lead to better and more sustainable use of water as a natural resource; create better habitats for wildlife that lives in and around water and help reduce the effects of floods and droughts. It applies to all water bodies, including rivers, lakes, estuaries and coastal waters up to 1 nautical mile offshore (3 nautical miles in Scotland).

This note falls into three parts:

- The implications and risks for recreational boating and how regions and clubs need to get involved in the process
- An explanation of the requirements of the Directive and the terminology
- How the WFD is being implemented in the UK (although it applies across the UK, WFD implementation is different in the devolved administrations within the UK)

Why the WFD could be Significant for Boating

Although in the first planning cycle impacts from recreational boating have been shown to be relatively minor, it is essential that we remain vigilant. There is always the risk that recreational boating impacts could become an issue during the implementation stage. It could also become an issue in the second and third planning cycles as the bar is raised and easy improvement options have already been taken.

The WFD has the potential to affect boating activities by placing restrictions or conditions on:

- facilities maintenance and development e.g. dredging and disposal, bank protection, weed control there are signs that recreation may be an issue for morphology (physical modification of natural water bodies) in the second cycle
- navigation/vessel movement e.g. boat wash, bed disturbance
- control of spread of non-native invasive (or "alien") species through hull fouling and boat movements – again likely to be an issue in the second cycle. The European Commission is developing an EU Strategy on Invasive Alien Species; a draft Directive is expected shortly
- discharges e.g. boat emissions, anti-fouling paints, boat wash down
- abstraction or impoundment, including structures such as weirs and locks
- new development e.g. dredging and disposal, infrastructure, land claim
- shellfish waters under the related Shellfish Waters Directive that may lead to attempts to control the discharge of black and grey waste water from boats

It is in any case in our interest as water users to encourage improvement in water quality. We can help implement the WFD by:

- making sure that we understand the impact of River Basin District Plans on the waters we use
- observing and reporting changes, positive or negative, in water quality
- doing all that we can to minimise the impact of recreational boating on water quality and on the environment generally
- working with other water users and stakeholders where appropriate

What you need to do at a Regional Level

At a regional level, it is important you:

- decide how you are going to monitor implementation of the River Basin District Plans, and how you are going to get information on what is being done at catchment/water body level
- ensure that clubs, marinas and other boating organisations in your region or country are briefed on the impact of WFD, and aware of the Plans and any actions planned for water bodies that they use
- encourage them to find out whether catchment pilots or projects have been set up to help implement plans, and where appropriate to take an active part and work with other stakeholders
- encourage them to make their members aware of water quality issues generally, as well as issues specific to the water body/bodies which they use, and to monitor and report any issues/changes that they observe while boating
- encourage them to be vigilant in identifying and minimising the risk of spread of non-native invasive species e.g. carpet sea squirt (*Didemnum vexillum*) and killer shrimp (*Dikerogammarus villosus*). Guidance on best practice is on the Green Blue website at www.thegreenblue.org.uk/clubs_and_training_centres/antifoul_and_invasive_species.aspx
- encourage boat owners, particularly those with yachts/motor cruisers, to minimise waste emissions to water. The RYA and The Green Blue have been working with the Environment Agency (EA) on a pilot project in the South East RBD to encourage best practice through clubs and marinas, and there are now plans to run similar projects elsewhere
- if you are in England or Wales make sure that your region is on EA's list of stakeholders, so
 that you are consulted at the various stages of second cycle planning. If the Liaison Panel
 membership is reviewed, try and make sure that there is a recreational representative on
 your Panel. RYA Scotland is dealing with these issues centrally but wishes to know of any
 RYA members who sit on Area Advisory Groups for other reasons.

Contact the Planning and Environment Manager at the RYA if you have any concerns or find any problems, and keep her up to date with the picture for your region/home country.

WFD Requirements and Terminology

The Directive itself is complex and has its own set of terminology and processes. Although it is important to understand how things work, it is not necessary to know all the detail. This section summarises the key parts of the Directive and defines the key terms used within it.

Physical structure

River basins are defined as the area of land drained by a single river flowing into the sea. These are grouped into River Basin Districts (RBDs), which also cover associated groundwaters and coastal waters. RBDs are the administrative areas for the WFD.

Ten RBDs have been set up in England and Wales (Severn, South East, South West, Thames, Dee, Humber, North West, Northumbria, Anglian and Western Wales), one in Scotland and one (Solway Tweed) which crosses the border of England and Scotland.

