



Strategic Environmental Assessment for the Water Framework Directive River Basin Management Plans and Programmes of Measures - Shannon iRBD

Scoping Document

Final



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EXECUTIVE SUMMARY

The Water Framework Directive is a piece of European legislation that promotes a new approach to water management through river basin planning. The legislation addresses inland surface waters, estuarine waters, coastal waters and groundwater. The purpose of the Water Framework Directive are to maintain “high status” of waters where it exists, prevent any deterioration in the existing status of waters and achieve at least “good status” in relation to all waters by 2015. Member States will have to ensure that a co-ordinated approach is adopted for the achievement of these objectives.

The Strategic Environmental Assessment Directive, another European Directive, has been implemented in order to integrate environmental considerations into the preparation of plans and programmes and is a means of ensuring a high level of protection for the environment, while also promoting sustainable development. The Strategic Environmental Assessment Directive will ensure that consideration is given to the environment in implementing the Water Framework Directive on the island of Ireland. The first step in the Strategic Environmental Assessment (SEA) process involved a screening step which identified that SEA would be required for the River Basin Management Plans and Programmes of Measures¹. This Scoping Report is the next step in the process.

This document establishes the scope of works involved for the Environmental Assessment and incorporates comments received on the scope of the SEA for the Shannon International River Basin District River Basin Management Plan and Programme of Measures.

An Environmental Report will be the outcome of the SEA and will accompany the draft River Basin Management Plan and Programme of Measures. All comments received during consultation will be considered for the assessment. There will also be further opportunities to comment on the process at later stages of the assessment.

Please send all comments on the scope of the SEA for the Shannon International River Basin District River Basin Management Plan and Programme of Measures to the following:

For Northern Ireland
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SEA River Basin Planning
Water Management Unit
17 Antrim Road
Lisburn
BT28 3AL
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For Republic of Ireland
Gerry Behan
Dir of Environmental & Emergency Services
Limerick County Council
County Hall
Dooradoyle
Co. Limerick
Email: environ@limerickcoco.ie

¹ Environmental Protection Agency (2007) *The Water Framework Directive, Assessment, Participation and Protected Areas: What are the Relationships?*

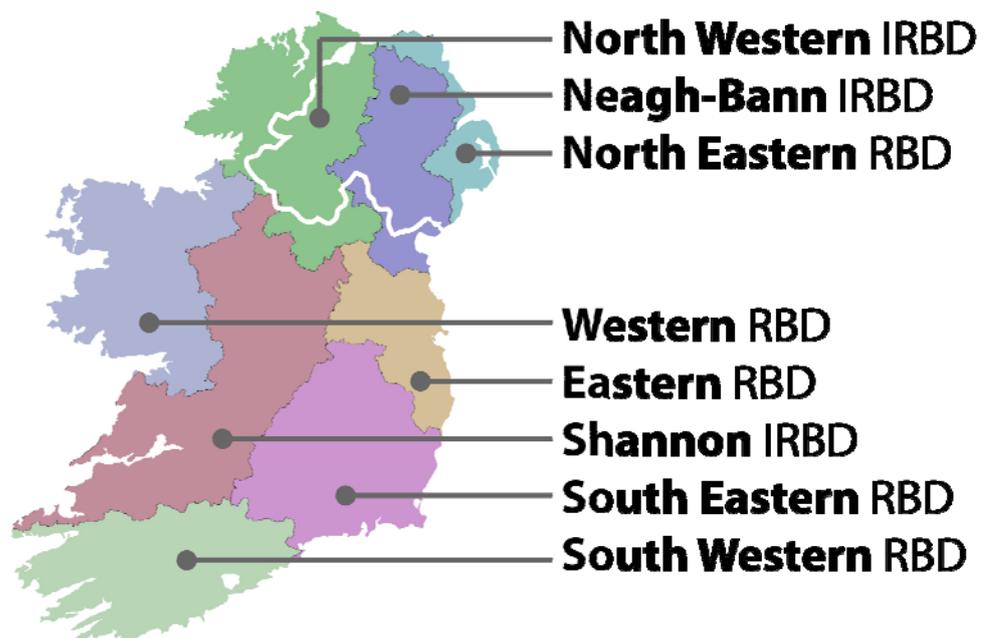
1 INTRODUCTION

1.1 WATER FRAMEWORK DIRECTIVE

The Water Framework Directive (WFD) (2000/60/EC) came into force in December 2000 and establishes a framework for community action in the field of water policy and for the protection of inland surface waters, transitional waters, coastal waters and groundwater. The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. All of the river basins on the island of Ireland have been distributed within eight RBDs; these are shown on **Figure 1.1**. Four of the eight RBDs are wholly contained within Ireland, one is wholly within Northern Ireland and the remaining three are international RBDs, i.e. occur within Ireland and Northern Ireland.

The WFD was transposed into law in Northern Ireland by the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003 (S.R. 544 of 2003) and in Ireland by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The purpose of the WFD is to maintain the “high status” of waters where it exists, prevent deterioration in existing status of waters and to achieve at least “good status” in relation to all waters by 2015. The mechanism by which this is to be achieved under the WFD is through the adoption and implementation of River Basin Management Plans (RBMPs) and Programmes of Measures (POMs) for each of the identified RBDs.

Figure 1.1: River Basin Management areas of Ireland



1.2 SHANNON IRBD

As stated above, cross border river basins covering the territory of more than one Member State must be assigned to an International RBD (IRBD). The Shannon IRBD is a cross-border area and is the largest on the island of Ireland covering an area of more than 18,000km². It stretches from the source of the River Shannon in the Cuilcagh Mountains in counties Cavan and Fermanagh to the tip of the Dingle peninsula in north Kerry. As well as the natural drainage basin of the Shannon River itself, which drains an extensive area of central Ireland, it also includes coastal parts of Kerry and Clare, which drain to the sea. The District drains eighteen local authority areas and is assigned international status as a small portion of County Fermanagh in Northern Ireland drains underground to the Shannon Pot.

As a whole the Shannon IRBD encompasses large areas of counties Limerick, Clare, Tipperary, Offaly, Westmeath, Longford and Roscommon as well as significant portions of Kerry, Galway, Leitrim, and Cavan. Other counties that have smaller portions in the Shannon IRBD include Sligo, Mayo, Cork, Laois, Meath and Fermanagh. The geographic scope of the Shannon IRBD is shown in **Figure 1.2**.

The distribution of people and types of activities that take place vary throughout the District. Although more than 670,000 people live in the Shannon District, the population density is lower than in eastern Ireland. The largest urban area is Limerick City (90,800, including its suburbs and environs) but other sizeable towns include Athlone (17,500), Ennis (24,300), Mullingar (18,400), Tralee (22,700) and Tullamore (12,900).

Urban areas in the District have a lot of industries and most of them are centred on rivers or the coastline. Many people live in small villages or one-off houses in rural areas.

The rich soils of the Shannon IRBD mean that agriculture is widespread. Over 70% of the land area is farmed. Livestock grazing on the pastureland is the most widespread type of farming. There is a healthy dairy and meat processing industry in the District. There are also more intensive agricultural enterprises in several areas. Though much of the land area is agricultural, there are also areas of forestry and peatlands. Peat has been used since the 1940s as fuel in local power stations to generate electricity. The District boasts scenic landscapes and offers great opportunities for fishing and boating, which attract many tourists.

In addition, some areas of the IRBD contain rare and vulnerable habitats and wildlife, and protected habitats and species. These areas include sections of rivers, lakes, coastal areas, bogs, turloughs, callows and fens. Parts of the lower River Shannon, Tralee Bay and Loop Head, the Burren and the Cliffs of Moher have been identified as containing rare and vulnerable habitats and wildlife.

Table 1.1: Required Contents of RBMP

Requirement of RBMP*	
1	A general description of the characteristics of the river basin district.
2	A summary of significant pressures and impact of human activity on the status of surface water and groundwater.
3	Identification and mapping of protected areas.
4	A map of the monitoring networks established for the purposes of Article 8 and Annex V of the WFD, and a presentation in map form of the results of the monitoring programmes.
5	A list of the environmental objectives established under Article 4 of the WFD for surface waters, groundwater and protected areas.
6	A summary of the economic analysis of water use as required by Article 5 and Annex III;
7	A summary of the programme or programmes of measures adopted under Article 11 of the WFD.
8	A register of any more detailed programmes and management plans for the river basin district dealing with particular sub-basins, sectors, issues or water types, together with a summary of their contents.
9	A summary of the public information and consultation measures taken, their results and the changes to the Plan made as a consequence.
10	A list of competent authorities in accordance with Annex I of the WFD.
11	The contact points and procedures for obtaining the background documentation and information referred to in Article 14(1) of the WFD.

*As set out in the European Communities (Water Policy) Regulations (Ireland) (S.I. 722 of 2003) and The Water Environment (Water Framework Directive) Regulations (Northern Ireland) (S.R. 544 of 2003)

In addition, the River Basin Management Plan itself must be based on a detailed analysis of the significant pressures and impacts of human activity on the status of surface waters and groundwater in the River Basin District, including:

- Estimation of point source pollution;
- Estimation of diffuse source pollution, including a summary of land use;
- Estimation of pressures on the quantitative status of water including abstractions; and
- Analysis of other impacts of human activity on water status.

This analysis is termed the Characterisation Report, the preparation of which was required under the WFD by 2005 and is now complete. The scientific assessment of the river basin that is contained in the Characterisation Report is vital for the production of a "Programme of Measures", which consists of policies and strategies, such as monitoring programmes, which are intended to reduce the risk to water bodies and target improvements and monitoring effort on those water bodies most at risk of failing to meet their targets.

In general, the Programme of Measures contained in the RBMP should include the information listed in **Table 1.2**.

Table 1.2: Programme of Measures Contents

Programme of Measures Contents	
1	A summary of measures required to implement Community legislation for water protection;
2	A report on the practical steps and measures taken to apply the principle of cost recovery of water use;
3	A summary of measures taken to identify, monitor and protect significant drinking water sources;
4	A summary of controls on abstraction and impoundment of water, including reference to the registers and identification of cases where exemptions have been made;
5	A summary of controls adopted for point source discharges and other activities with an impact on water status;
6	An identification of cases where direct discharges to groundwater have been authorised;
7	A summary of measures taken to prevent pollution from priority substances;
8	A summary of measures taken to prevent or reduce impact of accidental pollution incidents;
9	A summary of controls on activities and physical modifications to surface water that have an impact on the status of water;
10	A summary of measures taken in relation to water bodies unlikely to achieve the Directive objectives;
11	Details of the supplementary measures identified as necessary to meet environmental objectives; and.
12	Details of measures taken to avoid increase in pollution of marine waters.

Specifically, the Shannon IRBD River Basin Management Plan will identify overall environmental objectives to be achieved within the Plan period (by end 2015). These objectives are set from European WFD and subsequent national legislation. To achieve these overall objectives the Shannon IRBD RBMP will set specific objectives for each water body in the IRBD and provide a Programme of Measures to be implemented in order to achieve the objectives.

The WFD is being implemented in the Shannon IRBD on the following timescale:

- 2000 - Directive entered into force.
- 2003 - Directive transposed into domestic law. River Basin Districts (RBDs) and International River Basin Districts (IRBDs) identified and the competent authorities appointed to implement the Directive.
- 2004 - Characterisation of RBDs and IRBDs. Economic analysis of water use. Register of Protected Areas established in each RBD.
- 2005 - Criteria established for the assessment of good groundwater chemical status and criteria for identifying significant upward trends.
- 2006 - Environmental monitoring programmes established. Work programme for producing the first RBMPs established for consultation. Environmental quality standards for priority substances and controls on principal sources established.
- 2007 - Significant water management issues in each RBD and IRBD published.
- 2008 - Publish full draft RBMPs for consultation.
- 2009 - Finalise and publish first RBMPs. Finalise POMs to meet objectives.

- 2010 - Introduce pricing policies.
- 2012 - Ensure POMs are operational. Publish timetable and work programme for second RBMPs. Report progress in implementing measures.
- 2013 - Five year review for the first RBMP; Characterisation and impact assessments Economic analysis of water use. Publish, for consultation, an interim overview of the significant water management issues for second RBMP.
- 2014 - Publish second draft RBMPs for consultation.
- 2015 - Finalise and publish second RBMP with revised Programme of Measures.

All subsequent reviews of the RBMPs and POMs, as committed to under the WFD, will be subject to SEA.

1.4 STRATEGIC ENVIRONMENTAL ASSESSMENT

Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest appropriate stage, the environmental quality and consequences of Policy, Plan or Programme initiatives by statutory bodies. The purpose is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process.

The European Directive (2001/42/EC) on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive), was transposed into national legislation in Ireland by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435/2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436/2004), and in Northern Ireland by the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (S.R. 280/2004).

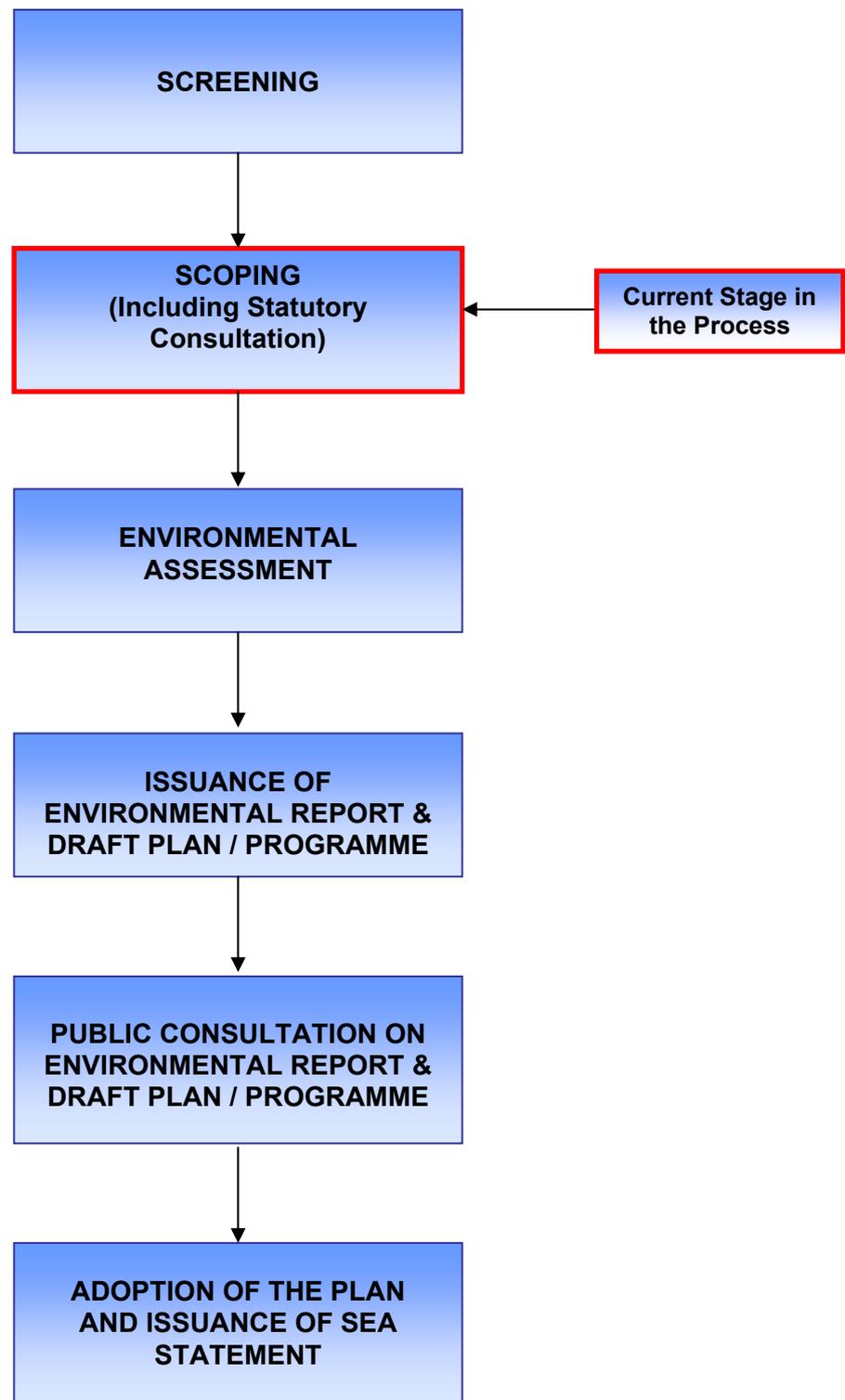
The SEA Directive requires that certain Plans and Programmes, prepared by statutory bodies, which are likely to have a significant impact on the environment, be subject to the SEA process. The SEA process is comprised of the following steps:

- Screening: Decision on whether or not an SEA of a Plan/Programme is required;
- Scoping: Consultation with the defined statutory bodies on the scope and level of detail to be considered in the assessment;
- Environmental Assessment: An assessment of the likely significant impacts on the environment as a result of the Plan or Programme;
- An Environmental Report;
- Consultation on the draft Plan/Programme and associated Environmental Report;
- Evaluation of the submissions and observations made on the draft Plan/Programme and Environmental Report; and

- Issuance of an SEA Statement identifying how environmental considerations and consultation have been integrated into the Final Plan/Programme.

Figure 1.3 shows the key steps required to complete the statutory SEA process in accordance with the relevant national legislation.

Figure 1.3: Overview of SEA Process



1.4.1 Requirement for a SEA

Article 3(2) of the SEA Directive makes SEA mandatory for plans and programmes:

- a) Which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and county planning or land use and which set the framework for future development consent for projects listed in Annexes I or II of the Environmental Impact Assessment (EIA) Directive (85/337/EEC); or
- b) Which, in view of the likely effect on protected sites, have been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive (92/43/EEC).

In addition, the Environmental Protection Agency (EPA) commissioned a study entitled *The Water Framework Directive, Assessment, Participation and Protected Areas: What are the Relationships?*, which was published in July 2007. This study concluded that SEA is required for the individual RBMPs and POMs. In addition, the study found that integrating SEA with the RBMP process would both facilitate the drafting of the RBMPs and POMs and help ensure that options/alternatives for the RBMPs and POMs are properly addressed at the appropriate level.

1.4.2 Scoping

Under Article 6 of the SEA Directive, the competent authority preparing the plan or programme is required to consult with specific “environmental authorities” (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report. It was considered appropriate to carry out a coordinated scoping phase for all eight RBMPs and POMs to ensure consistency moving forward to the environmental assessment phase. The competent authorities in relation to the RBMP and POMs for the Shannon IRBD are the Northern Ireland Environment Agency (NIEA) (formerly Environment and Heritage Service) and the following local authorities (of which Limerick County Council is the coordinating authority) – Cavan, Clare, Cork, Galway, Kerry, Laois, Leitrim, Limerick, Longford, Mayo, Meath, Offaly, Roscommon, Sligo, North Tipperary, South Tipperary and Westmeath County Councils, and Limerick City Council. These statutory consultees are established within the national legislation as being:

Ireland:

- Environmental Protection Agency (EPA);
- Department of Environment, Heritage and Local Government (DEHLG); and
- Department of Communications, Energy and Natural Resources (DCENR) (formerly Department of Communications, Marine and Natural Resources).

Northern Ireland:

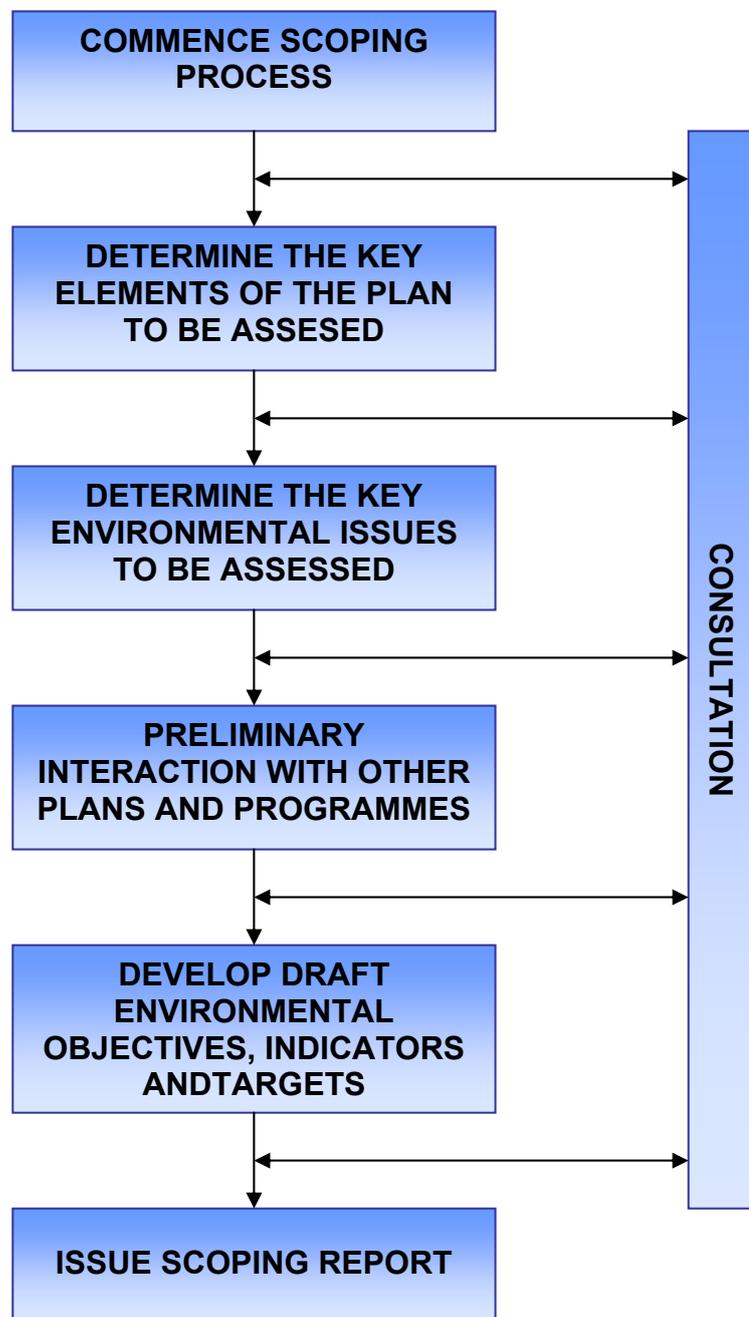
- Northern Ireland Environment Agency (NIEA) (formerly Environment and Heritage Service).

The main objective of scoping is to identify key issues of concern that should be addressed in the assessment of the Plan and the appropriate level of detail to which they should be considered. The scoping exercise should answer the following questions:

- What are the relevant significant issues to be addressed by the SEA?
- Against what environmental objectives should the potential options be evaluated?

The steps involved in the scoping process are outlined in **Figure 1.4**.

Figure 1.4: Steps Involved in Scoping Process



While the issuance of a Scoping Report is not a formal requirement of the SEA Regulations, it is recommended as good practice. A Scoping Report can inform stakeholders about the key environmental issues and the key elements of the Plan/Programme (P/P). In addition, the Scoping Report can be used as a tool to generate comments from stakeholders on the scope and approach of the SEA.

This document has been compiled as part of the Scoping stage of the Strategic Environmental Assessment (SEA) for the Shannon IRBD RBMP, and its associated Programme of Measures. This Scoping Report has been compiled on behalf of the competent authorities for the Shannon IRBD.

1.4.3 SEA Guidance

The following Guidance / Methodology documents will be referred to during the SEA process:

1.4.3.1 Ireland

Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland. Synthesis Report. 2003. Environmental Protection Agency.

<http://www.epa.ie/downloads/advice/ea/name,13547,en.html>

Implementation of SEA Directive (2001/42/EC). Assessment of Certain Plans and Programmes on the Environment. Guidelines for Regional Planning Authorities. November 2004. Department of Environment, Heritage and Local Government.

<http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,1616,en.pdf>

Strategic Environmental Assessment (SEA) Checklist - Consultation Draft. January 2008. Environmental Protection Agency.

http://www.epa.ie/downloads/consultation/strategic_environmental_assessment_jan086.pdf

Guidelines on SEA. Department of Communications, Energy and Natural Resources. Available at:

<http://www.dcmnr.gov.ie/Marine/Environmental+Assessment/Environmental+Assessment.htm>

1.4.3.2 Northern Ireland

A Practical Guide to the Strategic Environmental Assessment Directive. September 2005. Office of the Deputy Prime Minister.

http://www.ehsni.gov.uk/bm_sea_practicalguide.pdf

Strategic Environmental Assessment. Services and Standards for Responsible Authorities. Environment and Heritage Service.

<http://www.ehsni.gov.uk/sea-servicesandstandards.pdf>

1.4.3.3 Other

Strategic Environmental Assessment Toolkit (Version 1). September 2006. Scottish Executive.

<http://www.scotland.gov.uk/Publications/2006/09/13104943/0>

Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners. June 2004.

Countryside Council for Wales, English Nature, the Environment Agency and the RSPB.

