Presentation to Engineers Ireland – an Riocht
26th October, 2010

Water Framework Directive
Aims of the Presentation

- To provide some background to the EU Water Framework Directive;
- To outline the content and structure of the River Basin Management Plans (2009-2015) for the Shannon International River Basin District and South Western River Basin District;
- To assess the possible implications of these plans.
What is the Water Framework Directive?

- Adopted in 2000;
- Requires all waters to be of good status by 2015 (deadline can be relaxed to 2021 or 2027 in certain circumstances);
- Definition of “waters” includes surface waters (rivers, canals, lakes estuarine and coastal) and groundwater;
- Water quality to be managed in coordinated and planned manner;
- Stakeholder involvement.
Core Objectives of the WFD

– prevent deterioration in water quality;

– restore good water quality status;

– reduce chemical pollution of waters;

– achieve protected areas objectives (eg. drinking waters sources, shellfish waters, SACs/SPAs, bathing waters).
One coherent management framework for all water-related legislation

- Drinking Water Directive
- Seveso Directive
- Pesticides Directive
- IPPC Directive
- Nitrates Directive
- Urban Waste Water Directive
- Sewage Sludge Directive
- Habitats Directive
- Env. Impact Assessment Directive
- Birds Protection Directive
- WFD objectives and programme of measures
River Basin District Boundaries

EIGHT RBDs
1. Neagh Bann IRBD
2. North Western IRBD
3. Shannon IRBD
4. North Eastern RBD
5. Eastern RBD
6. South Eastern RBD
7. South Western RBD
8. Western RBD

COORDINATING AUTHORITY
Monaghan/ DOE NI - EHS
Donegal/ DOE NI - EHS
Limerick County
DOE NI – EHS
Dublin City
Carlow
Cork County
Galway County

County Kerry River Basin Districts
Achieving Objectives of the WFD:

Development and implementation of River Basin Management Plans (RBMP) for each River Basin District (RBD) -

- the pressures on waters;
- the status of waters;
- the objectives (what and when targets are to be achieved), and;
- the measures to be taken to achieve the objectives.
SI Nr. 722 of 2003 European Communities Water Policy Regulations 2003

Directive entered into force

Location and boundaries of RBDs identified
Competent authorities designated
Administrative provisions made

Water bodies identified and characterised and pressures and impacts analysed
Economic analysis of water use carried out
Register of protected areas issued

Monitoring programmes commenced

Economic analysis of water use carried out

Adopt River Basin Management Plan

Water Matters – Have Your Say overview of significant water management issues published

Draft River Basin Management Plan published including proposed measures
Consultation Processes Undertaken

2005: ‘A Future for our Waters’
(SWRBD Summary Characterisation Report.)
‘Protecting and Improving the Water Environment in the Shannon Region’
(SHIRBD Characterisation Report)

2007: ‘Water Matters - Have your say’
SWRBD and SHIRBD Significant Water Management Issues Reports

2008: ‘Water Matters - Help us plan’
Draft River Basin District Management Plans
SWRBD and SHIRBD
River Basin Management Plans - Core Text

• RPS Consulting Engineers were commissioned to prepare the generic core text for the plan to be used by all River Basin Districts.

• Consultants were also appointed to customise the individual River Basin Management Plans (mapping, text on local issues, local statistics etc.) : Mott MacDonald Pettit (South Western RBD), RPS Consulting (Shannon IRBD).
River Basin Management Plans

- River Basin Management Plan
- Published Document
- Background Documents
- Water Management Unit Action Plans
- Electronic Data Bases & Mapping
  - Watermaps
  - wfdireland.ie

Water Matters: Our Plan!

Plan Content

- Executive summary
- Chapter 1 - Introduction;
- Chapter 2 - Description of the RBD;
- Chapter 3 - The status of the waters of the RBD;
- Chapter 4 - The objectives for the RBD;
- Chapter 5 - The programme of measures for the RBD;
- Chapter 6 - Integrating plans and programmes.