Each River Basin is divided into catchments which are areas with several, often interconnected, water bodies. Catchments are further divided into water bodies (small rivers, lakes greater than half a hectare in surface area, sections of larger rivers, estuaries (known as transitional waters) or sections of coast). Transitional and coastal waters are often collectively known as TRaC waters.

Water bodies may be natural, artificial (AWBs) i.e. created by human activity, or heavily modified (HMWBs) i.e. substantially changed in character by physical modification for a range of activities, including navigation, port facilities and recreation. The latter two are often collectively referred to as

A/HMWBs. Ecological water quality objectives for artificial and heavily modified water bodies may be different to those for natural water bodies.

Administrative structure

The Minister responsible for the WFD is the relevant Secretary of State. The Directive requires appointment of a competent authority to implement the WFD. In England and Wales this is the Environment Agency (EA), for the Solway Tweed and the rest of Scotland this is the Scottish Environmental Protection Agency (SEPA), and for Northern Ireland it is the Northern Ireland Environment Agency.

To assist in their task, competent authorities have set up River Basin District Liaison Panels (generally referred to as Liaison Panels) composed of a range of major stakeholders. The RYA currently has representatives on two Liaison Panels (Anglian and South East). In Northern Ireland there is a WFD Stakeholder Forum.

Below these Liaison Panels are Catchment Groups in England, Wales and Northern Ireland, and Area Advisory Groups in Scotland. There is also a National Liaison Panel for England (NLPE) on which the RYA is a member, representing the Sport and Recreation Alliance. In Scotland there is a National Advisory Group. Although RYA Scotland is not represented directly, both SportScotland and the Scotlish Coastal Forum are members and feed issues back to RYA Scotland.

Water quality

The Directive provides for water bodies to be classified by ecological and chemical quality. The UK Technical Advisory Group (UKTAG) puts proposals for UK WFD standards to stakeholder consultation before submitting recommendations to Ministers.

Ecological quality is divided into a number of elements e.g. fish, diatom, phosphate and dissolved oxygen levels. The "one out, all out" principle applies, which means that overall water quality is determined by the quality of the lowest element. The level of water quality for each water body is classified as bad, poor, moderate, good or high. The Directive requires all water bodies to be at good or high level; anything else is treated as a WFD failure. The Directive also requires that there shall be no deterioration in quality of a water body (which is interpreted as a move to a lower classification).

Chemical water quality objectives are the same for both natural water bodies and A/HMWBs. The ecological water quality objective for natural water bodies is Good Ecological Status (GES). Where GES cannot be achieved by A/HMWBs due to technical infeasibility or disproportionate cost, the alternative objective is Good Ecological Potential (GEP). Meeting GEP requires all appropriate mitigation measures to be put in place. For protected areas under EU Directives, GES or GEP may be overridden by the requirements of the relevant Directive where these requirements are higher.

Planning and implementation cycles

The WFD operates on a series of six year cycles, as follows:

	Planning completed by end of:	Implementation completed by end of:
First cycle	2009	2015
Second cycle	2015	2021
Third cycle	2021	2027

The WFD requires the production in each planning cycle of a River Basin Management Plan (RBMP) for each RBD, approved by the Secretary of State. Each plan is required to contain a programme of measures designed to meet the objectives of the Directive. First cycle RBMPs were published on 22 December 2009 and the implementation of these plans is currently under way. Work has now started on planning for the second cycle.

The Directive requires the water quality objectives of GES/GEP and good chemical status to be met by the end of the first cycle. However it provides that the deadline may be extended where water quality objectives cannot be met by reason of technical infeasibility, disproportionate cost or natural conditions provided there is no deterioration. The terms "technical infeasibility", "disproportionate cost" and "natural conditions" are not defined and as such could be contentious (particularly, disproportionate cost). If an extension of the deadline is needed, the reasons are to be set out in each RBMP.

Participation

The Directive requires the active involvement of all interested parties, in particular in the production, review and updating of RBMPs. It also requires public consultation during the preparation of RBMPs on:

- The timetable and work programme for producing the Plan (Working Together)
- An interim overview of the significant water management issues identified (Significant Water Management Issues)
- The draft Plan

Implementation in the UK

Although the Directive applies throughout the UK, responsibility is devolved to the appropriate administration. The principles are the same but there are differences in implementation. For example, the Directive applies to all water bodies up to 1 nautical mile offshore, but in Scotland this has been extended to 3 nautical miles from a baseline that cuts across the mouth of firths and estuaries so that most coastal sailing takes place within them.