<http://www.english-nature.org.uk/pubs/publication/PDF/SEAbiodiversityGuide.pdf>

2 KEY FACTS

The key objectives of the WFD are:

- To prevent deterioration in, protect, and enhance, the status of aquatic ecosystems (and terrestrial ecosystems and wetlands directly dependent on aquatic ecosystems);
- To promote sustainable water use based on long-term protection of available water resources;
- To provide for sufficient supply of good quality surface water and groundwater as needed for sustainable, balanced and equitable water use;
- To provide for enhanced protection and improvement of the aquatic environment by reducing / phasing out of discharges, emissions and losses of priority substances; and
- To contribute to mitigating the effects of floods and droughts.

The WFD will be implemented in five phases, over a period of 27 years. These five phases are:

- 2000 - 2003 – Transposing legislation and RBD definition;
- 2004 - 2008 – RBD Characterisation, Issue Analysis and RBMP preparation;
- 2009 - 2012 – Programmes of Measures to be made operational;
- 2013 - 2015 – Review of first RBMP cycle; and
- 2016 - 2027 – Next cycle of RBMPs, planning, consultation and review.

The WFD covers all river basin areas within Europe.

The subject of the SEA for which this Scoping Report is being compiled is the Shannon IRBD.

The Shannon IRBD lies both within Northern Ireland and Ireland and extends across 17 counties.

Cavan, Clare, Cork, Galway, Kerry, Laois, Leitrim, Limerick, Longford, Mayo, Meath, Offaly, Roscommon, Sligo, North Tipperary, South Tipperary and Westmeath County Councils, Limerick City Council, and the Northern Ireland Environment Agency are the Competent Authorities under the WFD for the Shannon IRBD and are responsible for carrying out the SEA of the Shannon RBMP and POMs.

The contacts for any information regarding the SEA for the Shannon IRBD RBMP are:

For Northern Ireland
Northern Ireland Environment Agency
SEA River Basin Planning
Water Management Unit
17 Antrim Road
Lisburn
BT28 3AL
Email: SEA-riverbasinplanning@doeni.gov.uk

For Republic of Ireland
Gerry Behan
Dir of Environmental & Emergency Services
Limerick County Council
County Hall
Dooradoyle
Co. Limerick
Email: environ@limerickcoco.ie

3 PLAN CONTEXT

3.1 INTERACTION WITH OTHER RELEVANT PLANS AND PROGRAMMES

As part of the SEA process the context of the Shannon RBMP and POMs must be established with regard to other plans and programmes that have been adopted at the International, European and National Levels. In particular the interaction of the environmental protection objectives and standards included within these plans and programmes with the Shannon RBMP requires consideration.

Tables 3.1 to 3.4 summarise the findings of an initial review of environmental plans and programmes, adopted at International, European Community or Member State level, which would be expected to influence, or be influenced by, the Shannon RBMP and POMs.

Table 3.1: Preliminary Review of Legislations, Plans, Policies and Programmes - International

Topic	Title	Summary of Objectives
Biodiversity	UN Convention on Biological Diversity (1992)	Objectives include the maintenance and enhancement of Biodiversity.
	The Ramsar Convention The Convention on Wetlands of International Importance (1971 and amendments)	Objectives include protection and conservation of wetlands, particularly those of importance to waterfowl as Waterfowl Habitat.
Climate	UN Kyoto Protocol The United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol 1997	Objectives seek to alleviate the impacts of climate change and reduce global emissions of GHGs.
Environment	The MARPOL Convention International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).	Objectives include for the protection of the marine environment.
	The OSPAR Convention The Convention for the Protection of the Marine Environment of the North-East Atlantic (22 September 1992).	Objectives include the protection of the marine environment. The current instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic. It combined and up-dated the 1972 Oslo Convention on dumping waste at sea and the 1974 Paris Convention on land-based sources of marine pollution.
Human Health / Air	The Stockholm Convention (2001)	Objectives seek to protect human health and the environment from persistent organic pollutants (POPs).
	World Health Organisation (WHO) Air Quality Guidelines (1999) and Guidelines for Europe (1987)	Objectives seek the elimination or minimisation of certain airborne pollutants for the protection of human health.

Table 3.2: Preliminary Review of Legislations, Plans, Policies and Programmes - European Union

Topic	Title	Summary of Objectives
Air	The Air Framework Directive Directive on Air Quality Assessment and Management (Framework Directive) (1996/62/EC)	Objectives include the prevention and/or reduction of airborne pollutants for the protection of human health and environment.
	Directive on National Emission Ceilings for Certain Atmospheric Pollutants (2001/81/EC)	Objectives seek to limit the national emissions of certain airborne pollutants for the protection of human health and the environment.

Topic	Title	Summary of Objectives
Biodiversity	The EU Biodiversity Strategy Communication on a European Community Biodiversity Strategy	Objectives seek to prevent and eliminate the causes of biodiversity loss and maintain and enhance current levels of biodiversity.
	The EU Habitats Directive (92/43/EEC)	Objectives seek to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity.
	The EU Birds Directive (as modified) (EC/79/409)	Objectives seek to prevent and eliminate the causes of bird species loss and maintain and enhance current levels of biodiversity.
	The EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those fresh water bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters
Climate	Second European Climate Change Programme (ECCP II) 2005.	Objectives seek to develop the necessary elements of a strategy to implement the Kyoto protocol.
	Adapting to climate change in Europe – options for EU action {SEC(2007) 849}	Objective is to kick-start a Europe-wide public debate and consultation on how to take forward possible avenues for action in adapting to climate change at EU level.
Cultural Heritage	The Valletta Convention (1992)	Objective is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.
Human Health	The EU Environment and Health Strategy 2004-2010 (first period)	Objectives seek to prevent and reduce the impacts of pollution on human health.
	The EU REACH Initiative Registration, Evaluation and Authorisation of Chemicals (REACH)	Objectives seek to limit the harmful effects to the environment and human health from certain chemicals through improved analysis and data collection.
	Laying down the Health Conditions for the production and placement on the market of live bi-valve molluscs (91/492/EEC)	Objectives seek to ensure a suitable environment for shellfish growth and protect consumers of shellfish. It classifies shellfish harvesting areas according to the quality of shellfish populations. The classification determines the conditions under which shellfish harvested from those waters can be offered for sale.
	The EU Shellfish Directive (79/923/EEC)	Objectives seek to maintain those coastal and brackish waters, which need protection or improvement, in order to allow shellfish to develop and to contribute to the high quality of shellfish products intended for human consumption.
	The Plant Protection Products Directive (91/414/EEC)	To harmonise the overall arrangements for authorisation of plant protection products within the European Union. This is achieved by harmonising the process for considering the safety of active substances at a European Community level by establishing agreed criteria for considering the safety of those products. Product authorisation remains the responsibility of individual Member States.
	The Seveso (II) Directive (96/82/EC as amended)	Objective to prevent major accidents involving dangerous substances and limit their consequences for man and the environment, with a view to ensuring high levels of protection throughout the Community
Soils	The Soils Directive (Draft)	The proposed Directive lays down a framework for the protection and sustainable use of soil based on the principles of integration of soil issues into other policies, preservation of soil functions within the context of sustainable use, prevention of threats to soil and mitigation of their effects, as well as restoration of degraded soils to a level of functionality consistent at least with the current and approved future use of the land.
Sustainable Development	EU Common Agricultural Policy	Aims to provide farmers with a reasonable standard of living, consumers with quality food at fair prices and to preserve rural heritage.

Topic	Title	Summary of Objectives
	The Gothenburg Strategy (2001) Communication from the Commission on "a Sustainable Europe for a Better World"	Objectives seek to make the future development of the EU more sustainable.
	The Sixth Environmental Action Programme (EAP) of the European Community 2002- 2012	Objectives seek to make the future development of the EU more sustainable.
	The SEA Directive (2001/42/EC)	Objective is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.
	The EIA Directive	Objective is to require Environmental Impact Assessment of the environmental effects of those public and private projects which are likely to have significant effects on the environment.
Waste	The Landfill Directive (99/31/EC)	The Landfill Directive sets targets to reduce landfilling of biodegradable municipal waste.
Water	EU Dangerous Substances Directive (76/464/EEC)	The objective is to regulate potential aquatic pollution by thousands of chemicals produced in Europe. The Directive covered discharges to inland surface waters, territorial waters, inland coastal waters and groundwater.
	EU Water Framework Directive (2000/60/EC)	Objectives seek to maintain and enhance the quality of all surface waters in the EU. The RBMPs and POMs are a requirement of this directive.
	The Groundwater Directive (1980/68/EC)	Objectives seek to maintain and enhance the quality of all groundwater in the EU.
	EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding. With trends such as climate change and increased domestic and economic development in flood risk zones, this poses a threat of flooding in coastal and river basin areas.
	Bathing Water Directive 2006/7/EC	The overall objective of the revised Directive remains the protection of public health whilst bathing, but it also offers an opportunity to improve management practices at bathing waters and to standardise the information provided to bathers across Europe.
	Nitrates Directive 91/676/EEC	This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution.
	Urban Wastewater Treatment Directive 91/271/EEC. Amended under Directive 98/15/EEC	The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.
	The Sewage Sludge Directive 86/278/EEC	Objective is to encourage the use of sewage sludge in agriculture and to regulate its use in such a way as to prevent harmful effects on soil, vegetation, animals and man. To this end, it prohibits the use of untreated sludge on agricultural land unless it is injected or incorporated into the soil.
Groundwater Directive (2006/118/EC)	This new directive establishes a regime which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater.	

Topic	Title	Summary of Objectives
	IPPC Directive (2008/1/EC)	Objective is to achieve a high level of protection of the environment through measures to prevent or, where that is not practicable, to reduce emissions to air, water and land. The Directive provides an integrated approach to establish pollution prevention from stationary "installations". This codified act includes all the previous amendments to the Directive 96/61/EC and introduces some linguistic changes and adaptations.
	Drinking Water Directive (DWD) Council Directive 98/83/EC	The primary objective is to protect the health of the consumers in the European Union and to make sure the water is wholesome and clean.

Table 3.3: Preliminary Review of Legislations, Plans, Policies and Programmes - Ireland

Topic	Title	Summary of Objectives
Air	Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002)	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004).	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	The Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
Biodiversity	The National Biodiversity Plan (2002)	Objectives include the enhancement and conservation of biodiversity.
	The Wildlife Act 1976. The Wildlife (Amendment) act 2000	The purpose of the Wildlife Act, 1976 and the Wildlife Amendment Act, 2000 is to provide for the protection of Wildlife (both Flora and Fauna) and the control of activities which may impact adversely on the conservation of Wildlife.
	National Heritage Plan 2002-2007	The purpose of the National Heritage Plan is to set out a clear and coherent strategy and framework for the protection and enhancement of Irish heritage over the five year period.
	European Communities (Natural Habitats) Regulations, SI 94/1997, as amended SI 233/1998 and SI 378/2005	These Regulations give effect to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and the Minister to designate special areas of conservation (endangered species and habitats of endangered species) as a contribution to an EU Community network to be known as NATURA 2000.
	Flora Protection Order 1999	Objectives are to protect listed flora and their habitats from alteration, damage or interference in any way. This protection applies wherever the plants are found and is not confined to sites designated for nature conservation.
	Quality of Salmonid Waters Regulations 1988 (SI 293 of 1988)	Prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. Also, give effect to Council Directive No. 78/659/EEC on the quality of fresh waters needing protection or improvement in order to support fish life
Climate	National Climate Change Strategy (2000) and National Climate Change Strategy 2007-2012	Objectives include the reduction of national GHG emissions (including those from the water sector)

Topic	Title	Summary of Objectives
Cultural Heritage	National Heritage Plan (2002)	Core objective is to protect Ireland's heritage. Plan uses the "polluter pays principle" and the "precautionary principle". Sets out archaeological policies and principles that should be applied by all bodies when undertaking a development.
Human Health	Quality of Bathing Waters Regulations 1988 (SI 84 of 1988) and amendments	Prescribe bathing water quality standards and the bathing areas to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. Give effect to Council Directive No. 76/160/EEC concerning the quality of bathing water.
	Quality of Shellfish Waters Regulations 2006 (SI 268/2006)	Give effect to Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters and prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards.
Energy	White Paper on Sustainable Energy (2007)	Objectives include the increased utilisation and development of renewable energies to meet EU targets
Planning	National Spatial Strategy 2002-2020 (2002)	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.
	National Development Plan from 2007 to 2013	Objectives of the NDP are to promote more balanced spatial and economic development.
	Planning and Development Act 2000	Revised and consolidated the law relating to planning and development by repealing and re-enacting with amendments the Local Government (Planning and Development) Acts, 1963 to 1999; to provide, in the interests of the common good, for proper planning and sustainable development including the provision of housing; to provide for the licensing of events and control of funfairs; to amend the Environmental Protection Agency Act 1992, the Roads Act 1993, the Waste Management Act 1996, and certain other enactments.
Sustainable Development	Sustainable Development: A Strategy for Ireland (1997) (DEHLG)	Objectives are to ensure that future development in Ireland occurs in a sustainable manner.
	European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004)	The EU SEA Directive was transposed into Irish Law under S.I. 435 in 2004.
Environment	The Environmental Protection Agency Act 1992	Objectives include the better protection of the environment and the control of pollution through improved licensing and monitoring.
	The Protection of the Environment Act 2003	Objectives include for better protection of the environment and the control of pollution through improved licensing and monitoring.
Water	Drinking Water Regulations SI 439 of 2000	Prescribe quality standards to be applied in relation to certain supplies of drinking water, including requirements as to sampling frequency, methods of analysis, the provision of information to consumers and related matters. Give effect to provisions of EU Council Directive 98/83/EC on the quality of water intended for human consumption.
	Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (SI 258 of 1998)	Provide for specified improvements in water quality conditions in rivers and lakes based on phosphorus concentrations or related water quality classifications and give effect to certain requirements arising under Council Directive 76/46/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
	Water Quality in Ireland 2001-2003	This document assesses the quality of Ireland's aquatic ecosystems concentrating on ambient water quality indicators.
	Water Quality in Ireland 2005: Key indicators of the Aquatic Environment	The quality of rivers, lakes, estuaries, coastal waters, ground waters and canals is discussed in this report.

Topic	Title	Summary of Objectives
	Towards setting guideline values for the protection of groundwater in Ireland (2003)	Proposals for setting environmental quality objectives and standards for groundwater through use of guideline values.
	European Communities (Water Policy) Regulations (SI 722 of 2003)	Provide for the transposition into Irish national law of the provisions of the EU Water Framework Directive.
	European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005 (S.I. No. 378 of 2006)	Objective is to provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources. Give further effect to several EU Directives including Directives in relation to protection of waters against pollution from agricultural sources ("the Nitrates Directive"), dangerous substances in water, waste management, protection of groundwater, public participation in policy development and water policy (the Water Framework Directive).
	Arterial Drainage Acts, 1945 and 1995	Deals with the improvement of lands by drainage and the preventing or sustainably reducing the flooding of lands. Sets up the process of Arterial Drainage Schemes and provides for the maintenance of these works. Also implements a number of drainage and flood reduction related measures such as approval procedures for bridges and weirs, and iterates reporting requirements for Drainage Districts.
Material Assets	Dumping at Sea Act, 1996	Make provision to control dumping at sea, to give effect to the convention for the protection of the marine environment of the north-east Atlantic done at Paris on the 22nd day of September, 1992.
Waste	The Waste Management Act 1996 and amendments	Objectives include (amongst others) the more effective and environmentally sensitive management of wastes in Ireland.
	European Communities (Port Reception Facilities for Ship Generated Waste and Cargo Residues) Regulations 2003 (SI 117 of 2003)	Objective is to reduce the discharges of ship-generated waste and cargo residues into the sea, especially illegal discharges, from ships using ports in the Community, by improving the availability and use of port reception facilities for ship-generated waste and cargo residues, thereby enhancing the protection of the marine environment.

Table 3.4: Preliminary Review of Legislations, Plans, Policies and Programmes - Northern Ireland

Topic	Title	Summary of Objectives
Air and Climate	UK Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007	Sets out a comprehensive strategic framework for air quality policies, and establishes Air Quality Objectives for key air pollutants.
	Air Quality Limit Value Regulations (NI) 2003 (SR No. 2121 of 2003) and amendments.	Sets out air quality limit or guide values for specified pollutants to be achieved by local authorities.
	Draft UK Climate Change Bill (2007)	The draft Climate Change Bill, the first of its kind in any country, and accompanying strategy, set out a framework for moving the UK to a low-carbon economy. The key component of the legislation requires a mandatory 60% cut in the UK's carbon emissions by 2050.
Biodiversity	UK Biodiversity Action Plan	Sets out the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992 and describes the UK's biological resources and commits a detailed plan for the protection of these resources. Includes Species Action Plans, Habitat Action Plans and Local Biodiversity Action Plans with targeted actions.

Topic	Title	Summary of Objectives
	Northern Ireland Biodiversity Strategy 2002 (including NI Species and Habitat Action Plans and Departmental Biodiversity Implementation Plans)	Northern Ireland Biodiversity Group (NIBG) identified 15 major issues affecting Biodiversity in Northern Ireland. The Northern Ireland Biodiversity Strategy 2002 is the Government response to the publication.
	The Environment (Northern Ireland) Order 2002 (SI No. 3153 of 2002)	Provides much of the legislative basis for the protection of sites of importance to nature conservation in Northern Ireland. The Order provides for such areas to be designated as Areas of Special Scientific Interest (ASSIs).
	The Nature Conservation and Amenity Lands (Northern Ireland) Order (NCALO) 1985	Legislates for National Nature Reserves (NNRs), Marine Nature Reserves (MNRs) and Local Nature Reserves (LNRs).
	The Conservation (Natural Habitats) Regulations (Northern Ireland) 1995 (SR No. 380 of 1995) and amendments.	Implements the Habitats Directive in NI.
	The Wildlife (NI) Order 1985 and amendments.	This Order aims to protect wild animals, birds, plants and their habitats. It makes it an offence to kill, injure, disturb, take or sell specially protected wild animals, all wild birds, their nests and eggs, and to uproot, pick, or sell specially protected plants.
Energy	Renewables Obligation Order (Northern Ireland) 2006 (April 2006)	Places an obligation on licensed electricity suppliers in the United Kingdom to source an increasing proportion of electricity from renewable sources
	The Energy Efficiency (Northern Ireland) Order 1999 (No. 659 (N.I. 3))	Aims at promoting energy efficiency in the public and private sectors of business and to the public as a whole, through financial assistance, advice, research and dissemination of information.
Planning	The Regional Development Strategy 2025 – Shaping Our Future	Offers a strategic and long-term perspective on the future development of Northern Ireland up to the year 2025
	Planning Policy Statements 1 - 18	Policies on land-use and other planning matters that apply to the whole of Northern Ireland.
Sustainable Development	A Sustainable Development Strategy for Northern Ireland 2006. 'First Steps to Sustainability.' (and Implementation Plans)	The Strategy and implementation plan are aimed at ensuring that progress in NI is done with the correct balance of economic, environmental and social considerations.
Environment	Environmentally Sensitive Areas Designation Order (Northern Ireland) 2005. SR No. 276 of 2005.	Aims to conserve and enhance designated natural beauty areas, to conserve flora and fauna and geological and physiographical features of those areas; and to protect buildings and other objects of archaeological, architectural or historic interest in those areas.
	The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 1999. SR No. 73 of 1999.	Defines activities that require an Environmental Impact Assessment, and the preferred methods and contents of the assessment.
Water	The Surface Waters (Dangerous Substances) (Classification) Regulations (NI) 1998 (SR 397 of 1998)	Prescribe a system of classifying the quality of inland freshwaters, coastal waters and relevant territorial waters. It creates a system for classifying waters according to the presence in them of concentrations of the dangerous substances listed in the Schedules. Sampling requirements are prescribed in regulation 4. Regulation 5, by modifying section 4C of the Water Act (Northern Ireland) 1972, requires (and enables) the Department of the Environment to establish water quality objectives for those dangerous substances by applying the classifications prescribed in the Regulations.
	The Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990	These regulations implement Council Directive 86/278/EEC on the protection of the environment, and in particular soil, when sewage sludge is used on agricultural land. They prohibit the use of sludge from sewage treatment works being spread on agricultural land unless specified requirements are fulfilled.

Topic	Title	Summary of Objectives
	The Groundwater Regulations (Northern Ireland) 1998	This legislation aims to prevent pollution of groundwater. Before certain listed substances including used sheep dips and waste pesticides are disposed of by land spreading, authorisation must be obtained from Department for the Environment's Environment and Heritage Service.
	Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006	This established limits on the amount of chemical fertiliser to be applied to crop requirement taking into account phosphorus available from soil and organic manures.
	The Nitrates Action Programme Regulations (Northern Ireland) 2006	As eutrophication is recognised as a major problem, legislation covering all farms in Northern Ireland was considered the best option for implementing the Nitrates Directive. An action programme was agreed between the Department and stakeholders and accepted by the European Commission in October 2006. This resulted in the Nitrates Action Programme Regulations (Northern Ireland) 2006, coming into operation on 1 January 2007.
	The Industrial Pollution Control (Northern Ireland) Order 1997 (No. 2777 (N.I. 18))	Aims to prevent or minimise environmental pollution by prescribed substances from certain industrial processes. Best Available Techniques Not Entailing Excessive Cost (BATNEEC) must be used to minimise releases.
	The Water (Northern Ireland) Order 1999 (No. 662 (N.I. 6))	Contains a number of provisions to combat and prevent pollution affecting waterways and groundwater. It is an offence under the Water Order to make a polluting discharge or deposit either directly or via a drain into a waterway or the underground strata. It is also an offence to make an effluent discharge from a septic tank or treatment plant into a waterway or a soak-away without the consent of the Department of Environment (DOE).
	The Water and Sewerage Services (Northern Ireland) Order 2006	Aims at transferring responsibility of water and sewerage services to a government owned company. New regulation of these services to be implemented. Sets out the framework for the introduction of domestic charging for water and sewerage services.
	UK Marine Bill	The Marine Bill is designed to ensure clean healthy, safe, productive and biologically diverse oceans and seas, by putting in place better systems for delivering sustainable development of marine and coastal environment.
Waste	The Waste and Contaminated Land (Northern Ireland) Order 1997 (No. 2778 (N.I. 19))	Part I of the legislation deals with waste on land, collection and disposal of waste, land contamination by pollution, the control of the use, supply or storage of prescribed substances and articles confers powers to obtain information about potentially hazardous substances. Part II makes provision in relation with prohibition on unauthorized or harmful depositing, treatment or disposal of waste, duty of care, as respects waste, waste management licences, collection, disposal or treatment of controlled waste, special waste and non-controlled waste, other controls on substances, articles or waste, publicity, and registration of carriers of controlled waste.

In addition, regional plans and programmes in place within the District will also be reviewed (e.g. County Development Plans and Local Area Plans).

3.2 PLANNING HIERARCHY

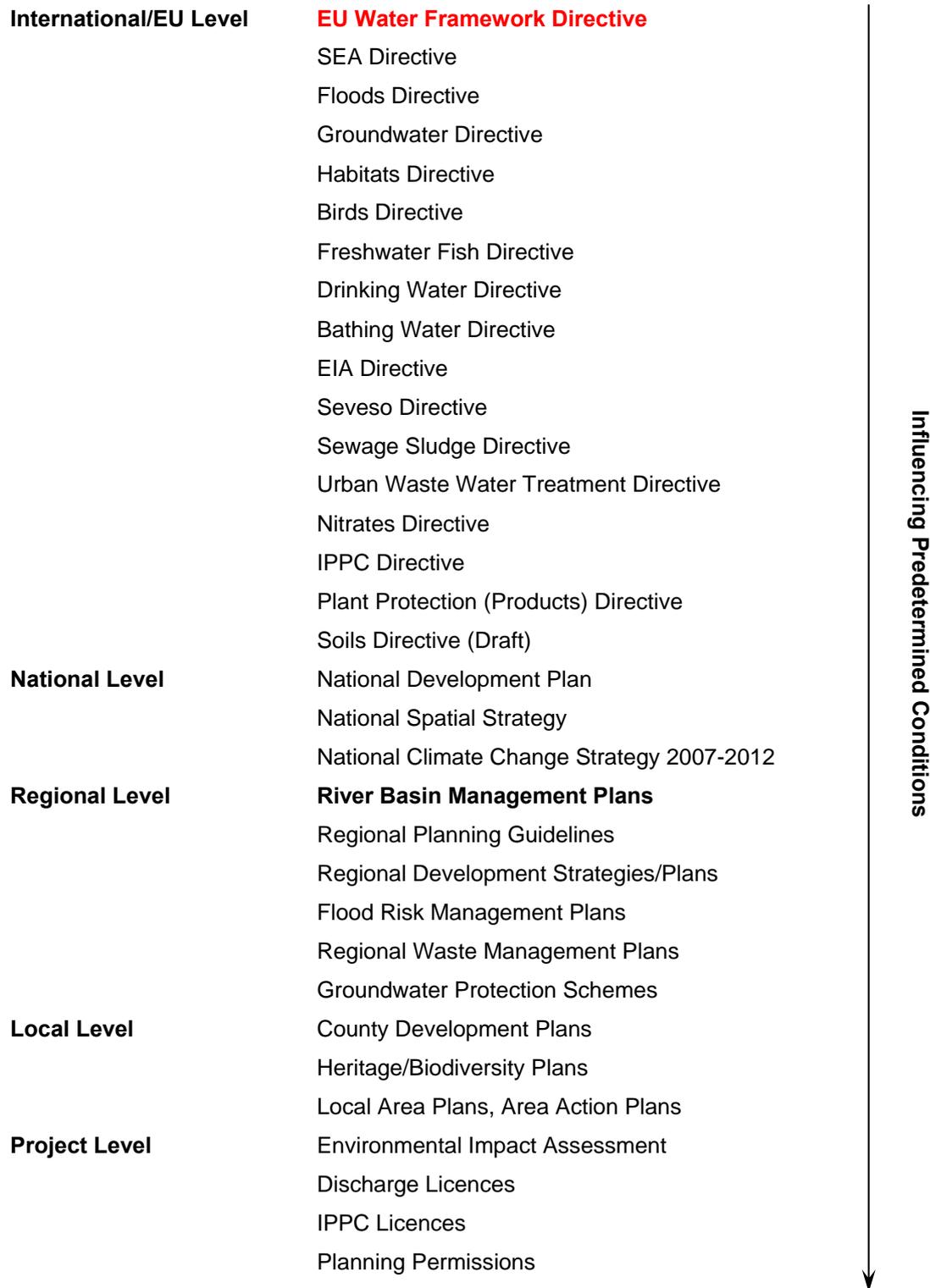
The Shannon is an IRBD. Therefore, the planning hierarchy in both Ireland and Northern Ireland must be considered when placing the Shannon RBMP and POMs in the context of other adopted plans and programmes. Within Ireland, the Planning and Development Act, 2000, has established a hierarchy in relation to planning as follows:

- National Development Plan (NDP);
- National Spatial Strategy (NSS);
- Regional Planning Guidelines;
- County, Borough and Urban District Development Plans; and
- Local Area Plans, Integrated Area Plans, Action Area Plans.

