

INFORMATION NOTE

Water Framework Directive (WFD)

Number: IN 10/08

| | |
|---|-------------------------------------|
| Property Directorate Sponsor: Ray Dickinson, DE Prop Env Pol, 94421 2126/0121 3112126 | Date of issue: 21 Aug 08 |
| Contact if different from Property Directorate Sponsor: | |
| Who Should Read this: All those involved with development of the estate and activities that have the potential impact on the water environment | |
| When it takes effect: Immediately | When it is due to expire: 20 Aug 09 |

This has been Equality and Diversity Impact Assessed in accordance with the Department's Equality and Diversity Impact Assessment Tool against: Part 1 Assessment Only (no diversity impact found/policy is a reflection of legal requirements and/or has been cleared by a Legal Advisor).

Document Aim: This Information Note aims to inform and update the current position with the implementation of the Water Framework Directive (WFD).

This Information Note sets out:

- The background of the WFD
- The aims of the WFD
- The potential defence impacts/risks
- The implementation timetable and links to further information

Background

1. The Water Framework Directive (WFD) is the most substantial piece of EC water legislation to date and is designed to improve and integrate the way water bodies are managed throughout Europe. Member States must aim to reach good chemical and ecological status for inland and coastal waters by 2015.

2. The Directive is designed to:

- enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands, which depend on the aquatic ecosystems
- promote the sustainable use of water
- reduce pollution of water, especially by 'priority' and 'priority hazardous' substances (through Daughter Directives)
- ensure progressive reduction of groundwater pollution.

3. The WFD has the potential to have a significant impact for MOD. Of the headline policy areas there are very few that will not have some impact on defence activities in some way. Actions may be required to control and manage:

- Diffuse pollution on the Defence Training Estate from fertilisers, organic pollution, pesticides, phosphates, sediment and training activities
- Diffuse pollution from the built estate from de-icing, construction, sediment, pesticides, storage of hazardous materials and transport pollution
- Water abstraction and physical modification of watercourses
- Naval Base and other defence activities impacting on estuaries and coasts
- Point source pollution from wastewater treatment works, emergency overflows, drainage systems and trade effluent discharges
- Management of Sites of Special Scientific Interest (SSSIs) to meet Directive requirements
- Land and water contamination as a result of past defence activities.

Implementation

4. The Directive rationalises existing EU water quality legislation and requires integrated river basin planning and management, working to common objectives and timetables in all water bodies across the EU. The implementation timetable is at Annex A. The next key milestone is the publication of draft River Basin Management Plans in Dec 2008.

5. DE D Property is engaged in the implementation process, through the Defra chaired cross-Whitehall Group, and is also the nominated Defence contact point for consultations during the development of River Basin Management Plans for each of the River Basin Planning Districts.

6. As noted above the proposed action plans in the draft River Basin Management Plans could have impacts on defence activities at a local level. Any potential issues should be brought to the attention of DE D Prop Env Pol.

7. For sites receiving water and waste water services through the AQUATRINE PFI arrangement elements of the WFD will pass to the AQUATRINE Service Provider (ASP) to achieve compliance (e.g. water abstraction and containment and treatment of potentially polluting material that enters the waste and surface water drainage systems). MOD establishments remain responsible for any required improvements to site practices and site development which have the potential to impact on River Basin water quality objectives.

Rationalising Existing EU Water Quality Legislation

8. The WFD replaces some existing Directives, and incorporates the objectives and requirements of others so that they are also WFD requirements:

- some existing EU water Directives (e.g. Freshwater Fish, Shellfish Waters, Surface Water Abstraction Directive) will be repealed and their relevant designated areas and objectives incorporated as 'protected areas' within WFD
- other water-related EU Directives (e.g. new Bathing Water, Urban Waste Water Treatment, Nitrates) are brought within the integrated river basin planning process and must be complied with if WFD objectives are to be met
- some areas designated under the Habitats and Birds Directives as Special Areas of Conservation and Special Protected Areas are included as WFD protected areas
- two WFD Daughter Directives which replace existing Directives on (a) groundwater, the abolition of which is imminent, and (b) priority substances (toxic chemicals which present a significant risk to/via the water environment), currently under negotiation.

9. A diagram illustrating the inter-relationships between the WFD and other Directives is attached at Annex C.

Integrated River Basin Planning

10. The WFD introduces a new, long-term integrated river basin planning system which applies to all surface waters, groundwaters, estuaries and coastal waters and encompasses most existing water legislation. It introduces a common process and timetable for setting water quality objectives and taking action to meet them.

11. The first step was to identify water bodies and divided the country into planning units - called River Basin Districts (RBDs). There are 16 RBDs in the UK (See Annex B).