- Appendix 1: Background documents;
- Appendix 2: Contact Details for Local Authorities;
- Appendix 3: Protected Areas in the RBD;
- Appendix 4: National legislation transposing eleven key EU Directives relevant to water protection;
- Appendix 5: RBD Action Programme.
Chapter 1 – Introduction

- Basic description of the River Basin District;
- Identification of the relevant public authorities and their various roles;
- Background information on the development of the plan.
Chapter 1 - Introduction

“Public authorities (local authorities, EPA, DoEHLG etc.) are required to exercise their functions in a manner which achieves or promotes compliance with the requirements of the Water Framework Directive”
- EC (Water Policy) Regulations

Public Authority Roles - River Basin Management Plans

**Local Authorities** – acting jointly, as the competent authorities for making the river basin management plans;

**EPA** – Establishing the water quality monitoring programme, assigning water quality status, reporting to the European Commission;

**DoEHLG** – Provision of resources and funding.
Chapter 2 – Description of the RBD (waters, key issues and pressures)

• Key Issues/Pressures identified in both SWRBD and SHIRBD include:
  - Wastewater & Industrial discharges
  - Wastewater from unsewered properties
  - Agriculture
  - Forestry
  - Landfills, mines, quarries & contaminated lands
  - Physical modifications
  - Water abstractions
  - Dangerous Substances

• Many of the above pressures relevant to County Kerry
Chapter 3 - Status of the waters of the RBD

For Surface Waters – Ecological & Chemical Status

“High Status” means that “quality elements show little or no effects of human activity compared to undisturbed conditions”

“Good Status” means “quality elements show only slight changes caused by human activity compared to undisturbed conditions”.

For Groundwater – Qualitative and Quantitative Status

“Good Status” must be achieved for abstraction and water quality.
Status of the waters of the RBD (contd.)

Water Quality Monitoring Regime:

- **Surface waters** – ecological and physico-chemical (supporting water quality conditions) monitoring;
- **Groundwaters** – chemical and quantitative monitoring;

Physico-chemical monitoring mainly undertaken in County Kerry by the KCC Laboratory;

Ecological monitoring mainly undertaken by the EPA.
Status of Surface Waters in Kerry

ECOLOGICAL STATUS

- No or minimal
- Slight
- Moderate
- Major
- Severe

High

- pass WFD

Good

Moderate

Poor

Bad

- fail WFD

Shannon International River Basin District

South Western River Basin District

Castleisland

Kilorglin

KILLARNEY

Kenmare

Waterville

Cork

Limerick

NATIONAL DEVELOPMENT PLAN

NDP
Chapter 4 – Objectives for the RBD

The plans set out four core objectives to be achieved by 2015*:

– prevent deterioration;
– restore good status;
– reduce chemical pollution;
– achieve (water dependant) protected areas objectives.

(some scope for relaxing this deadline in certain Circumstances)
**Objectives for the RBD**

**Alternative objectives**

• However, the Water Framework Directive allows alternative objectives to be set in certain limited circumstances:
  – Technical feasibility, disproportionate costs, environmental or recovery constraints
  – the nature and uses of certain artificial or heavily modified water bodies
  – new physical modifications and sustainable developments.

• These may lead to extended deadlines (2021 or 2027) and / or less stringent objectives
Chapter 5 – The programme of measures for the RBD (action programme)

• This chapter (along with Appendices 4 & 5) describes the measures which are to be taken to achieve the water quality objectives set out in chapter 4 of the plan.