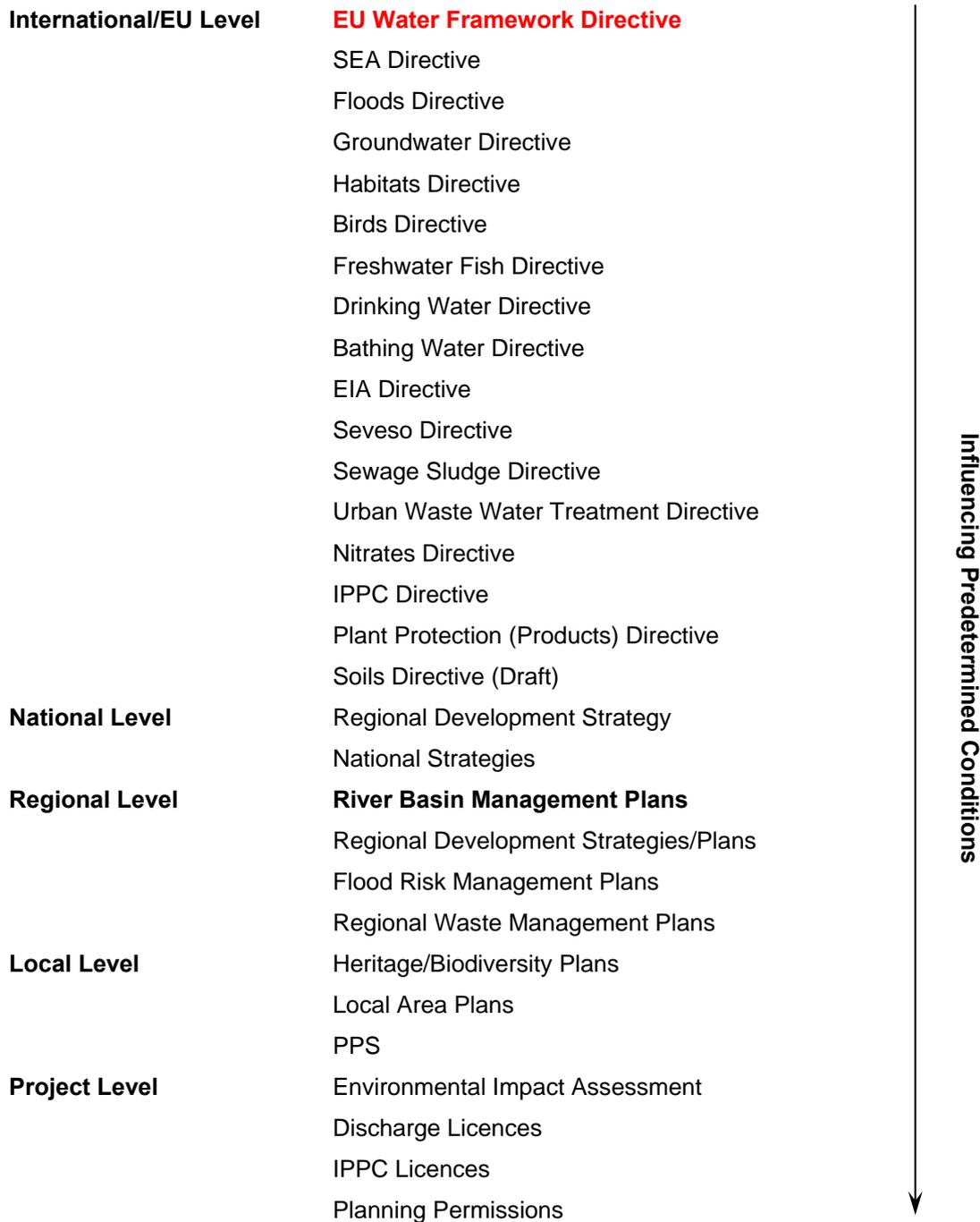
The Planning Service of Northern Ireland demonstrates the planning hierarchy as:

- Regional Development Strategy (RDS);
- Planning Policy Statements (PPS) and Development Plans (e.g. Area Plans); and
- Supplementary Planning Guidance (e.g. Design Guides).

A draft Hierarchy of Plans and Programmes in which the RBMP and POMs is placed in context is illustrated in **Figure 3.1** and **Figure 3.2**, for Ireland and Northern Ireland respectively. The RBMPs and POMs represent higher level regional planning and will inform county development plans and other local level planning strategies.

Figure 3.1: Draft Hierarchy of Plans and Policies (Ireland)

NB: International conventions and protocols are not listed here as they are higher in the hierarchy than the WFD. Please see Table 3.1 for a list of the relevant international conventions and protocols.

Figure 3.2: Draft Hierarchy of Plans and Policies (Northern Ireland)

NB: International conventions and protocols are not listed here as they are higher in the hierarchy than the WFD. Please see Table 3.1 for a list of the relevant international conventions and protocols.

4 ENVIRONMENTAL BASELINE

In line with the SEA Directive and the WFD Directive, an environmental baseline will be compiled for the Shannon IRBD. This will include: a description of the state of the environment at present; a discussion of the key problems/ issues currently being faced in the district; and a description of the expected evolution of the environment should the Shannon RBMP not be implemented, i.e. in the absence of the plan.

4.1 CURRENT STATE OF THE ENVIRONMENT

A brief description of the geographical setting of the Shannon IRBD is included in **Section 1.2** of this document. The Environmental Report will expand on the existing information and contain a full description of the Environmental Baseline data within the Shannon IRBD. Below is a non-exhaustive list of the information sources that will be used to compile the environmental baseline for the Shannon IRBD:

Ireland

- National Parks and Wildlife database (e.g. protected habitats and species);
- Record of Monuments and Places;
- Coillte forestry database (FIPS)
- Central and Regional Fisheries Boards;
- Waterways Ireland databases;
- Relevant County Development Plans;
- Central Statistics Office database, including census data;
- EPA databases (e.g. groundwater and surface water quality, air quality, etc.);
- EPA 2004 State of Environment Report and updated report, if available;
- EPA ENVision (Environmental Mapping / Geographical Information System);
- Geological Survey of Ireland (GSI) mapping, including groundwater maps ;
- Teagasc soil information;
- Discovery Ireland Programme;
- Corine and Landcover Land Use Databases;
- Information gathered during the implementation of the Water Framework Directive, for example, as required under Articles 5, 6 and 8;
- Health Services Executive;
- Department of Agriculture, Fisheries and Food databases;
- Marine Institute databases; and
- University and Institutes of Technology databases.

Northern Ireland

- Department of Environment databases;
- Northern Ireland Environment Agency databases, including IPC and IPRI databases;
- SNIFFER databases;
- Northern Ireland Environmental Link;
- Joint Nature Conservation Committee;
- Geological Survey of Northern Ireland;
- NI State of the Environment Report;
- NI Water;
- Waterways Ireland databases;
- Air Quality Archive;
- Relevant County Development Plans;
- Department for Regional Development;
- NI Statistics and Research Agency;
- Corine and Landcover Land Use Databases;
- Department of Agriculture and Rural Development;
- Information gathered during the implementation of the Water Framework Directive, for example, as required under Articles 5, 6 and 8;
- RSPB Bird Database;
- Department of Culture, Arts and Leisure databases;
- Fisheries Conservancy Board databases;
- Monuments and Buildings Record;
- University databases;
- Tellus Project data;
- Council databases, including registers of landfill sites;
- Landscape Character Reports;
- Ulster Museum and National Museum of Ireland databases, and
- Ulster and Irish Wildlife Trusts.

It is key that the current state of the environment be described using the most recent and up-to-date environmental data, information and reports. Where updates of significant environmental data and associated reports become available during the SEA process, consideration should be given to incorporating the new information into the description of the current state of the environment.

Where data gaps are found for particular aspects of the current state of the environment, the significance of these data gaps should be clearly stated. In addition, it should be stated whether these gaps can be reasonably and realistically addressed during the SEA process.

4.2 PRELIMINARY BASELINE

Included in this Scoping Report is a preliminary discussion of the environmental baseline for the Shannon IRBD. The preliminary baseline has been divided by topic into the issues requiring assessment under the SEA legislation.

4.2.1 Flora, Fauna and Biodiversity

Urban growth on the island of Ireland has been accelerating at a greater rate over recent years as increased development expands city and town limits into the countryside. Artificial land cover throughout Ireland remains relatively low; however, the constant encroachment on natural habitats will undoubtedly have an impact on natural flora, fauna and biodiversity.

In Ireland there are over 2,000 protected sites (including candidate designated areas). In Northern Ireland there are over 350 protected areas (including candidate designated areas).

Throughout the island of Ireland there has been a decline in many of the native species through habitat loss, competition, development and agriculture. Legislation from Ireland, Northern Ireland and Europe protect some of these species.

Within Ireland there are 18 species of plant or animal recorded as endangered, 52 recorded as vulnerable, 75 recorded as rare and 8 classed as intermediate (www.epa.ie/).

Within Northern Ireland there are currently 272 plant and animal species that require conservation action and have been identified as Priority Species under the Biodiversity Action Plan. There are also 457 species on the Northern Ireland Species of Conservation Concern (SOCC) list. Those species under threat have been identified on a scientific basis (www.ehsni.gov.uk).

Further information on biodiversity, flora and fauna in Ireland will be obtained from the National Parks and Wildlife Service (NPWS) database, information gathered under the National Platform for Biodiversity Research and the EPA Environment in Focus 2006 document. In Northern Ireland further information will be obtained from the Centre for Environmental Data and Recording (CEDaR), information gathered under the Countdown 2010 programme.

4.2.2 Population and Human Health

The population of the Ireland was over 4.2 million in 2006, while the population of Northern Ireland was over 1.7 million. Both populations have been increasing at ever growing rates; however the population densities are still low from a European perspective and the overall population still remains below that of the island in the early 19th century.

Although more than 670,000 people live in the Shannon District, the population density is lower than in eastern Ireland. The largest urban area is Limerick City (90,800, including its suburbs and environs) but other sizeable towns include Athlone (17,500), Ennis (24,300), Mullingar (18,400), Tralee (22,700) and Tullamore (12,900).

Baseline information on population will be gathered from the most recent censuses carried out in Northern Ireland and Ireland.

4.2.3 Water

The River Shannon is the largest in Ireland. It rises in County Cavan and flows for 260km before flowing into the Shannon Estuary at Limerick City. An unusual feature of the Shannon is that it is remarkably flat, with the majority of the fall in height taking place on the 24km stretch between Killaloe and Limerick. The first hydroelectric power generation station in Ireland was constructed on this stretch, at Ardnacrusha, in the 1920s. In winter, seasonal flooding occurs and the flood plains on either side of the river, called callows, are world famous for the plants and animals found there. The main tributaries of the Upper Shannon are the Rivers Suck, Inny and Brosna, while the main tributaries of the Lower Shannon and the Rivers Fergus, Mague, Deel and Mulkear.

There are more than 1,600 lakes in the Shannon District but less than 50 of them are over 1km² in area. The largest lakes are Lough Derg (120km²), Lough Ree (100km²) and Lough Allen (30km²), which are all on the River Shannon.

The River Shannon flows into the Shannon Estuary and on into the Atlantic Ocean. The Shannon Estuary is the largest estuary in Ireland, with an area of approximately 150km². The Fergus, Deel and Mague rivers all flow into the Shannon Estuary. The District's coastline incorporates most of the coastline of County Clare and about one third of the coastline of County Kerry. There are a number of ports and harbours. There are four main ports facilities on the Shannon Estuary: Aughish Alumina, Moneypoint, Foynes and Ted Russell Dock, Limerick. Shannon Foynes Port Company is the statutory body charged with the management of the Estuary.

With regard to groundwater, limestone rocks dominate the geology of the Shannon District. The Burren in County Clare is probably one of the best-known landscapes internationally. The karstified limestone creates unique groundwater features, including seasonal lakes (turloughs) and disappearing rivers during prolonged dry spells. Swallow holes form where the limestone bedrock is dissolved along fissures and cracks allowing the surface streams to disappear into the ground to emerge, possible miles away, as springs. However these interesting features of the local geology also mean the groundwater resources in the area are far more vulnerable to infiltration and transportation of pollutants.

The Shannon navigation is the longest navigable network in Ireland and Britain. There are several major canal systems that connect in the Shannon District, the main canals being the Grand and Royal Canals and the cross-border Shannon-Erne Waterway.

The River Shannon currently provides drinking water for up to 85,000 people from two abstraction points. These sources are Clonlara and the Clareville Canal, which are producing up to 60 MLD of water for public consumption. Limerick City Council also has a licence to increase this abstraction to 140 MLD, should the need arise.

Information collected during the previous phases of WFD implementation will be used to establish the water baseline for the District.

4.2.4 Air and Climate

In 2006, measured sulphur dioxide, nitrogen dioxide, carbon monoxide, lead and benzene concentrations in Ireland were all below their individual limits, as designated under the 2002 Air Quality Standards Regulations. In addition, particulate matter (PM₁₀) concentrations in 2006 were similar to those measured in 2005, with all stations compliant with the standard introduced from 2005. However, ozone concentrations measured in Ireland in 2006 were higher than recent years.²

Northern Ireland has a relatively good network of air quality monitoring sites, which have been established to ensure the standards of the National Air Quality Strategy are met. Data from the monitoring sites show that in general there has been a long term decline in the average number of air pollution days in Northern Ireland, reaching an all-time low of only three days in 2006. This is largely because of a reduction in particles and sulphur dioxide, but fluctuations from one year to the next can occur, as in 2003, because of differences in weather conditions. In rural areas the series can be volatile from one year to the next, and the downward trend is less clear. This reflects the variability in levels of ozone, the main cause of pollution in rural areas.³

Baseline air quality information specifically for the Shannon IRBD will be compiled from EPA and Local Authority sources (Ireland) and the NIEA, Northern Ireland Air and the UK Air Quality Archive (Northern Ireland).

² Environmental Protection Agency (2007). Air Quality in Ireland 2006 – Key Indicators of Ambient Air Quality.

³ <http://www.airqualityni.co.uk/reports.php>.

4.2.5 Cultural Heritage

Cultural Heritage is an important issue in the context of the RBMP as rivers and riverine/estuarine/coastal/marine environments are well known foci for human activity over millennia. From the earliest known periods of human settlement on the island, rivers have provided sources of food and communication, while also historically demarcating territories. Forging points, bridges, ferries and settlements on Irish rivers have evolved over time, and because of their unique environments they often preserve archaeological remains (such as wood and other organic materials) much better than would be found on 'dry' sites. Also, tributaries of main watercourses have been used, and modified, to provide power to industrial sites giving rise to industrial archaeological sites (e.g. mills), drinking water to adjacent settlements and infrastructure for canals.

Archaeological conservation in Ireland is dealt with by the National Monuments section of the DEHLG operating under the National Monuments Acts, 1930 - 1994, with two sections, the Archaeological Survey of Ireland and the Archaeological Archive being the primary producers and managers of data.

The Register of Sites and Places / Sites and Monuments Record comprise some one hundred and twenty thousand protected archaeological sites throughout Ireland. In addition, there are over eight hundred major archaeological monuments in state ownership or state guardianship under the National Monument Acts.

In Northern Ireland historic monuments have been protected by legislation since 1869. The Government has taken 181 state monuments into care since then. There are currently 1,738 scheduled historic monuments with the scheduling programme ongoing. There is also the Northern Ireland Sites and Monuments Record which has information on 16,038 sites, while the Industrial Heritage Record has 16,489 records. Northern Ireland also has a Maritime Record and a Historic Garden Register.

Information on the historic environment within Ireland may be obtained from the Register of Sites and Places / Sites and Monuments Record, the Register of Battle Sites, the Records of Protected Structures (included in relevant County Development Plans) and the Register of Excavations, which maintains details of all excavations carried out in Ireland together with a large archive of excavation reports. Within Northern Ireland information will be obtained from the: Northern Ireland Sites and Monuments Record; Industrial Heritage Record; Maritime Record; and Historic Garden Register. In addition, the Register of Historic Shipwrecks may be consulted as the Shannon IRBD contains coastal waters.

4.2.6 Landscape

The Shannon IRBD boasts scenic landscapes, including the world renowned Burren landscape in west Clare, mountainous regions, more than 1,600 lakes, and a coastline that incorporates most of the coastline of County Clare and about one third of the coastline of County Kerry.

The Landscape Character Assessments and Development Plans for the counties within the bounds of the Shannon IRBD will be consulted to determine the landscape designations for the areas that fall within the IRBD and whether there are any landscapes or views requiring special conservation or consideration.

4.2.7 Material Assets

Urban areas in the District have a lot of industries and most of them are centred on rivers or the coastline. In addition, the rich soils of the Shannon IRBD mean that agriculture is widespread, with livestock grazing, milk and meat processing occurring in the District. Though much of the land area is agricultural, there are also significant areas of forestry and peatlands. Peat has been used since the 1940s as fuel in local power stations to generate electricity. The District boasts scenic landscapes and offers great opportunities for fishing and boating, which attract many tourists. The Shannon River and its lakes are managed waterways, with significant infrastructure in sluice gates and weirs controlling the water levels.

Information on economics and infrastructure, including rail, road, water supply, wastewater treatment, etc., will be compiled as part of the material assets baseline. In addition, information on insurance claims from water related issues, i.e. flooding, could be compiled, if available. References will also be made to documents such as “Urban Waste Water Discharges in Ireland – A Report for the Years 2004 and 2005” (EPA, 2007), discharge licences as appropriate, and “Infrastructure Needs Surveys” from local authorities within the RBD.

4.2.8 Soil and Land Use

Information on soils in the district will be gathered from the Geological Survey of Ireland and Teagasc databases (Ireland) as well as from the British Geological Survey (Northern Ireland), Geological Survey of Northern Ireland, the Department of Agriculture and Rural Development (DARD) and the Agri-Food & Biosciences Institute (AFBI). In addition, OSI data, OSNI data, aerial mapping, land use mapping, Corine and LC2000 data may be used to examine land cover within the Shannon IRBD.

4.2.9 Interrelationships

In accordance with the SEA Directive, the inter-relationship between the SEA environmental topics must be taken into account. **Table 4.1** highlights the potential inter-relationships between the SEA topics. These potential interactions will be taken into account in the assessment of scenarios / alternatives.

Table 4.1: Potential Inter-Relationships Between SEA Topics

Biodiversity Flora, Fauna	√								
Population / Human Health	√	√							
Soil	√	√	√						
Water	√	√	√	√					
Air	√	√	√	√	√				
Climatic Factors	√	√	√	√	√	√			
Material Assets	√	√	√	√	X	√	√		
Cultural Heritage	X	√	√	√	√	√	√	√	
Landscape	X	√	√	√	X	√	√	√	√
	Biodiversity Flora, Fauna	Population / Human Health	Soil	Water	Air	Climatic Factors	Material Assets	Cultural Heritage	Landscape

√ = interrelationship Anticipated

X = no interrelationship anticipated

4.3 EXISTING ENVIRONMENTAL PRESSURES / PROBLEMS

The Significant Water Management Issues (SWMI) document for the Shannon IRBD highlighted the main pressures / problems facing the water environment within the river basin. The following sections give a summary of these environmental problems.

4.3.1 Wastewater and Industrial Discharge

In the Shannon District, estimates indicate that municipal and industrial discharges produce over 20% of the yearly phosphorus load and just under 5% of the nitrogen load. The shortfall in infrastructure at major plants and a myriad of smaller settlements is an issue in this district, in particular combined sewer overflow spillage and run-off from road networks into the District's rivers. Unauthorised or

crossed connections between storm drainage and foul sewers were also raised as a problem. There are many places where waters have been polluted by this type of discharge and in response treatment facilities have been upgraded. For example, Mullingar Wastewater Treatment Plant has been modernised to address pollution of Lough Ennell and the River Brosna. More investment is needed generally to ensure that treatment plants can cater for the unprecedented growth in demand in the District.

4.3.2 Landfills, Quarries, Mines and Contaminated Lands

There is concern about landfills, quarries, mines and contaminated sites in the Shannon District. Old mines such as the Silvermines in North Tipperary have been identified as causing water quality problems. In response the recommendations of the “Report of Investigation into the Presence of Influence of Lead in the Silvermines Area of County Tipperary” are being implemented. The EPA has also published a Code of Practice – *Environmental Risk Assessment for Unregulated Waste Disposal Sites (EPA 2007)*.

4.3.3 Agriculture

Agriculture is a very important activity, employing approximately 10% of the workforce in the Shannon District. About 70% of the land area is used for agriculture, mostly for livestock grazing on grassland. Estimates of nutrient input into waters in the Shannon District indicate that agriculture produces 55% of the yearly phosphorus load and 85% of the nitrogen load.

Other issues include water problems arising from insufficient slurry storage and the intensive farming practices in parts of the District. Bye-laws to control agricultural pollution have been put in place in priority areas including Cavan, Offaly and North Tipperary.

4.3.4 Wastewater from Unsewered Properties

Septic tanks pose a potential problem to the District’s waters. The growing population in the District is resulting in an increasing demand for individual houses and housing clusters throughout most of the District. For example, Cavan County Council has put bye-laws in place to address this problem. The coastal counties of Limerick, Clare and Kerry have an ever-increasing number of holiday homes. It is very difficult and costly to provide main sewer systems to dwellings in these areas and it is often not possible to achieve this ahead of new development. Effective control through planning, design, construction and operation of on-site systems is required to avoid water quality problems.

4.3.5 Forestry

Commercial forestry areas are localised in the Shannon District (covering less than 5% of the land area). However, some of these areas are in sensitive salmon and trout spawning areas in forested upland headwaters, underpinning the need for adequate control on forestry operations in sensitive areas. Reference will be made to the Irish National Forest Standard, Code of Best Forest Practice and the six environmental guidelines which form a framework for the Forest Service's implementation of sustainable forest management (SFM) in Ireland.

4.3.6 Usage and Discharge of Dangerous Substances

Potential sources of dangerous substances include agricultural chemicals especially pesticides and sheep dip, forestry, industrial chemicals, landfill, illicit dumps, commercial premises and well as household usages. Contamination from dangerous substances can have a long residence time in the environment and can often require costly clean-up operations. A number of mines in the District, for example the Silvermines, are currently being assessed in terms of their remediation, rehabilitation and long-term management needs. The threat from usage and release of dangerous substances from mines as well as from household substances is a potential water problem within the District.

4.3.7 Physical Modifications

The most significant physical change in the Shannon District is the hydroelectric power scheme with Ardnacrusha Dam, near Limerick, and weirs and sluices, which aid both water storage and navigation at key locations along the system. Many of the District's waterways have also been physically altered to allow for navigation, agricultural drainage and flood protection. Stretches need to be cleaned out from time to time, removing silt build-up to reduce flooding risk and to ensure that the system is navigable. The Shannon District is home to other large schemes including ports at Limerick and Foynes, flood protection schemes at Ennis and around Listowel and coastal defences in counties Limerick, Clare and Kerry.

Widespread development on floodplains (e.g. infill of wetland sites and general loss of wetland sites through reclamation), particularly with respect to potential effects on water quality and flooding behaviour, is a potential environmental problem within this district. The Office of Public Works is embarking on a comprehensive flood management plan for the Shannon District under the forthcoming Floods Directive.