Moreover, the priorities for action vary from one River Basin District to another and thus the exact action required from each home country and RYA region is likely to differ. As potential sources of conflict are most likely to occur in England, the situation in England is described first with deviations from it described for the other home countries.

ENGLAND

First cycle RBMPs

All first cycle Plans and Annexes are available on the Environment Agency website www.environment-agency.gov.uk/wfd. They describe how and when water bodies are expected to reach water quality standards.

Each Plan includes:

- information on the characteristics of the RBD
- a summary of significant pressures and impacts upon water bodies and an economic analysis of water use
- objectives for 2015 and beyond
- environmental outcomes
- impacts at catchment level
- a summary of proposed national and local measures by sector (the programme of measures)

The Plans is there to:

- establish a strategic plan for long term management of the RBD
- set out objectives for water bodies and in broad terms what measures are planned to meet these objectives
- act as the main reporting mechanism to the European Commission

Each Plan is supported by 14 Annexes running to some 2000 pages. These contain detailed information explaining and supporting the Plan. Key annexes are:

- Annex B objectives for waters, which sets out the current and projected ecological and chemical status for each water body
- Annex C actions, which sets out the programme of measures and indicates which water bodies it is likely to affect
- Annex I artificial and heavily modified water bodies, which includes many water bodies used for recreational boating – reservoirs, estuaries, harbours and coastal waters

First cycle implementation

The Catchment-based Approach

When RBMPs were drawn up, it was not clear how implementation would work. Following discussions between Defra and the EA, it was agreed that the EA would engage with delivery partners at catchment level in a way that encourages greater participation by stakeholders.

The approach focuses on the management of land and water in a sustainable way that balances competing human demands at a catchment scale. The aim is to establish a framework for integrated catchment management across England, which will feed into RBMPs to meet WFD objectives. The catchment is intended to be the delivery level for future cycles, and there should be more catchment level involvement in future planning cycles.

Catchment pilots

The EA selected 10 pilot catchments in which to develop new ways of working by the end of 2012. These are being evaluated and approaches that work will be rolled out more widely from 2013 onwards.

The EA also sought other stakeholders to host pilots, and received 70 applications. From these another 25 pilots, hosted by outside bodies, will also be evaluated. The remaining applications will not be evaluated, but will receive EA help to proceed. RYA member organisations may wish to get involved in projects hosted by water companies on sailing reservoirs or port and harbour authorities for example. Information on the catchment-based approach, pilot catchments and EA contacts is at www.environment-agency.gov.uk/research/planning/131506.aspx. A report on the evaluation of the catchment pilots is expected shortly.

Investment in river improvements

On 13 April 2011 the Secretary of State announced funding for England of £92 million over 4 years for a Catchment Restoration Fund to improve rivers and lakes, and a further £18 million in 2011-12 for farmers to protect water courses.

The Fund was launched in January 2012, administered by the EA, and available to not-for-profit bodies. It focuses primarily on WFD objectives and projects need to contribute to the catchment approach. So far there have been two application windows. Liaison Panels are involved in assessing applications before they are finally considered at national level. Both windows have been oversubscribed and as a result the window planned for March 2013 did not take place.

Investigations

The planning process revealed that for many water bodies we do not know:

- whether there really is a water quality problem
- if there is, where the pollution is coming from
- whether a proposed solution will work

As a result, first cycle Plans include over 10,000 investigations by the EA and water companies to answer these questions; over 80% of these have now been completed. In some cases these are

leading to quick environmental improvements. Investigations and results are available at www.environment-agency.gov.uk/research/planning/33106.aspx.

Water treatment improvements

Investment by water companies for the period of the first cycle was approved by Ofwat in November 2009. Much of this is directed towards WFD and is where the main capital investment in water quality improvement will take place. Details of projects are available on water company websites. Investment plans for the next cycle have to be with Ofwat in December 2013.

Water bodies

The EA has reviewed the designation of freshwater artificial and heavily modified water bodies (A/HMWBs) in the light of new data. This has led to some changes:

- between A/HMWBs and natural water bodies
- in the uses for which A/HMWBs are designated

EA has also carried out a high resolution mapping exercise of all water bodies. This will lead to some changes for the second cycle, particularly in relation to small water bodies, some of which may either be amalgamated with other water bodies, or removed from WFD altogether.