12. These districts were then 'characterised' by assessing the pressures and impacts on the water environment, such as pollution or overuse and the risk of them failing to meet the Directive's objectives if no action was taken. Pressures identified included:

- Diffuse pollution from rural areas (nitrates, organic pollution, pesticides, phosphates, sediment)
- Diffuse pollution from urban areas and transport (nitrates, organic pollution, pesticides, phosphates, sediment, urban and transport pollution pressures)
- Flow problems (abstraction and other artificial flow regulation, physical modification of estuaries, coasts, rivers and lakes)
- Point source pollution (nitrates, organic pollution, pesticides, phosphates)
- Some abstraction and flow pressures arise in the district as a result of water use for public supply and because of the way we have modified our rivers
- Biological effects (alien species, commercial fisheries)
- Industrial legacy (mines and mine waters, other pollutants e.g. metals)

13. The Competent Authorities (Environment Agency, SEPA, and EHSNI) have consulted on what they believed to be the most significant issues that face each River Basin District. The next stage is to develop draft River Basin Management Plans which will contain the proposed environmental objectives for water bodies and proposed programmes of measures required to achieve them, including some different approaches.

14. The primary focus of stakeholder engagement will be with Liaison Panels which have been established in each RBD. In addition a series of regional workshops are being held which are open to all stakeholders to contribute. Draft River Basin Management Plans will be issued for consultation in December 2008.

Common Standards to Define Common Objectives

15. The two key default objectives brought in by the WFD are:

- to prevent deterioration in water quality; and
- to aim to achieve 'good status' by 2015 in WFD water bodies.

16. Setting environmental quality standards is the approach all EU Member States are using to defining these new WFD objectives, especially 'good status'. The standards are set so as to support indigenous aquatic species, protect human health and minimise the treatment required for drinking water. An 'inter-calibration' exercise to compare and agree upon standards across the EU is currently being carried out. A final classification scheme (covering biological, physico-chemical, and chemical components) will be consulted on in 2008, once inter-calibration has been completed.

Delivery Mechanisms

17. The WFD requires Member States to have available mechanisms to deliver the measures needed to achieve its objectives. The across the UK there are already mechanisms in place to tackle pollution from industrial discharges and pollution incidents ('point source pollution'). The challenge that remains is to minimise environmental impacts from pollution from **diffuse agricultural** sources, from **diffuse non-agricultural** sources and from **hydromorphological** impacts resulting from physical changes to water bodies. Defra is reviewing the legislative, economic and voluntary mechanisms available for delivering action in these 3 areas and whether they are sufficient to meet WFD requirements.

Diffuse water pollution from agriculture (DWPA)

18. There are 3 linked elements to this work: Catchment Sensitive Farming, Nitrates Directive and the revised Code of Good Agricultural Practice for Water (COGAP).

19. Work to review measures to deal with DWPA, together with the voluntary, economic and legislative mechanisms for delivering them is being carried out under the Catchment Sensitive Farming programme.

20. The Nitrates Directive was adopted in 1991, and ongoing discussions between the UK and the European Commission have highlighted concerns with:

- the extent of current designations of Nitrate Vulnerable Zones (NVZs), and
- the adequacy of the Action Programme of measures that farmers are required to follow within these NVZs to tackle nitrate pollution.

21. Defra is also revising the COGAP as one of three elements of a new Environment Code for farmers (the other two elements relate to air and soil).

Diffuse water pollution from non-agricultural sources:

22. This covers a broad range of sources and contaminants and so it is necessary to focus the work on those sectors and activities which appear to be the main causes of problems. Five priority areas - industry, transport, abandoned mines, sewage and sediment - have been chosen for action on the basis of expert advice, output from stakeholder workshops held in 2004-2005 and 2007, and an extensive literature review. Defra are issuing a range of consultations throughout 2008.

23. In parallel the issue of Sustainable Drainage Systems (SUDS) which provide a holistic approach to drainage, producing combined water quality and quantity control, is being addressed.

Hydromorphology

24. Hydromorphology, physical changes to water bodies, were the second most significant pressure (after diffuse pollution) highlighted by the 2005 WFD risk assessment reports. There are similarities with non-agricultural diffuse water pollution in that this is a cross-cutting topic. There is a lack of scientific knowledge across Europe about the link between hydromorphological pressures and ecological impacts. Moreover, the Heavily Modified Water Bodies provisions in WFD mean that not all

of these impacts need to be tackled. The priorities are to review what voluntary, economic and legislative mechanisms we already have, and to gather more information about the scope of hydromorphological impacts and their causes. Draft guidance on the 'Classification of Ecological Potential for Heavily Modified Water Bodies and Artificial Water Bodies' can be found at:
http://www.wfduk.org/ec_potential/

Information

25. Further information is available at <http://www.defra.gov.uk/environment/water/wfd/index.htm>
Consultations (closed and current)

Diffuse sources of water pollution from agriculture – closed 13 Nov 07
<http://www.defra.gov.uk/corporate/consult/waterpollution-diffuse/index.htm>

Summary of significant water management issues – closed 24 Jan 08
http://www.environment-agency.gov.uk/subjects/waterquality/955573/1001324/1321809/1603386/1954818/?lang=_e

Implementation of the revised Bathing Water Directive – closed 4 Feb 08
<http://www.defra.gov.uk/corporate/consult/bathingwaters/index.htm>

Improving Surface Water Drainage – closed 30 Apr 08
<http://www.defra.gov.uk/corporate/consult/water-drainage/index.htm>