4.3.8 Abstractions

Drinking water supplies are very important in the Shannon District particularly as there is pressure on supply in some areas with a risk of shortages in large urban areas such as Limerick City. The potential effects of climate changes are also raising concerns for the security of future water supplies in District. The Shannon system is also being considered as a potential source of water for the Greater Dublin Area, which is facing water shortages in the future. There is currently an SEA underway on the *Greater Dublin Water Supply – Major Source Development Strategy*.

4.3.9 Local Issues

4.3.9.1 Invasive alien species

The EPA identified the eight species of main concern in Ireland in 2004, two of which were found in the Shannon District:

Dace, *Leuciscus leuciscus*, is an introduced freshwater or brackish fish, which is exceedingly prolific, and poses a risk as a potential pest in some areas. Dace is present in the subcatchments of the Shannon estuary;

Zebra Mussels, *Dreissena polymorpha*, have spread throughout the River Shannon and its main lakes. They out-compete native mussels. They attach to firm surfaces, boat hulls, rock, gravel, other mussels and plants and spread easily into other systems.

Since 2004, a third species of main concern has been identified in a study on alien species in Lough Derg 2005-2006: **Nuttall's pondweed**, *Elodea nuttallii*. In addition, this study found a **parasite of the freshwater eel**; **water violet**; **duckweed**; and **Canadian pondweed**.

4.3.9.2 Eutrophication of estuaries and lakes

Excessive nutrients in natural waters can lead to the growth of algae and weeds. This enrichment of water is called eutrophication and it is recognised as a major threat to the quality of Irish waters. Algal blooms and weeds can disrupt the normal functioning of an ecosystem, causing a variety of problems. They reduce the value of the affected waters for fishing, swimming and boating and can also interfere with the treatment of drinking water. In most cases where there are problems in freshwaters the enrichment is caused by phosphorous inputs whereas both nitrogen and phosphorous cause problems in estuaries. The sources of these nutrients are sewage, agricultural effluents, fertilisers and industrial wastes. In 1998, the Phosphorous Regulations were introduced to set water quality standards for rivers and lakes. These standards were to be met by the end of 2007.

4.3.9.3 Cruising and Boating

Cruising and boating are important recreational and tourism activities on the Shannon waterway and the Shannon-erne navigation. However, these can give rise to certain localised water problems including discharge from on-board toilets, physical disturbance by boat wakes and potential engine oil spillage.

The operation of boat “pump-out” facilities to collect and treat the effluent from on-board toilets has been an-ongoing problem in the District. Waterways Ireland and the local authorities adjoining the navigation are working together to address these problems and ensure that there are enough facilities that are well maintained and easy to operate for boat users. Bye-laws have been implemented which apply speed restrictions on boats along the Shannon navigation and the Shannon-erne Waterway.

4.3.9.4 Peat Extraction

Peat extraction is an important industry in the Shannon District. Peat is harvested to fuel power stations and homes and for gardening products. However, peat extraction can give rise to certain localised water problems including silt nutrient release from milled areas. There are also many former sites in the District that have fallen or will fall out of production requiring rehabilitation plans in the coming decade.

5 SCOPING

5.1 SCOPE OF THE PLAN

5.1.1 Geographic Scope

The Shannon RBMP is a regional plan for the Shannon IRBD (see **Figure 1.2**) and as such the assessment will be limited geographically to activities occurring within the functional area of the Plan. While recognition will be given within the Plan to the issue of water management in the adjacent RBDs, no separate assessment will be undertaken of these areas in the SEA. A separate SEA will be carried out for each of the seven remaining (I)RBDS.

5.1.2 Temporal Scope

The RBMP and POMs will cover the period from 2009 up to 2014, and will be reviewed after five years. In line with the SEA Directive, short, medium and long-term impacts (including reference to secondary, cumulative, synergistic, permanent and temporary, positive and negative effects) will be considered during the assessment. However, short-term assessment may not be very constructive as implementation of the Plan, and the associated Programme of Measures, will take time to be implemented and take effect; therefore, the results of such an assessment are likely to be similar to a 'business as usual' scenario for the short-term. As such assessments will be made for 2014 (as a medium term horizon) and 2030 (as a long term horizon), which represents the life of the current WFD.

5.2 SCOPING OF STRATEGIC ENVIRONMENTAL ASSESSMENT TOPICS

In accordance with S.R. 280 of 2004 (SEA Regulations, Northern Ireland) and S.I. 435 of 2004 (SEA Regulations, Ireland) consideration has been given to whether the environmental effects, both positive and negative, of the River Basin Management Plans are likely to be significant. A summary of the conclusions is listed in **Table 5.1**, below.

Table 5.1: Scoping of SEA Issues

SEA Issue	Scoped In / Out	Significant Environmental Effects likely to occur or reason for scoping out
Biodiversity, Flora and Fauna	In	<ul style="list-style-type: none"> • Effects on protected areas: European (e.g. SACs, SPAs, Ramsar sites) and water dependent ASSI / NHAs • Effects on flora and fauna, (including migratory bird species, invertebrates etc.) and habitats linked to water, including coastal and marine habitats • Effects on Freshwater Pearl Mussel protected areas • Effects on salmonids, other protected fish and shellfish species • Effects on sensitive habitats (i.e. peatlands, limestone habitats) • Potential introduction of alien species and invasive species • Protecting and enhancing biodiversity as a whole on a national, regional and local level • Potential for habitat loss and fragmentation • Potential for interaction with Habitats Directive, i.e Article 6
Population	In	<ul style="list-style-type: none"> • Recreational use of water (e.g. bathing, fishing) • Effects on Eco-Tourism • Possible effects on tourism (e.g. navigation, fishing, water sports) • Effects on National Parks and other designated areas • Improving degraded sites affecting water quality • Commercial and agricultural activities with an influence on water • Increase in demand for wastewater treatment either at the municipal level or individual wastewater treatment systems • Increase in demand for water supply • Flooding from increase in development in flood-sensitive areas
Human Health	In	<ul style="list-style-type: none"> • Effects on protected bathing waters • Effects on shellfish protected waters • Effects from drinking water abstraction (surface and groundwater) • Effects on drinking water protected areas • Effects on overall water quality, including municipal and private drinking water supplies • Effects from invasive species (e.g. Giant Hogweed) • Effects from toxic algal blooms
Soil and Land Use	In	<ul style="list-style-type: none"> • Impacts of afforestation/deforestation on water environment • Effects of contaminated land on the water environment • Effects of historical landfills on the water environment • Land vulnerable to erosion • Nitrate vulnerability (also connected to groundwater quality) • Erosion and soil function • Influence on land use practices (e.g. fertiliser application) • Effects of existing/historical mining activities on the water environment • Effects on geomorphology (i.e. river channels, landforms) • Effects of discharges on receiving aquatic sediments

SEA Issue	Scoped In / Out	Significant Environmental Effects likely to occur or reason for scoping out
Water	In	<ul style="list-style-type: none"> • Pressures and impacts on ecological status of water bodies • Water pollution from point or diffuse sources • Morphological impacts on water bodies from engineering and other works • Impacts on water bodies from abstraction (including fish passage) • Impacts on water bodies from landfills and mines/quarries • Impacts on water bodies from contaminated land • Impacts on water bodies from peat extraction • Impacts on water bodies from landspreading of organic wastes • Impacts on groundwater quality and quantity • Impacts on combined stormwater overflows • Impacts of forestry on the water environment • Effects on lakes, ponds, standing waters and other wetlands including peat lands • The coastal environment, including bathing waters transitional waters and estuaries • Protection of areas of fluvial or coastal flood risk • Impacts on water supply (including potable) and water conservation • Potential to improve water body status, including heavily modified and artificial water bodies
Air	In	<ul style="list-style-type: none"> • Effect of odour generated by wastewater treatment facilities • Potential impacts from disposal of sludge from wastewater treatment plants • Effects from acid rain
Climatic Factors	In	<ul style="list-style-type: none"> • Climate change mitigation and adaptation, including to effects from severe weather events and coastal zone management • Flooding (link to water receptor) • Changes in greenhouse gas emissions from water management activities
Material Assets	In	<ul style="list-style-type: none"> • Protection of water related assets including: <ul style="list-style-type: none"> ○ canals and hydro; ○ flood defences to protect houses, roads, etc; ○ Ports and harbours; ○ Causeways; ○ Bridges and culverts; ○ Groundwater sources; and ○ WWTWs and drainage. • Sustainable use of water (link to water receptor) • Change in land use based on risk to water quality, quantity and flooding thus reducing value of land either by limiting development potential or requiring a change in land use.
Cultural, Architectural and Archaeological Heritage	In	<ul style="list-style-type: none"> • Nationally designated sites within 10m of waterbodies • Effects on marine archaeology (e.g. wrecks) • Effects on water based archaeological features • Effects on cultural heritage features in the vicinity of floodplains and/or watercourses (i.e. mills, mill races and bridges) • Effects on historic ford crossings • Effects on industrial archaeology (e.g. canals) • Potential for disturbance of previously undiscovered archaeological remains near or within water bodies during development of water-related infrastructure (e.g. wastewater treatment facilities, flood defences, crossings).
Landscape	In	<ul style="list-style-type: none"> • Effects on areas of designated landscape quality and scenic views (i.e. in CDPs and other plans) • Tourism value of the RBD water bodies • Effect on gardens and designed landscapes • Effects on the general landscape as well as riverscapes, lakescapes and seascapes

5.3 PARTS OF THE RBMP TO BE ASSESSED

As part of the SEA scoping process a decision needs to be made as to what parts of the RBMPs and POMs should be assessed and to what level of detail. As stated in Deasley and Preston (2007)⁴, “RBMPs will be complex documents, which will incorporate very wide ranging actions for strategic water management alongside potentially very detailed measures that will apply to individual waterbodies to address specific issues”. Additionally, some of the measures in the Programme of Measures, both strategic and local, will be activities which are already underway.

The purpose of the SEA is to provide a meaningful assessment of those parts of the RBMPs and POMs that may lead to significant environmental effects, in order to, “contribute to more transparent decision making and to ensure the Directive’s objective of integrating environmental considerations into plan making is realised,” (Deasley and Preston, 2007). To achieve this, a decision about what parts of the RBMP and POMs will be assessed are required. **Table 5.2** sets out the elements of a RBMP and POM required by the WFD. **Table 5.2** also identifies those elements of the RBMP and POM that are proposed to be assessed as part of the SEA and why. Again this information is provided to generate discussion during the consultation process and is subject to change based on the comments received.

⁴ Deasley and Preston, 2007. *Strategic Environmental Assessment of Water Framework Directive River Basin Management Plans. Applying Strategic Environmental Assessment to River Basin Management Plans – A Scottish Perspective.* SEPA 2007.

Table 5.2: Proposed Parts of the RBMPs and POMs to be Assessed

	Requirement of RBMP*	Will this be assessed in the SEA? **
1	A general description of the characteristics of the river basin district.	No, the characterisation process was undertaken in 2005. It provides factual information about the environment in the RBD.
2	A summary of significant pressures and impact of human activity on the status of surface water and groundwater.	No. This provides factual information about the environment in the RBD.
3	Identification and mapping of protected areas.	No. This provides factual information about the environment in the RBD.
4	A map of the monitoring networks established for the purposes of Article 8 and Annex V of the WFD, and a presentation in map form of the results of the monitoring programmes.	No. This provides factual information about the environment in the RBD.
5	A list of the environmental objectives established under Article 4 of the WFD for surface waters, groundwater and protected areas.	Yes – The strategic objectives/direction of the RBMP will be assessed. The specific objectives set for each water body will not be assessed as they are set for a local level and are beyond the strategic scope of the assessment.
6	A summary of the economic analysis of water use as required by Article 5 and Annex III;	No. This provides factual information about the RBD.
7	A summary of the programme or programmes of measures adopted under Article 11 of the WFD.	Yes – All substantially new “national” measures will be assessed. Measures which relate to the continuation of existing activities (e.g. existing legislation) are not proposed to be assessed. However, these will be captured in the assessment of the overall strategic direction of the RBMP.
8	A register of any more detailed programmes and management plans for the river basin district dealing with particular sub-basins, sectors, issues or water types, together with a summary of their contents.	Yes – Where sub basin measures are identified, these will be assessed where they are significant. Again, only substantially new measures will be assessed.
9	A summary of the public information and consultation measures taken, their results and the changes to the Plan made as a consequence.	No, this is a statement about the consultation arrangements put in place. SEA consultation arrangements may be incorporated into this. The SEA Statement may also be incorporated into this.
10	A list of competent authorities in accordance with Annex I of the WFD.	No. This is a statement of facts.
11	The contact points and procedures for obtaining the background documentation and information referred to in Article 14(1) of the WFD.	No, these are administrative arrangements

Table is adapted from Table 6 in Deasley and Preston, 2007.

*As set out in the European Communities (Water Policy) Regulations (Ireland) (S.I. 722 of 2003) and The Water Environment (Water Framework Directive) Regulations (Northern Ireland) (S.R. 544 of 2003)

** Where RBMP and POMs factual information is not being assessed in the SEA, it will however be used for guidance in the assessment.

6 FRAMEWORK FOR ASSESSING ENVIRONMENTAL EFFECTS

The preceding sections have identified the environmental characteristics of the Shannon IRBD, the key environmental issues relating to the Shannon IRBD and the key influences from external plans, policies and strategies. This section uses that information to set out a series of draft SEA Objectives, indicators and associated targets. These will be used in the Environmental Report to predict the likely environmental effects of the Shannon RBMP and POMs and, subsequently, monitor implementation of the RBMP and POMs. The use of these objectives ensures that following this scoping stage the SEA focuses only on those issues that are most relevant and significant to the study and the RBMP and POMs.

6.1 DRAFT SEA OBJECTIVES

Set out in **Table 6.1** are the draft SEA Objectives that are being considered to test the Shannon RBMP and POMs. These objectives are based on the current understanding of the key environmental issues identified. The Detailed Assessment Criteria are examples of the issues that will be considered during the assessment of whether the individual RBMPs and POMs, including the proposed alternatives, are meeting the proposed SEA Objectives. It should be noted that these are **draft objectives** only and may be refined or developed further during the study. Additional draft Objectives received from stakeholders to date are included in **Table 6.2** and will be considered for the final objectives used in the Environmental Report.

Table 6.1: Draft SEA Objectives

Draft Objective	Detailed Assessment Criteria* – To what extent will the RBMPs and POMs:	SEA Topics
Objective 1 Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species	<ul style="list-style-type: none"> Provide effective protection of “protected areas” defined under the WFD? Provide effective protection of water dependent international, national and local designated sites? Contribute to water dependent UK and Irish Biodiversity Action Plan objectives? Support delivery of Northern Ireland and Ireland Biodiversity Strategies? Reduce water related impacts by alien species? 	Biodiversity, Flora and Fauna
Objective 2 Protect human health in undertaking water management activities	<ul style="list-style-type: none"> Protect drinking water areas (including private abstractions)? Contribute to the mitigation of floods and droughts? 	Population, Human Health, Soil

<p>Objective 3 Prevent deterioration of the status of water bodies. Enhance water body status (including groundwater) to good status, as appropriate</p>	<ul style="list-style-type: none"> • Reduce the impacts from point source pollution, diffuse source pollution, abstraction and flow regulation and morphological alterations? • Ensure sustainable levels of abstraction from surface and ground water • Ensure flow regulation is appropriate • Prevent deterioration of water bodies from morphological alterations? • Promote sustainable use of water and water conservation? 	Water
<p>Objective 4 Contribute to mitigation of, and adaptation to, climate change and air quality issues</p>	<ul style="list-style-type: none"> • Contribute to reducing GHG emission from water management activities? • Reduce vulnerability to the effects of climate change? • Encourage improved energy efficiency? • Address the potential impacts of climate change on biodiversity? 	Climatic Factors, Air
<p>Objective 5 Protect and, where appropriate, enhance the character, diversity and special qualities of cultural heritage in the River Basin District</p>	<ul style="list-style-type: none"> • Protect and, where appropriate, enhance or restore water related historic environment features? • Impact upon industrial archaeological sites? 	Cultural Heritage
<p>Objective 6 Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in the River Basin District</p>	<ul style="list-style-type: none"> • Protect and, where appropriate, enhance national designated landscape areas? 	Landscape
<p>Objective 7 Protect and make the most effective use of water management infrastructure</p>	<ul style="list-style-type: none"> • Make most efficient use of water management infrastructure? • Protect existing infrastructure – e.g. flood defences? • Assist with the planned phased introduction of upgraded wastewater treatment? 	Material Assets
<p>Objective 8 Protect and, where appropriate, enhance the function and quality of the soil resource in the River Basin District</p>	<ul style="list-style-type: none"> • Reduce erosion? • Protect agricultural land? • Safeguard soil quality, quantity and function? • Contribute to reducing levels of brownfield, derelict and contaminated land in plan area? 	Soil

*Detailed criteria are cited where appropriate and these will be used to ensure consistent application of the objectives.

Table 6.2: Additional Draft SEA Objectives from Stakeholders

Draft Objective	Detailed Assessment Criteria* – To what extent will the RBMPs and POMs:	SEA Topics
Objective S1 To maintain and improve where possible the quality of estuarine waters. (From: DCENR)	<ul style="list-style-type: none"> Reduce the impacts from point source pollution, diffuse source pollution, abstraction and flow regulation and morphological alterations? 	Water
Objective S2 Prevent deterioration of the status of water bodies with regard to quality. (From: DCENR)	<ul style="list-style-type: none"> Prevent deterioration of water bodies from point source and diffuse pollution? Prevent deterioration of water bodies from morphological alterations? 	Water
Objective S3 Prevent deterioration of the status of water bodies with regard to quantity. (From: DCENR)	<ul style="list-style-type: none"> Maintain fish passage at all times, including eels? Protect salmonid waters as designated under the Freshwater Fish Directive? Ensure sustainable levels of abstraction from surface and ground water? Promote efficient use of water? Ensure flow regulation is appropriate? 	Water
Objective S4 Protect sustainability of the rural and urban communities on a commercially/socially viable basis in tandem with achieving WFD objectives. (From: DCENR)	<ul style="list-style-type: none"> Maintain the service to local communities of fishing harbour and commercial port activities? 	Population/ Material Assets

6.2 DRAFT INDICATORS AND TARGETS

Targets will be considered over the duration of the baseline data collection and assessment, and through the consultation process, in order to meet the strategic environmental objectives of the RBMP. In each case, any target that is set must be attributable to the implementation of the RBMP and POMs. The indicators will also be selected bearing in mind the availability of data and the feasibility of making direct links between any changes in the environment and the implementation of the RBMP and POMs. Draft targets and indicators are provided in **Table 6.3**. Wherever possible quantitative indicators will be used. Again it should be noted that the indicators provided in **Table 6.3** are **draft indicators** only and have been provided as examples to generate discussion as to the types of indicators that may be appropriate and/or practicable. These indicators will be refined or developed further during the study, including in response to comments received on this Scoping Report.

6.3 IMPACTS, MITIGATION AND MONITORING

In line with the requirements in the SEA Directive the likely significant effects on the environment will be assessed. This includes reference to secondary, cumulative, synergistic, short, medium and long term, permanent and temporary, positive and negative effects as well as the interrelationships between the environmental issue areas. Where possible and practical, assessment of these impacts

will be quantitative. Any problems encountered during the assessment of impacts, including technical difficulties and/or lack of information, will be highlighted and described, as appropriate.

All potential positive and negative impacts will be presented individually. In addition, a summary of the overall balanced potential effect will be presented for each environmental issue area.

With regard to cumulative impacts, the use and application of Geographical Information Systems (GIS) should be considered, where possible, at the various key stages in the SEA process. GIS could along with other methodologies, and depending on the availability of relevant spatial data, assist in determining the cumulative vulnerability of various environmental resources within the IRBD and how they may be affected by any of the considered RBMP and POMs alternatives.

Where significant adverse impacts are identified during the SEA process, relevant and appropriate mitigation measures will be provided in the Environmental Report. In order to ensure implementation of the recommended measures, monitoring arrangements will be provided and will include, where feasible, details as to the frequency of monitoring, and analysis and reporting on monitoring. As part of the monitoring programme, relevant and appropriate thresholds will be included to determine when remedial action is required for the particular aspect of the environment being monitored.

6.4 COMPATIBILITY OF RBMP OBJECTIVES WITH SEA OBJECTIVES

The Objectives of the RBMP have not been drafted at this time; however they will be based on the Water Framework Directive Objectives. Therefore, **Table 6.4** provides a preliminary comparison of the draft SEA Objectives against the objectives of the Water Framework Directive in order to ensure that they are compatible. Once the objectives of the RBMP are available, their compatibility with the objectives of the SEA will need to be assessed.

6.5 APPROPRIATE ASSESSMENT

The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) obliges member states to designate Special Areas of Conservation (SACs) to protect and conserve habitats and species of importance in a European Union context. Article 6 is one of the most important articles of the Habitats Directive in determining the relationship between conservation and site use. Article 6(3) requires that “Any plan or project not directly connected with or necessary to the conservation of a site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.”

An Appropriate Assessment of the RBMP and POM is being carried out in parallel with the SEA process, with the findings of the Appropriate Assessment used to guide the development of the alternatives to be considered as part of the SEA.

Table 6.3: Draft SEA Indicators and Targets

Draft Objectives	Draft Indicators	Draft Targets
<p>Objective 1 Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species</p>	<ul style="list-style-type: none"> • Reported/Estimated levels of damage to designated sites/species/habitats • Proportion of designated sites in favourable condition • Achievement of Biodiversity Action Plan objectives and targets • Reported condition of nationally important wildlife sites, Sites of Special Scientific Interest (SSSI), etc. • Number and area of sites of Local Nature Conservation Interest and Local Nature Reserves within the Plan area • Reported levels of damage to sites of Local Nature Conservation Interest and Local Nature Reserves within the Plan area • Number of Species of Conservation Concern and area of Priority Habitats • Area and quality of habitat in relation to range-size requirements • Area of land actively managed for conservation • Numbers of species and population numbers of alien/invasive species • Number and nature of impediments to passage of fish (including eels) through rivers 	<ul style="list-style-type: none"> • Prevent further spread of alien/invasive species
<p>Objective 2 Protect and enhance human health in undertaking water management activities</p>	<ul style="list-style-type: none"> • Annual cost of damage related to flood events • Compliance of potable water sources (including private abstractions, where possible) with Drinking Water Standards 	<ul style="list-style-type: none"> • To Be Determined
<p>Objective 3 Prevent deterioration of the status of water bodies. Enhance water body status (including groundwater) to good status, as appropriate</p>	<ul style="list-style-type: none"> • Quality (biological and chemical) of rivers, canals and freshwater bodies • Quality (biological and chemical) and quantity of groundwater • Quality (biological and chemical) of marine waters • Quality (biological and chemical) of transitional waters • Use (by sector, including leakage), availability and proportions recycled • Water availability for water-dependent habitats, especially designated wetlands • Extent of use of Sustainable Urban Drainage solutions in new development 	<ul style="list-style-type: none"> • To Be Determined
<p>Objective 4 Contribute to mitigation of, and adaptation to, climate change</p>	<ul style="list-style-type: none"> • Emissions from proposed water treatment facilities • Incorporation of GHG sequestering facilities in plan • Amount of new development in floodplain • Flood risk to new development 	<ul style="list-style-type: none"> • To Be Determined
<p>Objective 5 Protect and, where appropriate, enhance the character, diversity and special qualities of cultural heritage in the River Basin District</p>	<ul style="list-style-type: none"> • Number of buildings and structures listed on a RPS and areas of ACAs/ASCs affected by strategic action of RBMP and POMs • Number of features listed on the RMP affected by strategic action of RBMP and POMs 	<ul style="list-style-type: none"> • No impact on buildings and structures listed on an RPS and areas of ACAs/ASCs by strategic action of RBMP and POMs • No impact on buildings and structures listed on the RMP by strategic action of RBMP and POMs
<p>Objective 6 Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in the River Basin District</p>	<ul style="list-style-type: none"> • Number and extent of designated landscape areas affected including change in quality of existing scenic areas and routes 	<ul style="list-style-type: none"> • No change in quality of views into/from existing scenic areas and routes • Maintain the character of the designated landscapes, supporting emerging landscape character objectives
<p>Objective 7 Protect and make the most effective use of water management infrastructure</p>	<ul style="list-style-type: none"> • Existing navigation and port/ferry activities continue unaffected • Number of properties, roads and rail infrastructure at risk from flooding • Adaptation to storm water pressures by water management infrastructure 	<ul style="list-style-type: none"> • No adverse effects on navigations and associated port/ferry activities • No increase in number of properties and length of road and rail infrastructure at risk from flooding • No increase in system bypass's due to storm water pressures
<p>Objective 8 Protect and, where appropriate, enhance the function and quality of the soil resource in the River Basin District</p>	<ul style="list-style-type: none"> • Area of agricultural land, forestry or urban development with adequate mitigation for any increases in run-off (relative to unmanaged land). • Area of known contaminated land and/or number of WWTPs and landfills/waste sites protected 	<ul style="list-style-type: none"> • To Be Determined

Table 6.4: Draft SEA Objectives and WFD Objectives: Are they compatible?