• Many of the measures are already provided for in national legislation and policies:
  • Urban Wastewater Treatment Regulations;
  • Wastewater Discharge (Authorisation) Regulations;
  • Water Services Investment Programme;
  • EPA Code of Practice for wastewater treatment & disposal systems serving single houses;
  • Good Agricultural Practice Regulations;
  • Controls on Forestry Development;
  • Freshwater Pearl Mussel Regulations…
## The Programme of Measures – Summary Action Programme for County Kerry

<table>
<thead>
<tr>
<th>Control of Urban Wastewater Discharges:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Treatment plants requiring capital works</td>
<td>11</td>
</tr>
<tr>
<td>Treatment plants requiring further investigation</td>
<td>22</td>
</tr>
<tr>
<td>Treatment plants requiring attention to meet shellfish PRPs</td>
<td>11</td>
</tr>
<tr>
<td>Treatment plants requiring improvements in operational performance</td>
<td>2</td>
</tr>
<tr>
<td>Urban agglomerations requiring investigations of CSOs</td>
<td>4</td>
</tr>
<tr>
<td>Urban agglomerations that require management of development</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Properties that will be subject to performance, operational and maintenance standards for on-site wastewater treatment systems (eg. septic tanks) [note : national legislation forthcoming]</th>
<th>46,900 (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm inspections under the Good Agricultural Practice Regulations</td>
<td>Total anticipated number of inspections unknown at present (DAFF, LA)</td>
</tr>
<tr>
<td>Pollution Reduction Programmes (PRPs) for designated shellfish waters</td>
<td>7</td>
</tr>
<tr>
<td>Sub-basin plans for sites designated for the protection of Freshwater Pearl Mussel populations</td>
<td>7</td>
</tr>
</tbody>
</table>
Chapter 6 - Integrating plans and programmes

• River Basin Management Plans should be integrated with other plans:
  – Land use and spatial plans e.g. County Development Plans;
  – Waste management plans;
  – Sludge management plans;
  – Forest management plans;
  – Flood risk management plans.
Water Management Unit Action Plans

• The Plan introduces the concept of the Water Management Unit Action Plan;

• Each River Basin District has been sub-divided into a number of Water Management Units (WMU);

• Each WMU has an individual Action Plan, which provides detail, at a local level, of the water quality issues and actions proposed for individual water bodies.

• Water Management Unit Action Plans are “live” documents.
WMU Action Plans

- Water Management Units are a geographical sub-unit of a river basin district.
- Delineated as clusters of water bodies based around main river catchments and sub-catchments.
- WMUs vary quite significantly in size depending on main river catchment.
- Nationally 152 vs c.4600 river waterbodies.
- The WMU Action Plans are developed as implementation plans for each local area during the course of the RBMP planning cycle 2010-2015 and will be used as a means of tracking progress.
Calculated in accordance with OSPAR HARP Guidelines. Not an indication of risk, rather an indication of potential to cause risk.
Transitional & Coastal Water Programmes
Groundwater Programmes
Adoption of the River Basin Management Plans
[EC Water Policy (Amendment) Regulations, 2010]

• Ministerial sign-off : 30th June, 2010;

• Plans came into effect : 9th July, 2010.
Possible/Probable Implications of the Plans

• **Water Services**:  
  – Upgrade or improvement works to wastewater treatment plants and collection systems (where negatively impacting on waters);  
  – EPA Licencing regime for municipal wastewater treatment systems;  
  – Sustainable water abstraction;  
  – Water Pricing Policy.

• **Environment**:  
  – Review all pollutant discharge authorisations;  
  – Identify sources of pollution and develop corrective actions;  
  – Good Agricultural Practice Regulations;  
  – Inspection programme for on-site wastewater treatment systems;  
  – Implement measures outlined in sub-basin plans (e.g. Freshwater Pearl Mussel action plans and shellfish water plans).
Possible/Probable Implications of the Plans

• **Planning & Development**:
  – Integration of RBMP objectives within Regional Planning Guidelines, County Development Plans, Local Area Plans etc.;
  – Implement EPA Code of Practice for on-site systems;
  – Environmental Impact Assessment;
  – Consider Sub Basin Plans (Freshwater Pearl Mussel etc.).
Challenges

– Changed economic climate;

– Coordination (eg. Shannon RBD);

– Meeting the targets as set out in the Directive;

– Legal interpretation of the Directive
THANK YOU

(www.wfdireland.ie)