River Basin Guidance Vol 2 – closed 19 May 08
<http://www.defra.gov.uk/corporate/consult/river-basin/index.htm>

Transposition of Article 6 of the Groundwater Directive – closed 20 Aug 08
<http://www.defra.gov.uk/corporate/consult/wfdgroundwater-transpose-article6/index.htm>

Implementation Timetable (Defra)

| Year | Requirement |
|----------|--|
| Dec 2000 | Directive comes into force |
| By 2003 | <ul style="list-style-type: none"> • Transpose requirements to Member State Law • Identify River Basin Districts (RBD) and Competent Authorities |
| By 2004 | Undertake RBD Characterisation <ul style="list-style-type: none"> • Pressures and Impacts upon water status • Economic analysis of water use • Identify heavily modified and artificial waters • Register of Protected Areas |
| By 2006 | <ul style="list-style-type: none"> • Monitoring programmes operational • Publish, for consultation, a work programme for River Basin Management Plan (RBMP) production |
| By 2007 | <ul style="list-style-type: none"> • Publish, for consultation, interim overview of significant water management issues in RBD |
| By 2008 | <ul style="list-style-type: none"> • Publish full draft RBMP for consultation |
| By 2009 | Publish final first RBMP <ul style="list-style-type: none"> • Designate heavily modified water bodies • Environmental Objectives • Programme of measures • Monitoring Networks |
| By 2010 | <ul style="list-style-type: none"> • Introduce pricing policies |
| By 2012 | <ul style="list-style-type: none"> • Programme of Measures operational |
| By 2013 | Review, for the first RBMP; <ul style="list-style-type: none"> • Characterisation assessments • Economic Analysis • Publish, for consultation, interim overview of significant water management issues for second RBMP |
| By 2015 | <ul style="list-style-type: none"> • Achieve Environmental Objectives of first RBMP • Publish Second RBMP |
| By 2021 | <ul style="list-style-type: none"> • Achieve Environmental Objectives of second RBMP • Publish Third RBMP |
| By 2027 | <ul style="list-style-type: none"> • Achieve Environmental Objectives of third RBMP • Fourth RBMP |

River Basin Districts in the UK and Ireland (map)



LEGEND: IRBD International River Basin Districts RBD River Basin Districts

Northern Ireland(UK) and Ireland

| | |
|--|--|
| | IRBD Name: North Western (IRBD) |
| | IRBD Name: Neagh Bann (IRBD) |
| | RBD Name: North Eastern |
| | RBD Name: Western |
| | IRBD Name: Shannon (IRBD) |
| | RBD Name: Eastern |
| | RBD Name: South Eastern |
| | RBD Name: South Western |

Scotland, England and Wales

| | | | |
|------------------------------------|---|---|---|
| | RBD Name: Scotland | | RBD Name: Western Wales |
| | RBD Name: Solway Tweed (Cross Border) | | RBD Name: Dee (Cross Border) |
| | RBD Name: Northumbria (Cross Border) | | RBD Name: Severn (Cross Border) |
| | RBD Name: North West | | RBD Name: Thames |
| | RBD Name: Humber | | RBD Name: South East |
| | RBD Name: Anglian | | RBD Name: South West |
| National and International Borders | | Coastal and Transitional Waters Areas are shown as a tint of the RBD. | |
| Rivers | | | |
| Capital Cities | | | |

**Water Framework Directive
2000/60/EC**

WFD Daughter Directive on groundwater (near adoption)

WFD Daughter Directive on priority substances (in negotiation)

WFD Protected areas (ANNEX IV)

- To remain:**
- Bathing Water (76/160/EEC, as amended by 2006/7/EC)
 - Drinking Water (80/778/EEC, as amended by 98/83/EC)
 - Urban Waste Water Treatment (91/271/EEC)
 - Nitrates (91/676/EEC)

- Other relevant Directives:**
- Integrated Pollution Prevention and Control (IPPC) (96/61/EC)**
 - Major Accidents (Seveso) (96/82/EC)
 - Environmental Impact Assessment (85/337/EEC)
 - Sewage Sludge (86/278/EEC)
 - Plant Protection Products (91/414/EEC)
 - Habitats (92/43/EEC)
 - Birds (79/409/EEC)

Drinking water protected areas

Economically significant aquatic species

Recreational water incl. bathing waters

Nutrient sensitive areas

Habitat or species, incl. Natura 2000 sites

- To be repealed:**
- forthwith**
- Dangerous Substances (76/464/EEC)*
- 2007**
- Surface Water for the abstraction of drinking water (75/440/EEC)
 - Exchange of info on quality of surface freshwater (77/795/EEC)
 - Surface water sampling/analysis (79/869/EEC)
 - [Reporting (91/692/EEC)]
- 2013**
- Water for Shellfish (79/923/EEC)
 - Water for Freshwater Fish (78/659/EEC)
 - Groundwater (80/68/EEC)

The above are WFD basic measures / to be included in programmes of measures (WFD Art. 10, Art. 11.3(a) & (d), Annex VI Part A)