SEA \ WFD	To prevent deterioration of, protect, and enhance, the status of aquatic ecosystems (and terrestrial ecosystems and wetlands directly dependent on aquatic ecosystems)	To promote sustainable water use based on long-term protection of available water resources	To provide for sufficient supply of good quality surface water and groundwater as need for sustainable, balanced and equitable water use	To provide for enhanced protection and improvement of the aquatic environment by reducing / phasing out of discharges, emissions and losses of priority substances	To contribute to mitigating the effects of floods and droughts
Objective 1 Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species	Y	Y	Y	Y	Y / N
Objective 2 Protect human health in undertaking water management activities	Y / N	Y	Y	Y	Y
Objective 3 Prevent deterioration of the status of water bodies. Enhance water body status (including groundwater) to good status, as appropriate	Y	Y	Y	Y	Y / N
Objective 4 Contribute to mitigation of, and adaptation to, climate change	Y / N	Y	Y / N	N/A	Y
Objective 5 Protect and, where appropriate, enhance the character, diversity and special qualities of cultural heritage in the River Basin District	N/A	N/A	Y	N/A	Y / N
Objective 6 Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in the River Basin District	Y	Y / N	Y	N/A	Y / N
Objective 7 Protect and make the most effective use of water management infrastructure	Y / N	Y	Y	Y	Y
Objective 8 Protect and, where appropriate, enhance the function and quality of the soil resource in the River Basin District	Y	Y	Y	Y	Y

Y = potentially compatible,

Y / N = potentially compatible / incompatible, more detail is required to determine,

N/A = Not Applicable

7 ALTERNATIVES

A key purpose of scoping is to set out sufficient details about the proposed methodological framework for the assessment of environmental effects to allow the consultees to form a view on this matter.

Table 7.1 contains an example of the assessment framework that is proposed for use during the SEA. This is an objectives-led assessment and will involve comparing the proposed alternatives against each of the SEA Objectives for each of the identified issue areas (e.g. agriculture, forestry, physical modifications, abstraction, local issues). The following is an example only and is provided as an indication of how the assessment will be carried out.

Table 7.1: Alternatives Compared to Draft SEA Objectives for Generic Activity (EXAMPLE ONLY)

Draft SEA Objectives	Alternative 1 (Business as Usual)	Alternative 2 (No Activity Allowed)	Alternative 3 (Continued Activity with stricter controls)
Objective 1 Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species			
Objective 2 Protect human health in undertaking water management activities			
Objective 3 Prevent deterioration of the status of water bodies. Enhance water body status (including groundwater) to good status, as appropriate			
Objective 4 Contribute to mitigation of, and adaptation to, climate change			
Objective 5 Protect and, where appropriate, enhance the character, diversity and special qualities of cultural heritage in the River Basin District			
Objective 6 Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in the River Basin District			
Objective 7 Protect and make the most effective use of water management infrastructure			
Objective 8 Protect and, where appropriate, enhance the function and quality of the soil resource in the River Basin District			

In considering alternatives for the RBMP and POMs, the alternatives proposed should be reasonable and realistic with the process used to develop the alternatives clearly described in the Environmental Report. In addition, assumptions made during the assessment of the alternatives will be described.

8 PROPOSED CONSULTATION TIMETABLE AND METHODS

To begin the process of scoping the SEA for the Shannon RBMP and POMs there was an initial consultation with the Statutory Authorities, as designated by the relevant SEA legislation and listed in **Table 8.1**. This step also represented the transboundary consultation required under the legislation for this IRBD. Following the statutory consultation, it was considered best practice to include a number of relevant non-statutory consultees in the scoping process; these are also listed in **Table 8.1**. In addition, the Draft Scoping Report was published on the Shannon IRBD website to encourage further participation by stakeholders and the public in the consultation process.

Table 8.1 Consultees in the SEA Scoping Process

Consultee	Statutory / Non-Statutory	Tier
Environmental Protection Agency	Statutory	First
Department of Environment, Heritage and Local Government	Statutory	First
Department of Communications, Energy and Natural Resources	Statutory	First
DoE (NI) Environment and Heritage Service	Statutory	First
Ireland River Basin District Project Coordinators	Non-Statutory	Second
Northern Ireland Interdepartmental Working Group	Non-Statutory	Second
Northern Ireland Stakeholder Forum	Non-Statutory	Second
Ireland River Basin Advisory Councils	Non-Statutory	Second
Ireland River Basin Management Groups	Non-Statutory	Second
Ireland River Basin Steering Groups	Non-Statutory	Second
Northern Ireland Council for Nature Conservation and Countryside	Non-Statutory	Second

Prior to the publication of the Draft Scoping Report comments were received from the:

- Department of Communications, Energy and Natural Resources (23/11/07 and 10/01/08);
- Department of the Environment, Heritage and Local Government (28/11/07 and 15/01/08);
- Environmental Protection Agency (23/11/07 and 18/01/08);
- DoE (NI) Environment and Heritage Service (23/11/07, 15/01/08, 25/01/08); and
- Royal Society for the Protection of Birds (NI) (13/11/07).

Those comments that applied to the scope of the SEA were incorporated into the Draft Scoping Report prior to publication, while those which applied to the drafting or content of the RBMP were forwarded to the IRBD coordinator.

A summary of the comments received after or at the time of publication of the Draft Scoping Report is included in **Table 8.2**, below. These include all comments relevant to the IRBD, regardless of which (I)RBD they were received for. All comments received both prior and subsequent to publication of the Draft Scoping Report are included in **Appendix A**.

It is recommended that timely consultation with the statutory consultees and non-statutory consultees continue throughout the evolution of the RBMP and the SEA process, with additional bodies or individuals added, as appropriate.

Table 8.2: Summary of Comments Received on the Draft Scoping Report

Comment Received From:	Summary of Comment	Where Incorporated
Health and Safety Executive Ireland (Shannon IRBD) (dated 18/03/08)	There may be information in Environmental Health Offices or Official Food Microbiological Laboratories regarding water quality in private wells. This may help quantify the septic tank effluent issue listed on p. 33 of the Draft Scoping Report.	This potential source of data has been included in Section 4.1 and will be reviewed as part of the Environmental Report.
	Farmyard pollution combined with improperly located boreholes may be a significant threat to groundwater in the region.	This potential pressure will be forwarded to the RBMP Team for consideration.
Northern Ireland Freshwater Task Force (Neagh Bann, North Western and North Eastern) (dated 25/02/08)	Noted several Plans and Programmes, which may be applicable.	These have been incorporated into Tables 3.2 and 3.4 , where not already present.
	Noted several potential additional sources of baseline data.	These have been incorporated into Section 4.1 , where not already present.
	Specific reference to environmental pressures and costs of provision of water services should be provided with the information on population.	Comment noted.
	Integrated Coastal Zone Management should be included in the Interrelationships section.	Comment noted.
	The term Nitrate Vulnerable Zones does not apply.	Section 5.1 , Soil, has been amended.
	Concerned that the SEA will only assess new national measures and will not include assessment of existing regulations where the standards have been raised.	The SEA will not assess each individual piece of legislation but rather the Programme of Measures proposed as part of the RBMP. Basic Measures, i.e. ones based on existing legislation will be addressed under the 'business as usual' scenario as they are currently in force. Changes to individual existing pieces of legislation would undergo a regulatory impact assessment and/or SEA. During that time, if raising of standards were proposed, this would be addressed.
	Suggested measures to make the Plan making and SEA processes more transparent.	Consideration will be given to the measures suggested during preparation of the Environmental Report and SEA Statement.
	Draft SEA Objectives S2 and S3 should replace Draft SEA Objective 3. Also, Draft SEA Objective S4 should be removed.	These comments will be considered during the finalisation of the SEA Objectives.

Comment Received From:	Summary of Comment	Where Incorporated
	Draft Indicators for Draft Objective 4 should include: the number of times sluice gates in wastewater treatment plants have to be opened to alleviate storm water pressures; flood risks to existing development; and details on GHG sequestering facilities.	These comments will be considered during the finalisation of the SEA Indicators.
	Correction to proposed timescale.	Table 9.2 has been amended.
Office of Public Works (All ROI) (dated 17/01/07)	Table 3.3, replace Arterial Drainage Act 1945 with Arterial Drainage Acts 1945 and 1995	Table 3.3 has been amended
	Request clarification of how the Plans will achieve a sustainable Social, Environmental and Economic balance.	In addition to being subject to an SEA, the alternatives proposed for the draft RBMP will be subject to a cost effectiveness assessment to determine economic impacts as well as a regulatory impact assessment to determine social impacts.
Coillte (All Rol) (11/01/08)	The 'impacts of forestry on the water environment' could be included under 'influence on land use practices' in Table 5.1, under the issue of Soil.	The potential for 'influence on land use practices' under the Soils heading refers to potential impacts of the Plan on land use practices and does not refer to specific impacts resulting from forestry. Table 5.1 has been amended to include forestry as an example of a potential land use that could be impacted by the Plan.
	Queried use of forestry issue as an example in Table 7.1.	This table was provided as an example only in order to demonstrate how the alternatives comparison tables would be laid out.
	Recommend the inclusion of local authorities with the examples given	Comment noted.
Friends of Irish Environment (Southwestern RBD) (dated 10/01/08)	The use of permissive words such as may or where feasible may lead to uncertainties in interpretation of responsibilities at a later stage.	Comment noted.
	Protected sites and species within the RBD must be listed separately from national sites.	The Environmental Report will be specific to the RBD and as such will list protected sites and species within the RBD.
	The status of water bodies in the RBD should be listed.	The baseline information included in the Environmental Report will include the status of water bodies in the RBD.
	The Material Assets baseline should include marine resources.	This information will be included, where applicable.

Comment Received From:	Summary of Comment	Where Incorporated
	The topics of Soil and Land Use should include evaluation of sedimentation of rivers and estuaries caused by soil erosion.	The issue of sedimentation of rivers and estuaries caused by soil erosion will be considered.
	The phosphorus and nitrogen load from unsewered properties and forestry is not given.	An estimate of the contribution of phosphorus and nitrogen from unsewered properties and forestry will be provided in the Environmental Report.
	The Fresh Water Pearl Mussel requires very high water quality.	Agreed.
	Inclusion of erosion impacts from forestry on peat soils (as defined under the Nitrates Directive) as well as on steep slopes of mineral soils should be included in the scope of the assessment.	Forestry has been identified in the SWMI document as a potential source of both positive and negative impacts on water resources and as such potential impacts from forestry activities, including erosion, will be included in the SEA.
	Other invasive species, including marine species, should be included in the assessment in addition to those listed in the Draft Scoping Report.	Alien species will be considered in the Environmental Report.
	The SEA must consider the short term environmental impacts of the RBMP in conjunction with other legislative requirements, plan or programmes and their timeframes	The relationship of the RBMP to other Plans and Programmes will be included in the Environmental Report. In addition, the cumulative environmental impacts associated with the RBMP and these existing legislative requirements will be considered.
	SEA Objectives to protect human health should include protection of bathing waters.	This comment will be considered during the finalisation of the SEA Objectives.
	The hyporheic zone has not been considered.	The SEA will consider the water bodies within the RBD using a holistic approach, which will include the hyperheic zone.
National Parks and Wildlife Service (dated 23/01/2008) (SWRBD and SERBD)	Requests a meeting to discuss the issues related to preparation of the SEA.	Consultation with the NPWS is considered critical to the preparation of the SEA and Habitats Directive Assessment and will be carried out throughout the process.

Comment Received From:	Summary of Comment	Where Incorporated
Department of the Environment, Heritage and Local Government (dated 19/12/08)	Notes international, national and local policies, plans and programmes to be considered when assessing impacts on terrestrial archaeological heritage as well as sources of baseline information.	Assessment of the potential impacts to archaeological heritage will have regard to the policies, plans and programmes listed. Potential impacts to terrestrial archaeological heritage as a result of the RBMP will be considered in the Environmental Report.
	Notes that underwater archaeological impacts should also be considered in the SEA and should include a detailed desktop study.	Potential impacts to underwater archaeological heritage as a result of the RBMP will be considered in the Environmental Report.
	Notes that architectural heritage impacts should be taken into account in the SEA and provides guidance on how the assessment should be carried out.	Potential impacts to architectural heritage as a result of the RBMP will be considered in the Environmental Report. Assessment of the potential impacts to architectural heritage will have regard to the guidance provided.
Harbour Master Shannon Estuary (Shannon IRBD) (dated 14/01/08)	Notes that there are four main port facilities on the Shannon Estuary	Section 4.2.3 has been amended to reflect this information.

9 NEXT STEPS

The SEA for the Shannon RBMP and POMs will develop in conjunction with the compilation of the RBMP and POMs. **Table 9.1** demonstrates the proposed time stages for both the River Basin Management Report and the SEA of the RBMP and POMs. In order to fully integrate the SEA and RBMP processes, SEA Team / RBMP Team Workshops will be held at key stages during both processes to ensure full engagement, interaction and information sharing between both teams as well as to ensure integration of environmental considerations. Consideration should be given to the appointment of a facilitator to ensure full integration takes place during the drafting of the Environmental Report, RBMP and POMs.

Table 9.1: Anticipated Milestones

River Basin Management Report	Year	Strategic Environmental Assessment of RBMPs & POMs
Significant Water Management Issues Report	2007	Scoping Report Consultation
Draft River Basin Management Plan Consultation	2008	Environmental Report Consultation
First River Basin Management Plan	2009	Strategic Environmental Assessment Statement

The proposed timescale to complete the Environmental Report, Shannon RBMP and issue the SEA Statement is given in **Table 9.2**.

Table 9.2: Proposed Timescale for SEA of Shannon RBMP & POMs

Action	Timescale
Scoping Document Release	December 2007
Contract advertisement for compilation of SEA for RBMPs	January 2008
Contract(s) Award for SEA of RBMP	February 2008
Consultations commence	March 2008
Completion of Environmental Report in conjunction with draft RBMP	December 2008
Publication of Environmental Report and draft RBMP for consultation	End 2008/Start 2009
Publication of Final RBMP and SEA Statement	2009

Scoping is a dynamic process and is expected to continue throughout the SEA process, up to the publication of the Environmental Report. Following completion of the Draft Consultation Scoping Report, it shall be made publicly available on the Shannon IRBD website for review. This will serve to continue to engage the wider public in the ongoing consultation that began at the start of the process to implement and comply with the WFD.

In addition, following completion of the scoping exercise and during the early stages of the **environmental assessment process** and the drafting of the Environmental Report, consideration will be given to holding formal SEA Workshops between the RBD authorities and personnel from the

statutory and non-statutory authorities as well as relevant technical and advisory groups to encourage continued participation in the SEA process.

LIST OF ABBREVIATIONS:

Abbreviation	Explanation
AFBI	Agri-Food & Biosciences Institute
AONB	Area of Outstanding Natural Beauty
ASSI	Area of Special Scientific Interest
DARD	Department of Agriculture and Rural Development
DCENR	Department of Communications, Energy and Natural Resources
DEHLG	Department of Environment, Heritage and Local Government
DoE	Department of Environment
EHS	Environment and Heritage Service
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EU	European Union
IRBD	International River Basin District
NHA	Natural Heritage Area
NI	Northern Ireland
NIEA	Northern Ireland Environment Agency
NPWS	National Parks and Wildlife Service
POMS	Programme of Measures
PPS	Planning Policy Statement
RBD	River Basin District
RBMP	River Basin Management Plan
RoI	Republic of Ireland
SEA	Strategic Environmental Assessment
SAC	Special Area of Conservation
SMR	Sites and Monuments Record
SPA	Special Protection Area
WFD	Water Framework Directive
WWTP	Waste Water Treatment Plant

APPENDIX A

Comments Received During Consultation

23rd November 2007

Eilish Clarke
Environmental & Heritage Service
Water Management Unit
17 Antrim Road
Lisburn
Co. Antrim
BT28 3AL

Re: Strategic Environmental Assessment for River Basin Management Plans and Programmes of Measures – Shannon International River Basin District (IRBD)

Dear Ms. Clarke,

I refer to your letter of the 12th October 2007 in the above regard.

The Department of Communications, Energy and Natural Resources have the following comments to make at this time.

“The Minister, having reviewed the submissions of 12/10/07 in relation to the Scoping of Environmental Report in connection with the proposed S.E.A for River Basin Management Plans and Programme of Measures, has the following observations which would apply in general to all R.B.D’s.:

- This Department supports the implementation of the Water Framework Directive nationwide and believes that if the target status objectives as outlined are achieved, this should protect marine and fishery interests (in terms of water quality and quantity issues) in general.
- Marine and Fishery based activities need also to be protected. In this regard the sustainable and statutory functioning of all Harbours and Ports should not be compromised as a result of the implementation of the Water Framework Directive. It is recommended that the Programme of Measures should be developed to take account of all Port Authority rights to continue to function under the Harbour Acts which oblige the Ports to maintain a pre-requisite draft for shipping and navigation purposes at all times. In terms of the continued functioning of ports, harbours and estuaries there is a necessity from time to time to undertake dredging, which is regulated by this Department of Agriculture, Fisheries and Food in accordance with the Foreshore Act 1933-98 and Dumping at Sea Act 1996. It is this Department’s viewpoint that this regulatory system should continue to operate and that the P.O.M.’s should not compromise the continued economic and practical viability of the Port operations (inclusive of navigational issues) to continue to function. In terms of consultation, it is recommended that all Port Authorities are consulted in relation to the preparation of R.B.M.P’s and P.O.M’s so that their concerns

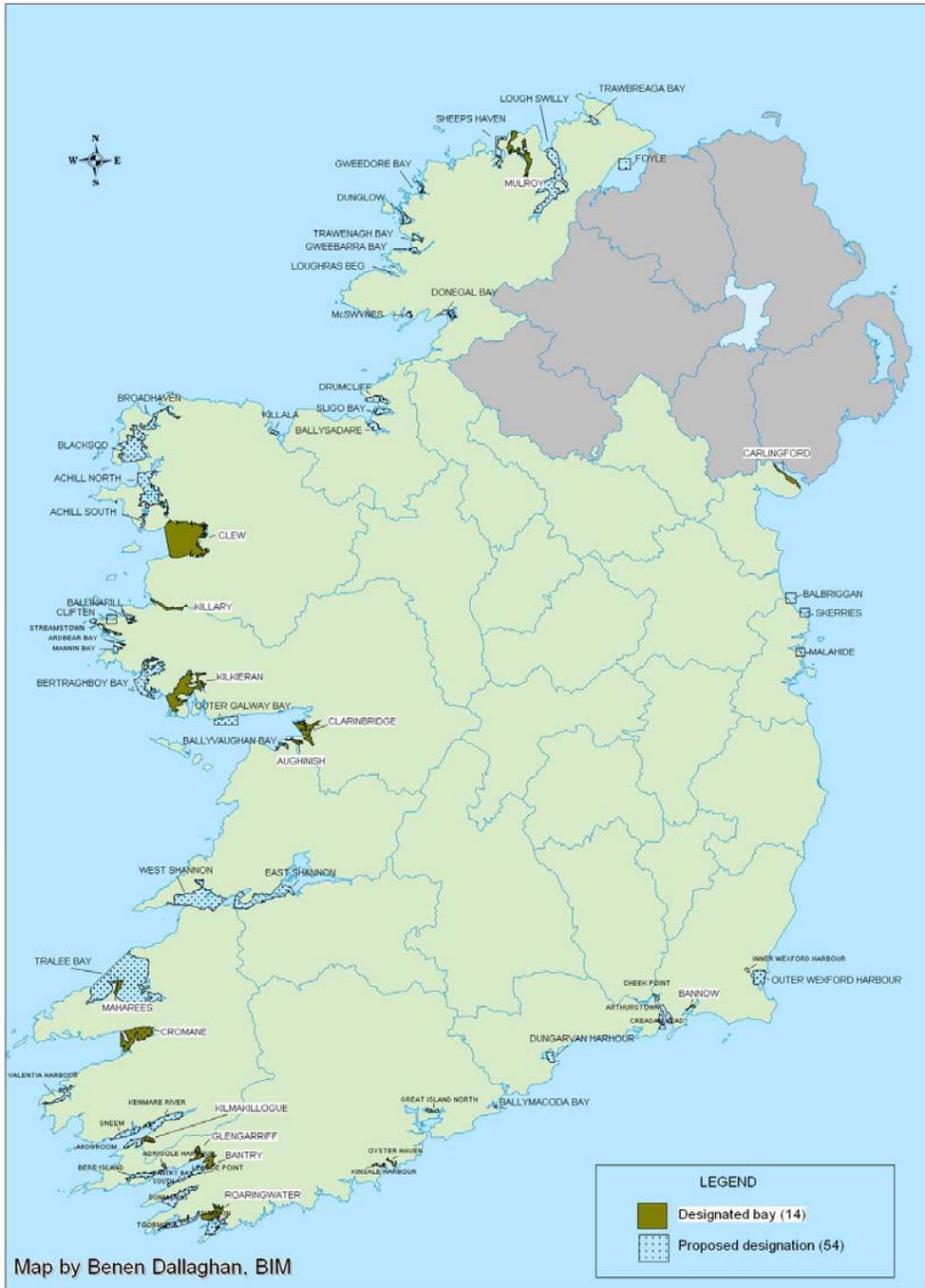
may be taken on board in the preparation of the Environmental Report for each R.B.D. A list of all Port Authorities and contact details are provided in the “Consultation List” later in this submission.

- The Department of Agriculture, Fisheries and Food’s Coastal Zone Management Division (C.Z.M.D) is responsible for the implementation of the Shellfish Waters Directive in regard to marine installations (this will transfer to the D.O.E.H.L.G shortly). Many of the issues (identified in the S.W.I.M.I documents) to be used as a basis for developing the P.O.M.’s, particularly waste water, septic tanks and agricultural effluent are also identified as major issues in the proposed designation of bays as Shellfish Waters under Directive 79/923/EC.

An interdepartmental committee is responsible for the implementation of this Directive, including representatives from D.O.E.H.L.G. The E.C.J delivered a judgement against Ireland on 14/6/07 for the non implementation of this Directive (basically that Ireland had failed to designate a sufficient number of water bodies to be protected under this Directive). On the basis of this judgement the Government decided, on 31st July, to designate further water bodies under the Directive. This will necessitate the making of Regulations and the development of Action Plans for the relevant Designated water bodies. D.O.E.H.L.G Officials have estimated that the cost of improving the waters in the candidate designated areas is approx €533 million for capital wastewater infrastructure with an ongoing annual maintenance requirement of approx €35 million year moving forward.

Under the E.C Directive No. 923 of 30th October 1979 on the Quality required of Shellfish Waters (79/923/EC) 14 areas have already been designated as Shellfish Waters. These are listed in the ‘Quality of Shellfish Waters Regulations, 1994 “SI No. 200/1994. In order to satisfy the E.C.J. judgement a further 54 areas (as of July 2007) have been proposed for designation. These are outlined on a map below.

MAP OF PROPOSED(54) & PREVIOUS(14) SHELLFISH DESIGNATIONS July 2007



BIM have been tasked with developing and co-ordinating Action Programmes in relation to the Designated Shellfish Waters. It would be important to liaise with B.I.M therefore in relation to developing P.O.M's for any such designated Shellfish Waters in order that the Action Programme and P.O.M's can be harmonised and co-ordinated to achieve the desired objectives.

- Under the 1959 Fisheries Act, there is a requirement to maintain fish passage in waterways at all times. Programmes of Measures would need to take cognisance of this in order to avoid interference with the passage of fish and stringent controls in particular would need to be developed to regulate issues including:
 - Abstraction Points (from Rivers, Lakes, Impoundment Reservoirs)
 - Discharge Points
 - Construction of Weirs
 - Construction of culverts or bridges over watercourses
 - Fishability

In view of the fact that monitoring requirements for “River Continuity”, as put forward in the Monitoring Programme, are set at only once every three years, there is an extra onus on the R.B.D's for the development of P.O.M's which ensure that River Continuity is guaranteed at all times in order to ensure the safe passage of fish.

- Linked to the previous comment, over time this Department has received numerous representations from Regional Fisheries Boards in relation to over-abstraction from watercourses. With the increase in development and additional water supply demands and the current lack of a strict Regulatory regime in relation to water abstractions, this Department is of the view that this particular concern should be addressed in the P.O.M's and stringent controls on permitted water abstractions (from rivers, lakes and reservoirs) should be put in place. In this regard a national licensing system, similar to that already in place in relation to the licensing for the discharge of trade effluent to watercourses (under S4 of the 1977 L.G Water Pollution Act), is suggested.
- In relation specifically to Hydro Electric Schemes, Section 123 of the 1959 Fisheries Consolidation Act specifies the dimensions for “gratings in watercourses diverted from rivers to prevent entry therein of salmon or trout.” (there is a requirement for a grating of 2” spacing at point of divergence and return to river and an additional requirement during March, April and May of a grating to prevent the admission of salmon fry or other small fish). Where relevant, P.O.M 's would need to take cognisance of the needs for Hydro Electric Scheme Operators to comply with S123 of the 1959 Fisheries Consolidation Act. No P.O.M 's should be developed that would in any way compromise this statutory requirement.