Second cycle planning

The timetable for second cycle planning is as follows:

- Working Together public consultation June-December 2012
- Challenges and Choices (formerly known as Significant Water Management Issues) public consultation June-December 2013
- Draft second cycle plans public consultation June-December 2014
- Final second cycle plans to Secretary of State for approval September 2015

The handling of the second planning cycle is still being developed, but the EA are looking for:

- more debate, less constrained by process
- more user-friendly presentation
- better integration with other water planning (water company and flood management investment)
- identifying the best and most cost-effective improvement options. The work on costs and benefits is particularly difficult technically

WALES

The Environment Agency is the lead authority for the WFD in Wales and the approach broadly follows the EA model for England. Although EA Wales is now part of Welsh Government's Natural Resources Wales, changes in policy as a result are not expected.

The main thrust of the vision in Wales is improvements on inland and coastal waters through better land management and protection from pollution in rural and urban areas. It does include creating a better quality of life for everyone, which is where the RYA can contribute in a positive way.

There is recognition that Western Wales is popular with tourists and recreational boaters and that this should be encouraged whilst taking action to minimise any environmental impacts. The EA will develop guidance notes for best practice for boat users and recreational activities linked to a wider code of practice for boat users across the river basin district.

SCOTLAND

The key issue in Scotland is mainly diffuse pollution from agricultural and urban sources, although non-native invasive species are also potentially a problem.

First cycle RBMPs

All first cycle Plans and Annexes are available on the Scottish Environment Protection Agency website www.sepa.org.uk/water/river basin planning.aspx. The plans follow a similar format to those for England.

First cycle implementation

The Catchment-based Approach

There are eight Area Advisory Groups in the Scotland RBD and two cross-border ones in the Solway Tweed, many involving several catchments. Due to generally lower population densities than in England and the proportion of catchments in good condition, work in the first cycle has built on previous work by SEPA to reduce diffuse pollution.

As in England, the approach focuses on the management of land and water in a sustainable way that balances competing human demands at a catchment scale. There is a restoration fund used for projects to remove barriers to migratory fish, bring rivers back into a more natural state and for coastal realignment.

Second cycle planning

The timetable for second cycle planning is as follows:

- Working Together to protect and improve Scotland's water environment September 2012
 January 2013
- Improving the physical condition of Scotland's water environment (Significant Water Management Issues) – September 2012 - January 2013
- Current condition and challenges for the future: evidence for and risk assessment of significant management issues – December 2013 - June 2014
- Draft second cycle plans December 2014 June 2015
- Final second cycle plans to be published on 22 December 2015

Handling of the second planning cycle is still being developed, but like the EA, SEPA are looking for:

- more debate, less constrained by process
- more user-friendly presentation
- better integration with other water planning (Scottish Water and flood management investment, Marine Spatial Plan)
- identifying the best and most cost-effective improvement options

There will be a consultation on whether to schedule additional areas of heavily modified waters (consultation December 2013 - June 2014) and the second cycle plans are expected to pay more attention to coastal waters.

NORTHERN IRELAND

The Environmental (WFD) Regulations (Northern Ireland) 2003 transpose the Water Framework Directive in Northern Ireland. The Regulations require that the Department of the Environment, the Department of Agriculture and Rural Development, the Department of Culture, Arts and Leisure and the Department for Regional Development shall exercise their relevant functions in a manner which secures compliance with the requirements of the Directive.

The Department of the Environment through the Northern Ireland Environment Agency have been designated the responsibility for coordinating the implementation of the WFD. The Department are responsible for the characterisation of the River Basin Districts, the development of a register of protected areas, WFD monitoring, public participation, the preparation and review of River Basin Management Plans, environmental objectives and associated programme of measures.

The WFD is being implemented in Northern Ireland through 3 River Basin Management Plans that were published in December 2009 for the Neagh Bann, North Western and North Eastern River Basin Districts. The Plans are available on The Department of the Environment website at: www.doeni.gov.uk/niea/water/wfd/themes/riv bsn mngt plng.htm

The Plans are being implemented through Local Management Area (LMA) Action Plans during the 2010 to 2015 river basin planning cycle. Action plans have been developed for the 26 LMAs across Northern Ireland and detail specific measures to improve the water environment at water body level.

There is a consultation period on the Timetable and Work Programme for Development of the Second Cycle River Basin Management Plans 2015 – 2021. The consultation period comes to an end on 22 June 2013.