LEGISLATION:

The following legislation needs to be considered:

- Fisheries Consolidation Act 1959, 1981/Fisheries (Amendment) Act 1997
- Foreshore Acts 1933-1998
- Harbours Act 1945
- Dumping at Sea Act 1996
- European Communities (Port Reception Facilities for Ship Generated Waste and Cargo residues) Regulations 2003.
- Arterial Drainage Act 1945.
- Quality required of Shellfish Waters Regulations, 1994 S.I. No. 200/1994” and Quality of Shellfish Waters (Amendment Regulations) 2001, SI 459 of 2001.
- 91/492/EEC Laying down the Health Conditions for the production and the placement on the market of live bi-value molluscs.
- Freshwater Fish Directive (78/659/E.C)
- Quality of Salmonid Waters Regulations 1988 (S.I No. 293 of 1988).
- Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I No. 258 of 1998).
- Nitrates Directive 91/676/EEC
- Floods Directive 2007/60/EC
- Quality of Bathing Waters Regulations 1988(S.I. No. 84 of 1988)/ Quality of Bathing Waters Regulations 1992/ Quality of Bathing Waters (Amendment) Regulations 2001 (S.I. No. 22 of 2001).

CONSULTATION:

In the preparation of the Environmental Report, this Department advises that a wide range of consultation should be undertaken in order to inform the public and interested parties as to the nature of the Environmental issues that will be addressed in the River Basin Management Plans and P.O.M's and in order to take cognisance of any views they may have. In relation to site specific localised issues these are likely to be picked up in consultation with Regional Fisheries Boards/D.A.F.F's Regional Divisional Engineers during the preparation of the Environmental Report for the specific R.B.P which relates to their functional area.(see list of suggested Consultees below) Earlier in this submission mention was made of the need to consult widely with Port/Harbour Authorities whose activities may be significantly impacted upon by the implementation of the W.F.D. The following is a broad-brush list of Consultees that this Department recommends should be included in consultation process. This is a nationwide list so it would fall to the Consultants in each R.B.D to identify within that R.B.D which contacts are relevant to their region.:

NATIONAL AUTHORITIES BODIES/AGENCIES:

- Marine Institute
Renvyle,
Oranmore,
Co. Galway (H.Q)

- Central Fisheries Board
Unit 4, Swords Business Campus,
Balheary Road, Swords, Co. Dublin (H.Q)
Tel (01) 8842600
e-mail - webmaster@cfb.ie

- Bord Iascaigh Mhara (B.I.M)
P.O. Box 12, Crofton Road,
Dun Laoghaire,
Co. Dublin (H.Q).
Tel: (01) 2841544

- Loughs Agency*
22 Victoria Road, Derry,
BT47ZAB (HQ)
Tel: (048) 71342100

(*This Agency was established under the British – Irish Agreement Act 1999 to provide for the effective conservation ,management, promotion and development of the fisheries and marine resources of the Foyle and Carlingford Areas).

- Office of Public Works
- Waterways Ireland

REGIONAL FISHERIES BOARDS:

- Shannon Regional Fisheries Board
Ashbourne Business Park
Dock Road
Limerick
Tel: (061) 300238
e-mail – info@shannon-fishery-board.ie
- Eastern Regional Fisheries Board
15a Main Street
Blackrock, Co. Dublin
Tel: (01) 2787022
e-mail - info@erfb.ie

- Western Regional Fisheries Board
The Weir Lodge
Earls Island, Galway
Tel: (091) 563118
e-mail - info@wrfb.ie
- Southern Regional Fisheries Board
Anglesea Street,
Clonmel, Co. Tipperary
Tel: (052) 23624
e-mail - enquiries@srfb.ie
- North Western Regional Fisheries Board
Abbey Street
Ballina, Co. Mayo
Tel: (096) 22623
e-mail - nwrfb@iol.ie
- South Western Regional Fisheries Board
1 Nevilles Terrace
Masseytown,
Macroom, Co. Cork.
Tel: (026) 41221
e-mail - swrfb@swrfb.ie
- Northern Regional Fisheries Board
Station Road
Ballyshannon
Co. Donegal
Tel: (071) 9851435
e-mail - hllloyd@nrfb.ie

HARBOUR AUTHORITIES:

- Arklow Harbour
Arklow Harbour Commissioners (H.C)
Harbour Office
Arklow, Co. Wicklow
Tel: (0402) 32466
e-mail - arklowharbour@eircom.net

- Baltimore & Skibbereen Harbour
Baltimore & Skibereen HC
Harbour Office
Baltimore, Co. Cork.
Tel: (028)20106

- Kinsale
Kinsale H.C.
Harbour Office
Kinsale
Co. Cork
Tel: (021) 4772503
e-mail - kharbour@iol.ie

- Tralee and Fenit Harbour
Tralee & Fenit Pier H.C.
Harbour Office
Fenit
Co. Kerry
Tel: (066) 7136231
e-mail- fenitmarina@eircom.net

- Bantry Bay
Bantry Bay H.C
Wolfe Tone Square
Bantry
Co. Cork.
Tel: (027) 53277
e-mail - harbourmaster@bantrybayport.com

- Kilrush
Kilrush U.D.C
Town Hall,
Killrush
Co. Clare

Tel: (065) 9051047
e-mail - kilrush@clarecoco.ie

- River Moy (Ballina)
River Moy Commissioners
The Quay,
Ballina
Co. Mayo
Te: (096) 21208
- Youghal
Youghal U.D.C
Town Hall,
Youghal
Co. Cork
Tel: (024) 92926
- Westport
Westport Port & Harbour Commissioners
Altamount,
Westport
Co. Mayo.
Tel: (098) 25439
- Wexford
Wexford H.C.
Harbour Office
Wexford.
Tel: (053) 22376

COMMERCIAL HARBOUR/PORT COMPANIES:

- Port of Cork
Port of Cork Company
Custom House Street
Cork
Tel: (021) 4273125
e-mail - BKeating@portofcork.ie
www.portofcork.ie
- Drogheda Port
Drogheda Port Company
Maritime House
The Mall
Drogheda
Tel: (041) 9838378
e-mail - maritimehouse@droghedaport.ie
www.droghedaport.ie
- Dublin Port
Dublin Port Company
Port Centre, Alexandra Road
Dublin 1.
Tel: (01) 8550888 or (01) 8555771
e-mail - econnellan@dublinport.ie
www.dublinport.ie
- Dun Laoghaire Harbour
Dun Laoghaire Harbour Company
Harbour Lodge,
Crofton Road
Dun Laoghaire
Co. Dublin
Tel: (01) 2801311
e-mail - michael@dlharbour.ie
www.dun-laoghaire.com
- Shannon/Foynes Port
Shannon/Foynes Port Company
Harbour Office
Foynes
Co. Limerick
Tel: (069) 73100 or (069) 65473
e-mail - bbyrne@sfpc.ie
www.sfpc.ie

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Ros An Mhí
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Princes Quay
Tralee
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- Mr. Edwin Mooney, Divisional Engineer
Dept. of Agriculture, Fisheries & Food
Leeson Lane
Dublin 2
Tel: (01) 6782076

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- Warrenpoint Harbour Authority
Warrenpoint
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Northern Ireland
Tel: (028-417) 73381
e-mail: info@warrenpointharbour.co.uk

- Irish Salmon Growers Association

- Irish Fishermen's Association.

Please note also that when preparing the Environmental Report, cognisance should be taken of this Department's generic guidelines which can be downloaded from the Department's website at:

<http://www.dcmnr.gov.ie/Marine/Environmental+Assessment/Environmental+Assessment.htm>

The above is without prejudice to any comments that any of the Regional Fisheries Boards may have in this matter.

Yours sincerely,

Coordination Unit

23rd November 2007

Gerry Behan
Director of Services
Limerick County Council C/O

Tony McNally
Donegal County Council
Co – Ordinating Local Authority
Shannon International River Basin District
County House
Lifford
Co. Donegal

Re: Strategic Environmental Assessment for River Basin Management Plans and Programmes of Measures – Shannon International River Basin District (IRBD)

Dear Mr. McNally,

I refer to a letter of the 12th October 2007 in the above regard received from Limerick County Council.

The Department of Communications, Energy and Natural Resources have the following comments to make at this time.

“The Minister, having reviewed the submissions of 12/10/07 in relation to the Scoping of Environmental Report in connection with the proposed S.E.A for River Basin Management Plans and Programme of Measures, has the following observations which would apply in general to all R.B.D’s.:

- This Department supports the implementation of the Water Framework Directive nationwide and believes that if the target status objectives as outlined are achieved, this should protect marine and fishery interests (in terms of water quality and quantity issues) in general.
- Marine and Fishery based activities need also to be protected. In this regard the sustainable and statutory functioning of all Harbours and Ports should not be compromised as a result of the implementation of the Water Framework Directive. It is recommended that the Programme of Measures should be developed to take account of all Port Authority rights to continue to function under the Harbour Acts which oblige the Ports to maintain a pre-requisite draft for shipping and navigation purposes at all times. In terms of the continued functioning of ports, harbours and estuaries there is a necessity from time to time to undertake dredging, which is regulated by this Department of Agriculture, Fisheries and Food in accordance with the Foreshore Act 1933-98 and Dumping at Sea Act 1996. It is this Department’s viewpoint that this

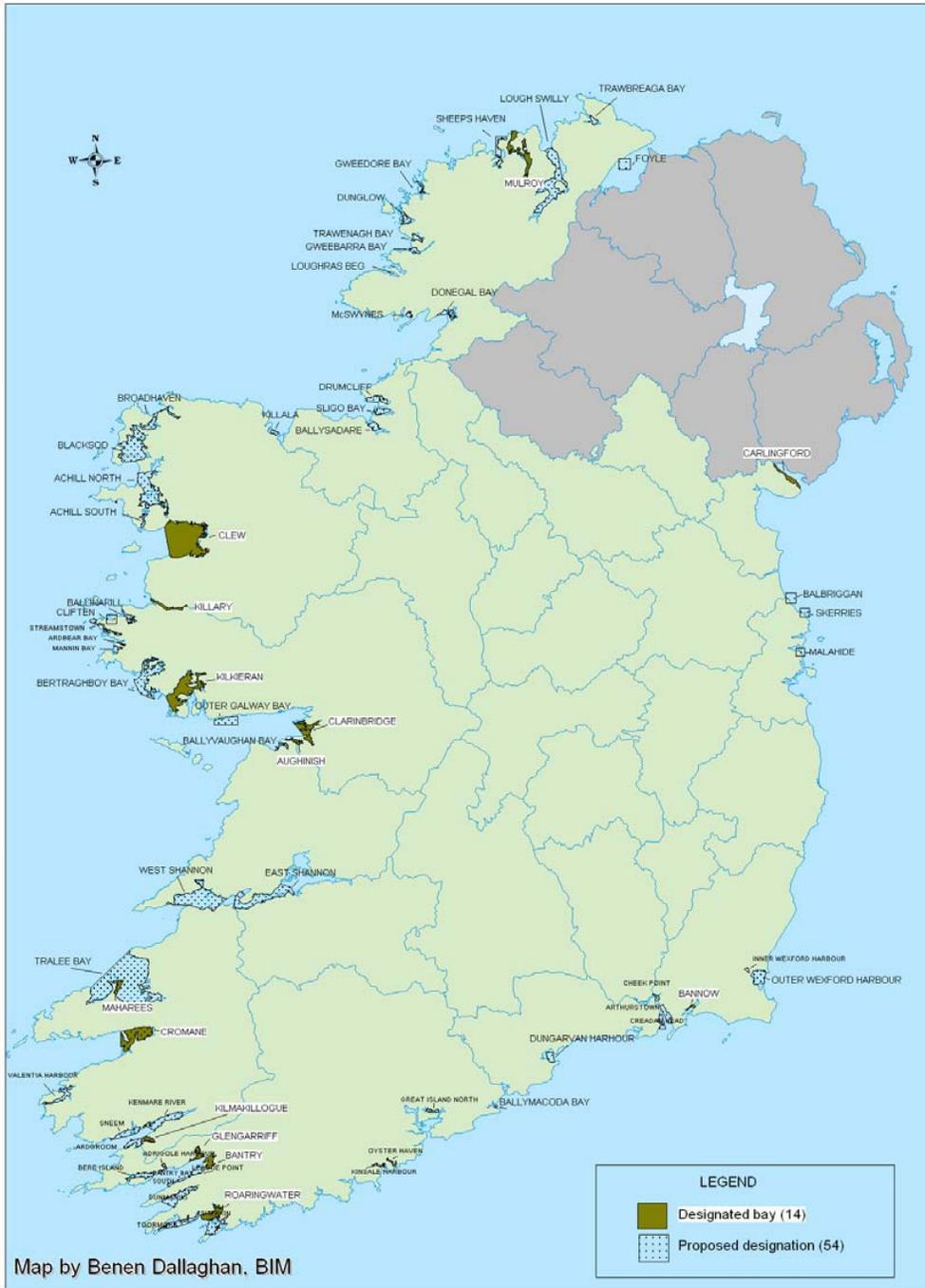
regulatory system should continue to operate and that the P.O.M.'s should not compromise the continued economic and practical viability of the Port operations (inclusive of navigational issues) to continue to function. In terms of consultation, it is recommended that all Port Authorities are consulted in relation to the preparation of R.B.M.P's and P.O.M's so that their concerns may be taken on board in the preparation of the Environmental Report for each R.B.D. A list of all Port Authorities and contact details are provided in the "Consultation List" later in this submission.

- The Department of Agriculture, Fisheries and Food's Coastal Zone Management Division (C.Z.M.D) is responsible for the implementation of the Shellfish Waters Directive in regard to marine installations (this will transfer to the D.O.E.H.L.G shortly). Many of the issues (identified in the S.W.I.M.I documents) to be used as a basis for developing the P.O.M.'s, particularly waste water, septic tanks and agricultural effluent are also identified as major issues in the proposed designation of bays as Shellfish Waters under Directive 79/923/EC.

An interdepartmental committee is responsible for the implementation of this Directive, including representatives from D.O.E.H.L.G. The E.C.J delivered a judgement against Ireland on 14/6/07 for the non implementation of this Directive (basically that Ireland had failed to designate a sufficient number of water bodies to be protected under this Directive). On the basis of this judgement the Government decided, on 31st July, to designate further water bodies under the Directive. This will necessitate the making of Regulations and the development of Action Plans for the relevant Designated water bodies. D.O.E.H.L.G Officials have estimated that the cost of improving the waters in the candidate designated areas is approx €533 million for capital wastewater infrastructure with an ongoing annual maintenance requirement of approx €35 million year moving forward.

Under the E.C Directive No. 923 of 30th October 1979 on the Quality required of Shellfish Waters (79/923/EC) 14 areas have already been designated as Shellfish Waters. These are listed in the 'Quality of Shellfish Waters Regulations, 1994 "SI No. 200/1994. In order to satisfy the E.C.J. judgement a further 54 areas (as of July 2007) have been proposed for designation. These are outlined on a map below.

MAP OF PROPOSED(54) & PREVIOUS(14) SHELLFISH DESIGNATIONS July 2007



BIM have been tasked with developing and co-ordinating Action Programmes in relation to the Designated Shellfish Waters. It would be important to liaise with B.I.M therefore in relation to developing P.O.M's for any such designated Shellfish Waters in order that the Action Programme and P.O.M's can be harmonised and co-ordinated to achieve the desired objectives.

- Under the 1959 Fisheries Act, there is a requirement to maintain fish passage in waterways at all times. Programmes of Measures would need to take cognisance of this in order to avoid interference with the passage of fish and stringent controls in particular would need to be developed to regulate issues including:
 - Abstraction Points (from Rivers, Lakes, Impoundment Reservoirs)
 - Discharge Points
 - Construction of Weirs
 - Construction of culverts or bridges over watercourses
 - Fishability

In view of the fact that monitoring requirements for “River Continuity”, as put forward in the Monitoring Programme, are set at only once every three years, there is an extra onus on the R.B.D's for the development of P.O.M's which ensure that River Continuity is guaranteed at all times in order to ensure the safe passage of fish.

- Linked to the previous comment, over time this Department has received numerous representations from Regional Fisheries Boards in relation to over-abstraction from watercourses. With the increase in development and additional water supply demands and the current lack of a strict Regulatory regime in relation to water abstractions, this Department is of the view that this particular concern should be addressed in the P.O.M's and stringent controls on permitted water abstractions (from rivers, lakes and reservoirs) should be put in place. In this regard a national licensing system, similar to that already in place in relation to the licensing for the discharge of trade effluent to watercourses (under S4 of the 1977 L.G Water Pollution Act), is suggested.
- In relation specifically to Hydro Electric Schemes, Section 123 of the 1959 Fisheries Consolidation Act specifies the dimensions for “gratings in watercourses diverted from rivers to prevent entry therein of salmon or trout.” (there is a requirement for a grating of 2” spacing at point of divergence and return to river and an additional requirement during March, April and May of a grating to prevent the admission of salmon fry or other small fish). Where relevant, P.O.M 's would need to take cognisance of the needs for Hydro Electric Scheme Operators to comply with S123 of the 1959 Fisheries Consolidation Act. No P.O.M 's should be developed that would in any way compromise this statutory requirement.

LEGISLATION:

The following legislation needs to be considered:

- Fisheries Consolidation Act 1959, 1981/Fisheries (Amendment) Act 1997
- Foreshore Acts 1933-1998
- Harbours Act 1945
- Dumping at Sea Act 1996
- European Communities (Port Reception Facilities for Ship Generated Waste and Cargo residues) Regulations 2003.
- Arterial Drainage Act 1945.
- Quality required of Shellfish Waters Regulations, 1994 S.I. No. 200/1994” and Quality of Shellfish Waters (Amendment Regulations) 2001, SI 459 of 2001.
- 91/492/EEC Laying down the Health Conditions for the production and the placement on the market of live bi-value molluscs.
- Freshwater Fish Directive (78/659/E.C)
- Quality of Salmonid Waters Regulations 1988 (S.I No. 293 of 1988).
- Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I No. 258 of 1998).
- Nitrates Directive 91/676/EEC
- Floods Directive 2007/60/EC
- Quality of Bathing Waters Regulations 1988(S.I. No. 84 of 1988)/ Quality of Bathing Waters Regulations 1992/ Quality of Bathing Waters (Amendment) Regulations 2001 (S.I. No. 22 of 2001).

CONSULTATION:

In the preparation of the Environmental Report, this Department advises that a wide range of consultation should be undertaken in order to inform the public and interested parties as to the nature of the Environmental issues that will be addressed in the River Basin Management Plans and P.O.M's and in order to take cognisance of any views they may have. In relation to site specific localised issues these are likely to be picked up in consultation with Regional Fisheries Boards/D.A.F.F's Regional Divisional Engineers during the preparation of the Environmental Report for the specific R.B.P which relates to their functional area.(see list of suggested Consultees below) Earlier in this submission mention was made of the need to consult widely with Port/Harbour Authorities whose activities may be significantly impacted upon by the implementation of the W.F.D. The following is a broad-brush list of Consultees that this Department recommends should be included in consultation process. This is a nationwide list so it would fall to the Consultants in each R.B.D to identify within that R.B.D which contacts are relevant to their region.:

NATIONAL AUTHORITIES BODIES/AGENCIES:

- Marine Institute
Renvyle,
Oranmore,
Co. Galway (H.Q)

- Central Fisheries Board
Unit 4, Swords Business Campus,
Balheary Road, Swords, Co. Dublin (H.Q)
Tel (01) 8842600
e-mail - webmaster@cfb.ie

- Bord Iascaigh Mhara (B.I.M)
P.O. Box 12, Crofton Road,
Dun Laoghaire,
Co. Dublin (H.Q).
Tel: (01) 2841544

- Loughs Agency*
22 Victoria Road, Derry,
BT47ZAB (HQ)
Tel: (048) 71342100

(*This Agency was established under the British – Irish Agreement Act 1999 to provide for the effective conservation ,management, promotion and development of the fisheries and marine resources of the Foyle and Carlingford Areas).

- Office of Public Works
- Waterways Ireland

REGIONAL FISHERIES BOARDS:

- Shannon Regional Fisheries Board
Ashbourne Business Park
Dock Road
Limerick
Tel: (061) 300238
e-mail – info@shannon-fishery-board.ie
- Eastern Regional Fisheries Board
15a Main Street
Blackrock, Co. Dublin
Tel: (01) 2787022
e-mail - info@erfb.ie

- Western Regional Fisheries Board
The Weir Lodge
Earls Island, Galway
Tel: (091) 563118
e-mail - info@wrfb.ie
- Southern Regional Fisheries Board
Anglesea Street,
Clonmel, Co. Tipperary
Tel: (052) 23624
e-mail - enquiries@srfb.ie
- North Western Regional Fisheries Board
Abbey Street
Ballina, Co. Mayo
Tel: (096) 22623
e-mail - nwrfb@iol.ie
- South Western Regional Fisheries Board
1 Nevilles Terrace
Masseytown,
Macroom, Co. Cork.
Tel: (026) 41221
e-mail - swrfb@swrfb.ie
- Northern Regional Fisheries Board
Station Road
Ballyshannon
Co. Donegal
Tel: (071) 9851435
e-mail - hllloyd@nrfb.ie

HARBOUR AUTHORITIES:

- Arklow Harbour
Arklow Harbour Commissioners (H.C)
Harbour Office
Arklow, Co. Wicklow
Tel: (0402) 32466
e-mail - arklowharbour@eircom.net

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Baltimore & Skibereen HC
Harbour Office
Baltimore, Co. Cork.
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- Kinsale
Kinsale H.C.
Harbour Office
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Co. Cork
Tel: (021) 4772503
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Tralee & Fenit Pier H.C.
Harbour Office
Fenit
Co. Kerry
Tel: (066) 7136231
e-mail- fenitmarina@eircom.net

- Bantry Bay
Bantry Bay H.C
Wolfe Tone Square
Bantry
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Tel: (027) 53277
e-mail - harbourmaster@bantrybayport.com

- Kilrush
Kilrush U.D.C
Town Hall,
Killrush
Co. Clare

Tel: (065) 9051047
e-mail - kilrush@clarecoco.ie

- River Moy (Ballina)
River Moy Commissioners
The Quay,
Ballina
Co. Mayo
Te: (096) 21208
- Youghal
Youghal U.D.C
Town Hall,
Youghal
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Westport Port & Harbour Commissioners
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Tel: (053) 22376

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e-mail - BKeating@portofcork.ie
www.portofcork.ie
- Drogheda Port
Drogheda Port Company
Maritime House
The Mall
Drogheda
Tel: (041) 9838378
e-mail - maritimehouse@droghedaport.ie
www.droghedaport.ie
- Dublin Port
Dublin Port Company
Port Centre, Alexandra Road
Dublin 1.
Tel: (01) 8550888 or (01) 8555771
e-mail - econnellan@dublinport.ie
www.dublinport.ie
- Dun Laoghaire Harbour
Dun Laoghaire Harbour Company
Harbour Lodge,
Crofton Road
Dun Laoghaire
Co. Dublin
Tel: (01) 2801311
e-mail - michael@dlharbour.ie
www.dun-laoghaire.com
- Shannon/Foynes Port
Shannon/Foynes Port Company
Harbour Office
Foynes
Co. Limerick
Tel: (069) 73100 or (069) 65473
e-mail - bbyrne@sfpc.ie
www.sfpc.ie

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Ros an Mhí F.H.C.
Ros An Mhí
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Tel: (091) 572108
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Tel: (021) 4515111

West

- Mr. Ger Egan, Divisional Engineer
Dept of Agriculture, Fisheries and Food
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Merchants Road
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Tel: (091) 560501

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Tel: (066) 7127235

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Dept. of Agriculture, Fisheries & Food
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Tel: (01) 6782076

OTHER

- Warrenpoint Harbour Authority
Warrenpoint
Co. Down
Northern Ireland
Tel: (028-417) 73381
e-mail: info@warrenpointharbour.co.uk

- Irish Salmon Growers Association

- Irish Fishermen's Association.

Please note also that when preparing the Environmental Report, cognisance should be taken of this Department's generic guidelines which can be downloaded from the Department's website at:

<http://www.dcmnr.gov.ie/Marine/Environmental+Assessment/Environmental+Assessment.htm>

The above is without prejudice to any comments that any of the Regional Fisheries Boards may have in this matter.

Yours sincerely,

Coordination Unit

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Gasworks Business Park
Lower Ormeau Road
Belfast BT7 2JA

23 November 2007

Eilish Clarke
EHS Water Management Unit
1ST Floor, Brandan Building
17 Antrim Road
Lisburn
Antrim
BT28 3AL

SEA 06-07

Dear Eilish,

**Consultation on the Strategic Environmental Assessment for River Basin
Management Plans and Programmes of Measures**

**Draft Strategic Environmental Assessment (SEA) Scoping Review (Shannon
IRBD)**

**Consultation response on the scope and level of detail that must be included in
the Environmental Report. Regulation 11 (5) of the Environmental Assessment of
Plans and Programmes Regulations (Northern Ireland) 2004 (Statutory Rule 2004
No. 280).**

I refer to your e-mail of 12 October 07 in relation to the above named Environmental
Report. The Department's response to your consultation request is set out below.

NATURAL HERITAGE

. 1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans or programmes;

The relationship of the River Basin Management Plan (RBMP) and the Programme of Measures (POM) to other Water Framework Directive plans or programmes should be highlighted and described in detail. It would be worth considering the production of a schematic diagram to aid interpretation of relationships between WFD associated documents.

2. The relevant aspects of the environment and the likely evolution thereof without implementation of the plan or programme;

We acknowledge that there is a multitude of information that relates to the freshwater environment in Northern Ireland. We consider that state of the environment information provide should relate to the River Basin area rather than the whole country.

State of the environment data that we consider should be utilized in relation to biodiversity, flora and fauna and its assessment during the SEA process are:

- Maps of rivers designated under the Freshwater Fish Directive and associated compliance.
- Maps showing GQA Biological Quality and compliance with targets for rivers. We anticipate that chemical quality will also be considered. Similar information should be provided to indicate the biological quality of other waterbodies including lakes. If his information is not available it should be recorded as a technical difficulty.
- Maps showing areas that have been designated as a Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar Sites or Areas of Special Scientific Interest (ASSI) combined with appropriate descriptions and indication of conservation status. We acknowledge that this information could be refined to display information about the designations that are most likely to be influenced by river basin issues.
- Priority habitat and species information about the river basin should be provided if available. In particular we would welcome information about European Priority Habitats and Species including otters. If such information is not available to a satisfactory standard for utilization it should be recorded as a technical difficulty.

State of the environment data that we consider should be utilized in relation to landscape and its assessment during the SEA process is:

- Map of landscape Character Areas and appropriate descriptions.
- Map showing any landscape designations in the plan area and appropriate descriptions.



State of the environment data that we consider should be utilized in relation to soils and its assessment during the SEA process is:

- Maps of soil and geology of the area and appropriate descriptions.
- Map of earth science statutory designations
- Information on farmland quality.

Other information that we consider would be useful would be

- Map of river catchments
- Sensitive Areas identified under the UWWT Directive
- Information about forestry
- Spatial frameworks from the Regional Development Strategy including those for Northern Ireland, Rural areas and Tourism.
- Information on waste water in the area
- Maps indicating population per district and in rural / urban areas.
- A general land use map would be a useful addition for the assessment.

We would also like to see specific data that is related to any of the environmental problems that are related to the plan area.

3. The environmental characteristics of areas likely to be significantly affected.

If during the assessment process any specific areas are identified as being likely to be significantly affected it may be beneficial to produce specific state of the environment data / characteristics relating to those areas.

4. Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance such as those areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.

We consider that existing environmental problems that were highlighted by WFD Article 5 Characterisation Reports and WFD Article 14 Significant Water Management Issues Reports that relate to this RBD should be highlighted. The document 'Managing the Water Environment in Northern Ireland' (EHS 2000) may also highlight some environmental problems. Environmental problems should be described in detail.



5. The environmental objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

We consider that the Environmental Report should consider investigating the environmental objectives that are established within the documents listed below and their relevance to the programme:

International and European Plans, Programmes and Policy:

Ramsar Convention

Convention on Biodiversity, Rio de Janeiro 1992

Water Framework Directive (2000/60/EC)

EC Directive on Conservation of Wild Birds 79/409/EEC

EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) 1992

EC Freshwater Fish Directive (78/659/EEC)

EC Shellfish Directive (79/923/EEC)

Urban Waste Water Treatment Directive (91/271/EEC)

Northern Ireland Plans, Programme and Policy

Regional Development Strategy – Shaping our Future. 2025

Northern Ireland Biodiversity Strategy

Local Development Plans

6. The likely significant effects on the environment including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects

An assessment is required to investigate these issues. We do not know what specific assessment will be carried out on but we assume that each programme of measure and specific actions / objectives / plans within the RBMP will be assessed against the issues highlighted in Schedule 2 (6) of the EAPPR.

The assessment is likely to indicate potential positive and negative environmental effects for specific measures / actions. It is important for all potential negative and positive impacts to be highlighted during the assessment rather than providing an overall balanced potential effect. It would also be useful to know their impacts on previously identified problems. We would expect to see detailed impact description for potential negative effects.

7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

This will be reliant upon the results of assessments during the SEA process.



8. An outline for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical difficulties or lack of know-how) encountered in compiling the required information.

Methods of decision making utilised during the preparation of the River Basin Plans and alternatives considered should be described as appropriate.

Any problems encountered during the SEA process, including lack of certain data, should be highlighted.

9. A description of the measures envisaged concerning monitoring in accordance with regulation 16.

Any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects should be described in detail and should be included in the monitoring to ensure that they are being effective.

A non-technical summary of the information.

This should include a summary of all of the above requirements.

We consider that the NI RBP and POM will have to pay substantial attention to transboundary consultations due to the cross-boarder nature of the river basin districts.

BUILT HERITAGE

All of the River Basin Management Plans and Programmes of Measures appear to have common themes, and so it is likely that each will be similar in terms of their SEA, but each should take due regard for the cultural heritage (including archaeological and architectural heritage) within the river basin/catchment area to which they refer.

We also note that there area elements of a cross-border nature in one or more of these (the Shannon plan would at first glance be considered a ROI issue, but I understand a portion of the catchment of the Shannon has been identified in county Fermanagh – this would need to be confirmed by someone more knowledgeable than me).

In following the SEA methodology, it is essential that the importance and the potential impacts upon the Cultural Heritage resource is adequately recognized. Rivers and riverine/lacustrine environments are well known foci of human activity over millennia. From the earliest known periods of human settlement here rivers have provided sources of food and communication, while historically they have also demarcated territories. Forging points, bridges, ferries and settlements on our rivers have evolved over time, and because of their unique environments they often preserve archaeological remains (such as wood and other organic materials) much better than one would find on 'dry' sites. Tributaries of the main watercourses have also been used and modified, from providing sources of power to industrial sites (e.g. mills), sources of drinking water for adjacent settlement sites or places of activity, to providing the infrastructure of canals.



The sustainable management of these river basins, particularly with regard to infrastructural development (including new buildings, roads, bridges and flood defences) and recreational use (such as the modification of watercourses for angling) needs to recognize the potential impacts for the archaeological and architectural heritage in its diversity. Historic mills, mill races, canals and bridges are particularly vulnerable to changes in the management of such water systems.

Planning for future adverse events and the remedial actions required (such as incidents of pollution or flood risk) will also require consideration of potential impacts on the cultural heritage (including archaeological and architectural heritage), as does the future planning of routine works such as clearance of introduced obstructions (e.g. removal of fallen trees that may block a watercourse) and maintenance of drainage. Watering and de-watering of areas of land associated rivers have, in the past, resulted in archaeological remains being uncovered and sometimes destroyed.

In compiling the draft Environmental Report, it is essential that the assessment of effects is made relevant to the locales to which the management plans and programmes of measures refer. The SEA process is a strategic one, and site-specific issues may not readily come to the fore, but these management plans and programmes of measures are likely to be focused in discrete areas. Impacts similarly need to have a discrete focus, set in a Northern Ireland context (and beyond were appropriate).

For many SEAs that we have reviewed the issue of monitoring has been problematic. It is important that appropriate monitoring measures (along with appropriate mitigation measures) are clearly laid out, identifying roles and responsibilities of those conducting such monitoring.

AIR AND ENVIRONMENTAL QUALITY

We have nothing specific to highlight at this stage but trust the Environmental Report will consider the effects of the plan on air quality and climate change.

EHS is willing to consider this plan in further detail as more information becomes available.

I hope this is helpful.



John Minnis

SEA Coordinator.



Klondyke Building
Cromac Avenue
Gasworks Business Park
Lower Ormeau Road
Belfast BT7 2JA

23 November 2007

Dr Tony McNally
NS-SHARE Project Co-ordinator
Enterprise Fund Business Centre
Ballyraine
Letterkenny
Co. Donegal

SEA 06-07

Dear Tony,

**Consultation on the Strategic Environmental Assessment for River Basin
Management Plans and Programmes of Measures**

**Draft Strategic Environmental Assessment (SEA) Scoping Review (Shannon
IRBD)**

**Consultation response on the scope and level of detail that must be included in
the Environmental Report. Regulation 11 (5) of the Environmental Assessment of
Plans and Programmes Regulations (Northern Ireland) 2004 (Statutory Rule 2004
No. 280).**

I refer to your e-mail of 12 October 07 in relation to the above named Environmental
Report. The Department's response to your consultation request is set out below.

NATURAL HERITAGE

. 1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans or programmes;

The relationship of the River Basin Management Plan (RBMP) and the Programme of Measures (POM) to other Water Framework Directive plans or programmes should be highlighted and described in detail. It would be worth considering the production of a schematic diagram to aid interpretation of relationships between WFD associated documents.

2. The relevant aspects of the environment and the likely evolution thereof without implementation of the plan or programme;

We acknowledge that there is a multitude of information that relates to the freshwater environment in Northern Ireland. We consider that state of the environment information provide should relate to the River Basin area rather than the whole country.

State of the environment data that we consider should be utilized in relation to biodiversity, flora and fauna and its assessment during the SEA process are:

- Maps of rivers designated under the Freshwater Fish Directive and associated compliance.
- Maps showing GQA Biological Quality and compliance with targets for rivers. We anticipate that chemical quality will also be considered. Similar information should be provided to indicate the biological quality of other waterbodies including lakes. If his information is not available it should be recorded as a technical difficulty.
- Maps showing areas that have been designated as a Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar Sites or Areas of Special Scientific Interest (ASSI) combined with appropriate descriptions and indication of conservation status. We acknowledge that this information could be refined to display information about the designations that are most likely to be influenced by river basin issues.
- Priority habitat and species information about the river basin should be provided if available. In particular we would welcome information about European Priority Habitats and Species including otters. If such information is not available to a satisfactory standard for utilization it should be recorded as a technical difficulty.

State of the environment data that we consider should be utilized in relation to landscape and its assessment during the SEA process is:

- Map of landscape Character Areas and appropriate descriptions.
- Map showing any landscape designations in the plan area and appropriate descriptions.

State of the environment data that we consider should be utilized in relation to soils and its assessment during the SEA process is:

- Maps of soil and geology of the area and appropriate descriptions.
- Map of earth science statutory designations
- Information on farmland quality.

Other information that we consider would be useful would be

- Map of river catchments
- Sensitive Areas identified under the UWWT Directive
- Information about forestry
- Spatial frameworks from the Regional Development Strategy including those for Northern Ireland, Rural areas and Tourism.
- Information on waste water in the area
- Maps indicating population per district and in rural / urban areas.
- A general land use map would be a useful addition for the assessment.

We would also like to see specific data that is related to any of the environmental problems that are related to the plan area.

3. The environmental characteristics of areas likely to be significantly affected.

If during the assessment process any specific areas are identified as being likely to be significantly affected it may be beneficial to produce specific state of the environment data / characteristics relating to those areas.

4. Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance such as those areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.

We consider that existing environmental problems that were highlighted by WFD Article 5 Characterisation Reports and WFD Article 14 Significant Water Management Issues Reports that relate to this RBD should be highlighted. The document 'Managing the Water Environment in Northern Ireland' (EHS 2000) may also highlight some environmental problems. Environmental problems should be described in detail.

5. The environmental objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

We consider that the Environmental Report should consider investigating the environmental objectives that are established within the documents listed below and their relevance to the programme:

International and European Plans, Programmes and Policy:

Ramsar Convention

Convention on Biodiversity, Rio de Janeiro 1992

Water Framework Directive (2000/60/EC)

EC Directive on Conservation of Wild Birds 79/409/EEC

EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) 1992

EC Freshwater Fish Directive (78/659/EEC)

EC Shellfish Directive (79/923/EEC)

Urban Waste Water Treatment Directive (91/271/EEC)

Northern Ireland Plans, Programme and Policy

Regional Development Strategy – Shaping our Future. 2025

Northern Ireland Biodiversity Strategy

Local Development Plans

6. The likely significant effects on the environment including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects

An assessment is required to investigate these issues. We do not know what specific assessment will be carried out on but we assume that each programme of measure and specific actions / objectives / plans within the RBMP will be assessed against the issues highlighted in Schedule 2 (6) of the EAPPR.

The assessment is likely to indicate potential positive and negative environmental effects for specific measures / actions. It is important for all potential negative and positive impacts to be highlighted during the assessment rather than providing an overall balanced potential effect. It would also be useful to know their impacts on previously identified problems. We would expect to see detailed impact description for potential negative effects.

7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

This will be reliant upon the results of assessments during the SEA process.

8. An outline for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical difficulties or lack of know-how) encountered in compiling the required information.

Methods of decision making utilised during the preparation of the River Basin Plans and alternatives considered should be described as appropriate.

Any problems encountered during the SEA process, including lack of certain data, should be highlighted.

9. A description of the measures envisaged concerning monitoring in accordance with regulation 16.

Any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects should be described in detail and should be included in the monitoring to ensure that they are being effective.

A non-technical summary of the information.

This should include a summary of all of the above requirements.

We consider that the NI RBP and POM will have to pay substantial attention to transboundary consultations due to the cross-boarder nature of the river basin districts.

BUILT HERITAGE

All of the River Basin Management Plans and Programmes of Measures appear to have common themes, and so it is likely that each will be similar in terms of their SEA, but each should take due regard for the cultural heritage (including archaeological and architectural heritage) within the river basin/catchment area to which they refer.

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EHS is willing to consider this plan in further detail as more information becomes available.

I hope this is helpful.



John Minnis

SEA Coordinator.

**Water Framework Directive:
Shannon International River Basin District
River Basin Management Plan/Programme of Measures
Strategic Environmental Assessment Stage 1 Scoping
Environmental Protection Agency (EPA) –Initial Submission**

The following are initial comments in relation to the Scoping Notification issued to the EPA in relation to the SEA for the River Basin Management Plan (RBMP) and Programme of Measures (POMs) for the Shannon International River Basin District.

These initial comments relate to generic SEA Process Issues and specific environmental issues, which should be addressed in the SEA process. The EPA sees this initial notification and the comments provided below as the first in ongoing consultation during the SEA of the RBMPs and POMs.

1. SEA PROCESS ISSUES

This section of the EPA's submission highlights SEA Process issues, which should be addressed as appropriate. In addition reference is made to environmental data sources, relevant guidance and SEA outputs.

1.1 River Basin Management Plan / Programme of Measures

The SEA should clearly set out at the outset the broad overall objectives of the RBMP/ POMs. In addition a description should be provided of what aspects come within and importantly what is clearly outside the scope of the RBMP/POMs.

The RBMP/POMs should be clearly set within the hierarchy of other relevant water management and environmental protection related plans/ programmes at a national, regional/ catchment and local level e.g. flood risk management plans, groundwater protection schemes/ plans etc.

1.2 EU and national environmental legislation, objectives, policies

The SEA should take into account all relevant environmental objectives and standards set, for the environmental topics to be described and assessed, in all relevant EU and National legislation.

Where there is potential for conflict between the objectives of the WFD and associated RBMP and POMs these should be highlighted at an early stage in the SEA process. Any potential conflicts should be explored further during the SEA process as the RBMPs/ POMs are developed.

Environmental objectives agreed for the purpose of the SEA should be linked to relevant and appropriate environmental indicators and targets.

1.3 Inter –relationships with other relevant Plans and Programmes

The links between the RBMP/POMs and other relevant environmental Plans and Programmes should be described e.g. –Flood Risk Management Plans, Land use Plans, Biodiversity/ Heritage Plans, Management Plans under the Habitats Directive etc.

1.4 Existing Environment

In describing the existing state of the environment the specific environmental topics should be described in the context of the following:

- Current status of the environment,
- Existing environmental problems and as appropriate any likely potential future issues
- The evolution of the particular aspect(s) of the environment in the absence of the plan
- Implications of the general objectives of the RBMP/POMs on specific aspects of the environmental topics being described.

1.5 Upto date Environmental Monitoring Data etc.

The current state of the environment should be described using most recent and upto date environmental data, information and reports. Where updates of significant environmental data and associated reports become available during the SEA process, where possible, this information should be incorporated into the description of the current state of the environment and where relevant related environmental problems.

You are referred in this regard to the full range of Water and Air Quality Reports prepared by the EPA. (See www.epa.ie/https://www.epa.ie/downloads/pubs/other/corporate/occs/publist/publications%20list%20nov%202007.pdf).

1.6 State of the Environment Report

The current, national State of the Environment Report (EPA, 2004) is currently at the early stages of update and review and the updated report should be available during the SEA process. In the meantime you are referred to the current State of the Environment Report and also the relevant Environmental Indicators Reports – Environment in Focus, Water etc. See EPA Publications on www.epa.ie.

1.7 WFD- Data / Reports

You are also referred to the significant environmental information and data collected and reports published thus far under the requirements of the WFD and associated regulations. Much of this information has been mapped. This data, information and reports should form a significant part of the description of the relevant aspects of the current state of the water related aspects of the environment.

1.8 EPA ENVision/ GIS

You are referred to the web based Environmental Mapping / Geographical Information System (GIS) ENVision recently launched by the EPA. <http://maps.epa.ie/InternetMapView/MapView.aspx>

In undertaking the SEA, all the environmental data and information presented on these GIS based maps should be taken into account. There will also be significant elements of this data as well as relevant additional information associated with the GIS for each of the individual RBDs. You are referred to the full range of Protected Areas within the RBD as set out in Annex IV 1(I) –(v) inclusive of the WFD.

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The use of and application of GIS should be considered where possible at the various key stages in the SEA process. GIS could along with other methodologies, and depending on the availability of relevant spatial data, assist in determining the cumulative vulnerability of various environmental resources within the RBD and how these might be impacted by the RBMP /POMs.

1.9 Environmental Data Gaps

Where it is found or considered that there are data gaps for particular aspects of the current state of the environment, clearly state the significance of these data gaps. Where significant data gaps are identified state whether these can reasonably and realistically be addressed during the SEA process.

In describing the current state of the environment, the inter-relationships between the relevant different aspects of the environment should be described e.g. water quality and human health, fisheries, biodiversity, shellfisheries etc. For those aspects assessed to have potential to be significantly affected by the RBMP/POMs, these inter-relationships should be followed through in the assessment of the preferred alternative(s) or combination of alternatives.

1.10 Habitats Directive Article 6(3) Appropriate Assessment

In consultation with the Department of the Environment, Heritage and Local Government and as appropriate the Environment Heritage Service, Northern Ireland, a determination should be made on the requirement for an Appropriate Assessment of the RBMP/POMs in accordance with Article 6(3) of the Habitats Directive.

Where an Appropriate Assessment is assessed to be required, it is recommended that this should be undertaken in conjunction with the relevant stage of the SEA process. Subject to consultation with the relevant statutory authorities consideration should be given to the outputs from the Appropriate Assessment being presented separate to the SEA Environmental Report. The significant findings and recommendations of the Appropriate Assessment should be incorporated within the Environmental Report as appropriate e.g. alternative assessment, mitigation, monitoring.

It is acknowledged that, where determined to be required, the scope of an Appropriate Assessment will become more apparent as the RBMP/POM making process progresses.

For those Natura 2000/ European sites within the RBD and likely to be impacted by the RBMP/ POMs, the availability and status of Management Plans in accordance with the Habitats Directive should be determined. Where Management Plans are available, the objectives and management practices proposed/ set out should be taken into account in the Appropriate Assessment, where required, and SEA and in the preparation of the RBMP/POMs.

1.11 Scoping In/Out aspects of the Environment

For any environmental issue(s) be determined to be scoped out of the SEA process, clear justification should be included in the Environmental Report as to why the

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specific environmental issues were not considered likely to be potentially affected by the RBMP/ POMs.

1.12 Significant Water Management Issues (SWMI) Report/ Consultation Documents

The SWMI Report identifies and seeks comments on the most significant water – related issues including Local issues specific to the RBD identified for the RBD. The SWMI Report for the RBMP along with feedback from the consultation process should form a significant input to the RBMP /POMs Scoping exercise.

1.13 SEA Scoping Workshops

Following completion of the initial SEA scoping exercise, it is recommended that the RBD authorities and/or their agents/consultants, where possible and appropriate, arrange and facilitate formal SEA Workshops with key personnel within statutory and non –statutory authorities and relevant technical and advisory groups operating under the wider WFD activities.

1.14 Alternatives

In considering and assessing alternatives within the RBMP/POMs the alternatives proposed should be reasonable and realistic. They should be assessed against the relevant environmental objectives established for the key environmental aspects of the environment likely to be significantly affected. Clear justification should be provided for the selection of the preferred alternative/ combination of alternatives.

Where relevant, the development of alternatives should be clearly described. In addition, the methodology applied in the assessment of alternatives along with any assumptions made should be described.

1.15 Consultation

In order to promote Best Practice in SEA in the context of consultation, it is recommended that the public be given an opportunity to make submissions on the issues to be addressed in the SEA process. To this effect consideration should be given to the publication of relevant and appropriate notices to inform and engage the wider public in the SEA process. It is acknowledged that notices have previously been published regarding the SWMI Reports with a view to informing and engaging the public on the WFD –RBMP/ POMs making process and related significant water management issues.

Following completion of the Draft Scoping Report consideration should be given to the making available of this document on the RBD website.

For International RBD RBMPs/POMs considered likely to have significant effects in another Member State, the relevant competent authority should ensure appropriate and timely consultation with the relevant authorities in Member State(s).

1.16 Assessment of Likely significant effects

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In assessing the likely significant effects of the RBMP/POMs on the full range of environmental issues likely to be significantly affected, the full range of effects as set out in Annex I of the SEA Directive - likely significant effects should include-secondary, cumulative, synergistic, short, medium and long term, permanent, temporary, positive and negative effects, should be assessed and reported on.

The methodology applied in the assessment of the preferred option along with any assumptions made should be described. Where possible and practical, quantitative assessments should be undertaken of the assessment of the preferred alternative/combination of alternatives.

1.17 Mitigation of significant effects

Where significant adverse effects are identified there should be a clear link with relevant and appropriate mitigation measure(s). You are referred in this regard also to the requirement of the Article 6 of the Habitats Directive.

The emphasis should, in the first instance, be on avoidance of significant adverse effects.

1.18 Monitoring

Monitoring arrangements should be clearly set out along with responsibilities frequency of monitoring, and analysis and reporting on monitoring. Monitoring arrangements should be sufficiently flexible so as to be able to react to unforeseen / unexpected events. Maximum use should be made of existing environmental monitoring programmes. To this effect, the significant environmental monitoring required under the Water Framework Directive should fulfill most if not all of the requirements with respect to water quality.

The monitoring arrangements and related programme should include relevant and appropriate thresholds which should trigger when remedial action should be undertaken for the particular aspect of the environment being monitored.

1.19 SEA Process and SEA-Environmental Report Compliance

The SEA Process for the RBMP should comply fully with procedural requirements and the set out in the SEA Directive and the relevant national SEA Regulations. The Environmental Report should be prepared in accordance with the specific information specified in Article 5 (1-3 inclusive) Environmental Report of the SEA Directive Annex I –“ of the SEA Directive.

Integration Particular emphasis should be given during the SEA and RBMP/POM making process to ensuring that both process are fully integrated. Appropriate SEA Team / RBMP/POMs Team Workshops should be held at key stages during both processes to ensure full engagement and interaction and sharing of information with key members of both teams and to ensure full integration of environmental considerations.

Consideration should be given to the appointment of a facilitator to ensure full integration takes place during the SEA process and the RBMP/POMs making process.

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1.20 Documentation of the SEA Process

Where key decisions are made during the SEA process e.g. Scoping In/Out environmental topics, selection of preferred alternative (s) etc. these decisions should be documented as part of an overall SEA/ RBMP/POMs process.

1.21 Information on the Decision

Following adoption of the RBMP/POMs, the competent authority is required to make available the adopted RBMP/POMs and a statement setting out relevant Information on the Decision” as set out in Article 9 of the Directive.

1.22 SEA Guidance /Methodology

You are referred to the following Guidance/ Methodology, which should be referred to along with other relevant and appropriate SEA and related Guidance during the SEA process:

- EPA –Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland –Synthesis report (EPA, 2003)
- The Department of Environment Heritage and Local Government Guidelines: “Implementation of SEA Directive 92001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment –Guidelines for Regional Authorities and Planning Authorities” (DoEH&LG, November 2004) While the focus is on Land use Planning, this SEA guidance is of relevance.

In addition, to the above, it is brought to your attention that it is intended publish a Draft SEA Process Checklist for consultation on the EPA website during the first quarter of 2008. As soon as this Checklist is published it will be circulated to the relevant competent authority for the RBD.

In the meantime you are referred to Appendix B -SEA Process Checklist in EPA – Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland –Synthesis report (EPA, 2003).

2. SEA ENVIRONMENTAL ISSUES

This section of the EPA's submission sets out the environmental issues, which should be addressed in the SEA process. On receipt of the Draft Scoping Report a more specific submission will be provided.

Annex I (f) of the SEA Directive sets out the environmental issues which are included within the scope of the SEA – biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationships between the above factors.

Our initial assessment is that all the above environmental issues should be described in the context of the SEA and the RBD/ POMs and should be included within the scope of the SEA. Of all the environmental topics Air, initially appears to be the aspect with least interaction with the scope of the RBMP/POMs. It is however, inherently linked with Climate Change.

Table 1: Initial SEA Scoping Issues RBMPs/POMs

SEA Issue	Scoped In / Out	Potential Environmental Issues/ Data Relevant to RBMP/POMs
Biodiversity, Flora and Fauna	In	<ul style="list-style-type: none"> • Natura 2000/ European Sites –SAC’S, SPAS, Ramsar Sites • Habitats Directive-Annex I/ Annex II- SACs • Status -SAC Management Plans • Birds Directive- SPA • Coastal /Marine Habitats/ Species • Appropriate Assessment-Article 6 Habitats Directive –Screening • Habitat Mapping Data/ Habitat Quality • Wildlife Act/ Wildlife Amendment Act • Ramsar Sites • Effects on Freshwater Pearl Mussel Pearl Mussel protected areas • Effects on salmonids, other protected fish and shellfish species. • Impact on wetland sites/ eco –hydrological/ hydrogeological regime Effects on water systems due to abstraction • Peatlands • Limestone Areas • Protection and enhancement of national, regional local biodiversity • Connectivity- provided by River / lake systems • Potential Link with Population /Quality of Life • Impact of in-channel works on river corridors, habitats and species • Eco Tourism • Invasive Species –Plants/ Animals, New Species - migrants
Population	In	<ul style="list-style-type: none"> • Recreational use of water (bathing, fishing) • Tourism –Navigation/ Fishing/ Water Sports • County Development Plans (development and population growth projections) • Flood Risk • Municipal waste water infrastructure and level of treatment • Available water supplies for agriculture, domestic, industrial, commercial • Agricultural Activities • Population / Quality of Life • Multi cultural society Cultural Differences • Education /Awareness
Human Health	In	<ul style="list-style-type: none"> • Overall Water Quality • Protected Bathing waters • Shellfish Protected waters • Drinking water Abstraction (surface and groundwater) • Drinking Water Protected areas • Water Supply Treatment • Algal Blooms -Toxins • Invasive Species – Giant Hogweed • Groundwater Vulnerability

SEA Issue	Scoped In / Out	Potential Environmental Issues/ Data Relevant to RBMP/POMs
Soil/Geology	In	<ul style="list-style-type: none"> • Effects of contaminated land on the water environment • Historical Landfills • Unauthorised Waste Disposal • Nitrate Vulnerable Zones (also connected to groundwater quality) • Influence on land use practices (e.g. fertiliser application) • Geology- • Geomorphology –River channels/landforms • Geodiversity- caves, mining etc. Eskers, Drumlins • Existing /Historical Mining Activities • Soil Quality • Sealing of Soil • Quarries/Aggregates • Exploration Activities • Peatlands, Agricultural, Bio-energy Crops • Land Use Change • Forestry
Water	In	<ul style="list-style-type: none"> • National Data coverage on water quality (surface water/ groundwater/ estuary/ coastal) and flows. • National Data coverage data on specific relevant pollutants • Inventory of point source discharges • Inventory of uses (abstraction, bathing, shellfish, fisheries) and protected areas • Quality data of point source discharges and their impacts • Assimilative capacity of waters • Pressures and risks to ecological status of water bodies • Impacts on water bodies from landfills and mines/quarries • Impacts on water bodies from contaminated land • Impacts on water bodies from water abstraction • Impact on water bodies from peat extraction • Impacts on water bodies from landspreading of organic wastes • Impacts of combined storm water overflows • Accumulative effect of point source discharges • Seriously and moderately polluted sites • Eutrophic coastal and estuarine waters • Maintaining good quality status • Enforcement of licences • Water Supply, Water Conservation • Drought • Flood Risk Management • Water Transfer between catchments • Fisheries- Commercial/ Sport • Aquaculture /Shellfisheries- Licensing
Air	In	<ul style="list-style-type: none"> • Effects of acid rain • Renewable Energy • Climate Change

SEA Issue	Scoped In / Out	Potential Environmental Issues/ Data Relevant to RBMP/POMs
Climatic Factors	In	<ul style="list-style-type: none"> • Flood Risk • Renewable Energy –Hydro/ Geothermal • Drought Management • Coastal Zone Management • Severe weather events
Material Assets	In	<ul style="list-style-type: none"> • Protection of water systems from over abstraction • Integrity of municipal drainage networks • Sustainable Urban Drainage Systems • Provision of adequate drainage infrastructure and treatment level
Cultural Heritage	In	<ul style="list-style-type: none"> • Water based archaeological features –Discovery Ireland • Features in vicinity of floodplains, watercourses • Battle sites • Old ford Crossings • Industrial Archaeology- canals
Landscape	In	<ul style="list-style-type: none"> • General Landscape • Riverscapes • Lakescapes • Seascapes • Designated Landscape Areas • Scenic Views



for birds
for people
for ever

River Basin Management Plans and Programmes of Measures: Strategic Environmental Assessment and biodiversity

Preliminary comments on process from RSPB Northern Ireland

November 2007

1. General remarks

The RSPB supports a strong Strategic Environmental Assessment (SEA) process for Northern Ireland that allows decision-makers to identify and evaluate the environmental impacts of strategic proposals and to act appropriately on that information, complementing the process developed for Environmental Impact Assessment. We therefore welcome the development of a SEA for the River Basin Management Plans and Programmes of measures under the EU Water Framework Directive.

Biodiversity is an important aspect of the environment that needs to be considered in every SEA (see Annex I of Directive 2001/42/EC). As a signatory to the Convention on Biological Diversity, the UK is committed to developing national strategies to conserve biodiversity. We do, therefore, expect to see the effective treatment of biodiversity considerations within SEA assessments, e.g. potential contributions to UK Biodiversity Action Plan and Northern Ireland Biodiversity Strategy targets.

Given that the development of Environmental Reports under the SEA Directive is still in its infancy in Northern Ireland, we aim to identify best practice at an early stage so that biodiversity considerations are appropriately addressed in all SEAs.

Our comments on this scoping exercise and its biodiversity considerations are based largely on the contents of a document entitled *Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners*, which was published by the Countryside Council for Wales, English Nature, the Environment Agency and the RSPB in June 2004:

<http://www.rspb.org.uk/ourwork/policy/planning/sea.asp>

2. Setting objectives and indicators

The biodiversity objectives and indicators for the SEA should be consistent with those of other existing initiatives and plans. In our opinion, an objective is a statement of what is intended, specifying a desired direction of change. The achievement of objectives is normally measured using indicators.

We suggest the following objectives and indicators should be included in the Environmental Report:

Objectives	Indicators
<i>International/national</i>	
<ul style="list-style-type: none"> Avoid damage to designated sites and protected species 	<ul style="list-style-type: none"> Reported levels of damage to designated sites
<ul style="list-style-type: none"> Achieve favourable conservation status at all designated sites 	<ul style="list-style-type: none"> Proportion of designated sites in favourable condition
<ul style="list-style-type: none"> Meet UK BAP objectives 	<ul style="list-style-type: none"> Achievement of UK Biodiversity Action Plan objectives and targets
<i>Regional biodiversity interests</i>	
<ul style="list-style-type: none"> Meet NI Biodiversity Strategy objectives 	<ul style="list-style-type: none"> Achievement of NI Biodiversity Strategy/Departmental BIP objectives and targets
<i>Local biodiversity interests</i>	
<ul style="list-style-type: none"> Maintain local biodiversity 	<ul style="list-style-type: none"> Number and area of Sites of Local Nature Conservation Interest (SLNCIs) and Local Nature Reserves (LNRs) within the plan area Reported levels of damage to SLNCIs and LNRs.
<i>Biodiversity in the wider countryside</i>	
<ul style="list-style-type: none"> Enhance biodiversity in the wider countryside Restore the full range of characteristic habitats and species to viable levels Safeguard genetic resources by protecting species populations, and the habitats and ecological processes on which they depend 	<ul style="list-style-type: none"> Number of Species of Conservation Concern and area of Priority Habitats Area and quality of habitat in relation to range-size requirements Area of land actively managed for conservation River quality objectives

3. Links to other policies, plans and programmes

The Environmental Report must explain the plan's relationship with other relevant plans and programmes and relevant environmental protection objectives at international, Community and Member State level (see Annex I (d) of the SEA Directive). We believe the SEA should take account of the following biodiversity-related plans and programmes:

- Council Directive EC/79/409 (as modified) on the conservation of wild birds
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
- UK Biodiversity Action Plan (including UK Species and Habitat Action Plans)
- Northern Ireland Biodiversity Strategy (including NI Species and Habitat Action Plans and Departmental Biodiversity Implementation Plans)

As the responsible authority, the DOE should demonstrate how the objectives of these plans and programmes have been taken account in the preparation of the RBMPs and PoMs. This would promote the coordination of planning and decision-making, and allow potential conflicts and opportunities to be identified.

4. Describing the baseline

The RSPB believes that the setting of appropriate objectives for the SEA (see *Setting objectives and indicators*) necessitates the use of best available baseline data. We hold a variety of bird data that may be helpful in defining the baseline and we would be keen to discuss the provision of data with the DOE. In addition, many other data may be held outwith government by nature conservation organisations that may be willing to supply it for the purposes of a more appropriate appraisal. We suggest that RPS explores these other potential data sources.

5. Identifying options and alternatives

Environmental Reports should outline the reasons for selecting the alternatives that have been considered and explain how alternatives were selected and assessed. Alternatives should be identified that avoid or minimise biodiversity impacts, for instance through demand management, choice of types and locations of development, and layout within particular sites. Where possible, opportunities to enhance biodiversity should be sought at different scales.

6. Impact identification, prediction and evaluation

The SEA Directive requires an analysis of 'any existing environmental problems which are relevant to the plan'. Biodiversity is one aspect of the environment that must be considered and the SEA should also include assessment of possible significant effects of the plan on 'flora, fauna, soil, water, air, climatic factors and landscape'. Inter-relationships must be considered, as well as relevant secondary, cumulative, synergistic, short, medium and long term, permanent and temporary, positive and negative effects.

We believe that the following likely existing or potential impacts of BMAP on biodiversity should be tackled under the RBMPs and PoMs:

- Habitat loss caused by land-take
- Habitat fragmentation
- Alteration of hydrological regime
- Alteration of soil composition
- Pollution (direct and diffuse)
- Disturbance
- Introduction of non-native species
- Edge effects
- Genetic impacts
- Behavioural impacts
- Elevated mortality (especially of NI's Species of Conservation Concern)

There are many techniques available to predict and evaluate impacts, e.g. integrated habitat systems, network analysis, scenario/sensitivity analysis, multi-criteria analysis, vulnerability analysis and risk assessment.

7. Mitigation

Mitigation measures are those actions taken to reduce adverse effects, whether by controlling the sources of impacts, or the exposure of ecological receptors to them. We would be keen to work with the DOE to identify any mitigatory measures that may be required.

8. Monitoring

The SEA Directive requires the significant environmental effects of implementing the plan or programme to be monitored to identify unforeseen environmental effects and to enable remedial action to be taken (see Article 10). This is a critically important component of the SEA process. We suggest that the DOE adopts the monitoring framework proposed in ODPM (2004)¹ and investigates, as a matter of priority:

- What needs to be monitored
- What sort of information is required (to ensure the data used are fit for purpose)
- What are the existing sources of monitoring information
- Gaps in the existing information, and how can these be filled
- What should be done if adverse effects are found
- Who is responsible for the various monitoring activities, when should these be carried out, and what is the appropriate format for presenting the monitoring results?

9. Consultation

Once again, we thank DOE for allowing the RSPB to comment at the scoping stage. We think the exercise is a useful first step in the appreciation of biodiversity issues within the SEA process and we are happy to help in whatever way we can during the development of the Environmental Report. We look forward to seeing the Environmental Report and monitoring the progress of this SEA during its continued development and future assessment.

For more information, please contact Dr. James Robinson at RSPB Northern Ireland, Belvoir Park Forest, Belfast BT8 7QT, tel: 028 9049 1547, email james.robinson@rspb.org.uk,

¹ ODPM (2004) *A Draft Practical Guide to the Strategic Environmental Assessment Directive*.

10th January 2008

“Shannon IRBD”

Mr. Tony McNally
Enterprise Fund Business Centre
Ballyraine
Letterkenny
Co. Donegal

**Re: Strategic Environmental Assessment of the Shannon IRBD River Basin
Management Plan Draft Scoping Report**

Dear Mr. McNally,

I refer to your letter of the 12th December 2007 in the above regard.

The Department of Communications, Energy and Natural Resources on behalf of the Engineering Division whose functions have transferred to the Department of Agriculture, Fisheries and Food have the following comments to make at this time.

Tables 3.2 and 3.3

In “Review of Legislation” it is suggested that you should consider putting the EU Shellfish Directive (79/923/EC) and European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. No. 268 of 2006)* as a “Human Health” Topic rather than a “Biodiversity” Topic.

Table 6.2

Objective S4’s Detailed Assessment Criteria could include “Maintain the service to local communities of fishing harbour and commercial port activities”.

Tables 6.3

The Objective 3 Draft Indicators could include “Number and nature of impediments to passage of fish (including eels) through rivers”.

The Inland Waters Morphology Program of Measures Working Group can advise further in this matter in due course

Table 6.3, 6.4 and 7.1

Objective S4 from Table 6.2 could be included in these tables.

In terms of the list of suggested Consultees (Ref Table 8.1), from this Department’s perspective a list of suggested Consultees was previously sent to you in our letter of the 23/11/07, in relation to Marine and Fisheries interests. It should be noted that in terms of localised Consultees ,only ones operating in the area of the RBD need be consulted. The National Consultees would need to be consulted in relation to all RBD’s as required.

The above is without prejudice to any comments that any of the Regional Fisheries Boards may have in this matter.

Yours sincerely,

Coordination Unit

*Please note that S.I No 268 of 2006,European Communities (Quality of Shellfish Waters) Regulations 2006 , has replaced S.I No 200 of 1994 (Quality of Shellfish Waters Regulations 1994) and S.I No 459 of 2001 (Quality of Shellfish Waters (Amendment) Regulations 2001) which have both been revoked .

Dr. Haddow,

The following general comments refer to the draft scoping documents circulated. I hope that they are of assistance

Colin Byrne and Kevin Forde

- on behalf of the Water Inspectorate and Water Quality Section
15/01/08

1. The proposed scope of the assessment to be carried out as part of the SEA process would appear to be adequate.
2. The SEA will apply to river basin plans and programmes of measures. This is not consistent throughout the document. For example, on page 8 of the Eastern RBD document the sentence "This study concluded that SEA is required for the individual RBMPs."
3. The competent authorities (local authorities and Environment & Heritage Service) are responsible for the SEA process. It is critical that the competent authorities are involved in the process. Therefore, the contacts for information in the first instance (e.g. on page 11 of the ERBD scoping document) should be officials in the Coordinating authorities and EHS rather than the authority's agent.
4. Separate, tailored scoping documents are required for each national and International RBD. Therefore, information/data presented in each document should relate specifically to that (I)RBD. This is not consistent under the various headings in Section 4.2 Preliminary baseline. For example, in the Eastern RBD document, under "Flora, fauna and biodiversity" national statistics are provided rather than for the Eastern RBD.
5. With regard to Section 6.5 "Appropriate assessment" (Eastern RBD as an example) the second paragraph is incorrect, EIA must apply to projects regardless. Under the Habitats Directive "appropriate assessment must also be applied to plans and programmes liable to cause an impact on protected sites. Under Article 6(3) of the Habitats Directive (92/43/EEC) it states;

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not

adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

(Note: While programmes are not specified above, both plans and programmes are referred to in the recitals of the Directive).

Paragraph 2 in Section 6.5 of the scoping document, as it stands, reads;

“As part of the SEA process consideration will be given as to whether the RBMP, or aspects thereof, requires an Appropriate Assessment, with this decision made in discussion with the DOEHLG. As the RBMP is a strategic plan it may be more appropriate to carry out an appropriate Assessment when more specific information is available, i.e. at Project Level and during an EIA. If this is the outcome, it may be more appropriate for the SEA to require mitigation, in the form of a full Appropriate Assessment, to be carried out at the Project stage.”

Instead I suggest deleting this paragraph and replacing with;

“The Environmental Assessment should include the necessary information for the “appropriate assessment” under the habitats directive as the plan and programme will inevitably affect designated areas for the protection of habitats and species. The subsequent Environmental Report should include a separate and distinct sub-section addressing the “appropriate assessment” under the habitats directive.”

(page numbers referred to in the following comments are from the North Western IRBD Draft Scoping Report)

6. The report should be preceded by an executive summary. This should include, for example, a short summary of the WFD, River Basin Management Planning, the purpose and structure of the scoping report, and a statement that any comments on the document may be directed to.....(i.e. an informal request for comments rather than a formal consultation). The style of language in this section should aid public understanding of the purpose of the document. Reference could be made to the style of language in the SWMI reports.
7. The terms ‘Ireland’ and ‘Northern Ireland’ should be used throughout the document. The acronyms ‘ROI’ and ‘NI’ should not be used.
8. Page 6 – the timetable for 2013 is not clear in relation to what relates to the first RBMP and what relates to the second RBMP. Also reference should be made to subsequent planning cycles.
9. Page 8 – suggest replacing the following sentence –
‘ Under Article 6 of the SEA Directive, the competent authority preparing the plan or programme (in this case the Environment and Heritage Service (EHS) as well as Donegal, Cavan, Leitrim, Longford,

Monaghan and Sligo County Council, of which Donegal County Council is the Co-ordinating Local Authority) is required to consult with specific “environmental authorities” (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report’.

with the following amended text

‘ Under Article 6 of the SEA Directive, the competent authority preparing the plan or programme is required to consult with specific “environmental authorities” (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report. The competent authorities in relation to the RBMP and POM for the North Western RBD are the Environment and Heritage Service – Northern Ireland (EHS) and the following local authorities (of which Donegal County Council is the coordinating authority) - Donegal, Cavan, Leitrim, Longford, Monaghan and Sligo County Councils.’

10. Page 10 – web links should be given for all of the guidance documents that are available online.
11. Page 11 – The following line is unclear and should be replaced, with a better description of the purpose of the RBMP. - ‘The objectives of the RBMP are expected to mirror the objectives of the WFD.’
12. Page 12/13 –Figure 3.1 doesn’t provide a clear explanation of the relationship between the WFD etc, and the planning hierarchies. Supporting text is needed to help clarify this relationship. Also, there should be separate diagrams for Ireland and Northern Ireland, (This would assist understanding and would also help to clarify that although a joint RBMP may be prepared, it will be prepared in context of separate planning hierarchies).
13. Page 14– The table heading should read – Preliminary Review of Legislations, Plans, Policies and Programmes – International
14. Page 15– The table heading should read – Preliminary Review of Legislations, Plans, Policies and Programmes – European Union
15. Page 17– The table heading should read – Preliminary Review of Legislations, Plans, Policies and Programmes – Ireland
16. Page 20– The table heading should read – Preliminary Review of Legislations, Plans, Policies and Programmes – Northern Ireland

17. Tables 3.1 to 3.4 should follow their introduction, (i.e. currently the section on planning hierarchy comes between the tables and the introduction, putting them out of context for the reader.)
18. The sentence that follows table 3.4 has no context and refers exclusively to the planning hierarchy in Ireland.
19. Page 22 - the list of information sources should be separated into 2 lists – a list for Ireland and a separate list for Northern Ireland.
20. Page 23 – the terms ‘Irish’ and ‘Northern Irish’ should not be used. They should be replaced, as appropriate with the ‘Ireland’ and ‘Northern Ireland’. This applies to wherever these terms may be used throughout the document.
21. Page 30 The final sentence in the paragraph on abstractions refers only to Ireland. Should this refer to the ‘island of Ireland’? If it refers only to Ireland, and there is no equivalent information available on Northern Ireland, then maybe the sentence could be changed to read as follows – ‘In fact there are more drinking water abstractions from surface waters in the portion of the North Western District within Ireland, than in any of the other districts within Ireland.’
22. Page 32 – paragraph 5.1.2 states that the RBMP will cover the period from 2009 to 2013. Should this read 2009 to 2014?
23. Page 32 – the reference to the SEA regulations – Northern Ireland should refer to a statutory rule (SR), and not an SI.
24. Page 39 – para 6.4, as referred to in point 6 above, I don’t think that the phrase - ‘expected to mirror the objectives of the Water Framework Directive’ is a clear statement, and I think that it could be re-drafted.

General formatting comments

1. Title Page should refer to ‘River Basin District’ and not to the acronym ‘RBD’.
2. Acronym for this Department should be ‘DEHLG’ not ‘DOEHLG’.
3. In general throughout the document, once an acronym has been introduced it should be used consistently thereafter.

Klondyke Building
Cromac Avenue
Gasworks Business Park
Lower Ormeau Road
Belfast BT7 2JA

15 January 2008

Eilish Clarke
EHS Water Management Unit
1ST Floor, Brandan Building
17 Antrim Road
Lisburn
Antrim
BT28 3AL

SEA 06-07

Dear Eilish,

**Consultation on the Strategic Environmental Assessment for River Basin
Management Plans and Programmes of Measures**

Draft Strategic Environmental Assessment (SEA) Scoping Reviews

**Consultation response on the scope and level of detail that must be included in
the Environmental Report. Regulation 11 (5) of the Environmental Assessment of
Plans and Programmes Regulations (Northern Ireland) 2004 (Statutory Rule 2004
No. 280).**

The Departments originally issued submissions in response to the above consultation on 23 November 2007. Since then the Department has received draft scoping reports which set out further detail. The Department's response to these draft detailed scoping reports is set out below.

NATURAL HERITAGE

1. Natural Heritage broadly approves of the sources of information and the methodologies envisaged for the production of the RBMPs Environmental Reports.
2. However, we do not agree with the proposed methodology associated with Appropriate Assessments (Section 6.5). Appropriate Assessment is not part of the SEA process, but a quite separate and distinct requirement which the competent authority must carry out before proceeding with adoption of the plan. ECJ rulings and common understanding would both categorise RBMPs as land use plans and as requiring Appropriate Assessment if they are likely to have a significant impact upon N2K sites. We are of the opinion that the SEA process and its associated assessments should not be used as tests to determine if the RBMPs require an Appropriate Assessment due to the impacts that the plan may have upon N2K sites.
3. In addition we would question the proposed parts of the RBMPs to be assessed during the SEA process. We consider that it may be beneficial to include some of the existing Programmes of Measures in the 'proposed parts of the RBMPs to be assessed'. This is to ensure that existing POMs, which form part of the RBMP, do not have negative effects on the environment, or, if they are having negative effects that these effects are mitigated against.
4. Minor comments about the scoping reports:
We are not clear about the proposed consultation steps involved in the scoping process (Figure 1.4). Who is being consulted at each of these stages? We consider that Natural Heritage, as a constituent of the SEA consultation body, do not have to be consulted at each of these stages.
5. Although we acknowledge that this is not a scientific document we consider that it may be worthwhile, in some instances, to include the scientific name of species mentioned, particularly invasive species. This would ensure there is no confusion about the species being referred to as many invasive species have several common names or have names similar to other invasive species. For example in the local issues of North Eastern RBP Japanese Weed is referred to, which we assume is *Sargassum muticum*, which is also commonly known as Wireweed. The name Japanese Weed could easily be mistaken for Japanese Knot Weed which is a different invasive species – *Fallopia japonica*.
6. On a similar note it is important to reference documentation referred to in the report, possibly in a reference section or as a footnote. For example Deasley and Preston (2007) is mentioned but we could not find information about the name of this document.



7. Primary Baseline.
The Northern Ireland Landscape Character Assessment Series would assist with the identification of landscape interests that occur within each RBD.
8. Draft SEA objectives.
Objective 1 criterion should also provide protection of water dependent international designated sites.
9. We would welcome the inclusion of the additional draft SEA objectives from stakeholders.
10. Draft SEA indicators and targets.
A target relating to alien / invasive species is required for Objective 1

BUILT HERITAGE

1. While the draft Scoping Reports for these RBMPs refer to different areas within the island of Ireland, the approaches to SEA contained within them are effectively the same, and all share common points that we would wish to comment on.
2. Most, if not all, of the draft Scoping Reports do not detail Listed Buildings (i.e. buildings that are statutorily protected under the Planning (NI) Order 1991. These are significant heritage assets in Northern Ireland, and they need to be considered against any plans which would impact upon them. The source of information on these is, for Northern Ireland, the Monuments and Buildings Record. This is held by EHS: Built Heritage at Waterman House.
3. Similarly, Conservation Areas (which have statutory designation) and Areas of Townscape or Village Character (designated through Area Plans) need to be recorded, especially as some of the actions resulting from the RBMPs may impact upon these. The source of information on these is, for Northern Ireland, Planning Service (Department of Environment).
4. In all tables within the draft Scoping Report where the interrelationships between SEA topics we note that the area of Cultural Heritage (including architectural, archaeological and landscape interest) is omitted. This needs to be rectified.

5. At Tables 8.3 and 8.4 of each of the plans, especially Objective 5, it needs to be noted that some of the past industrial processes associated with watercourses have resulted in contamination issues. Part of the 'contaminates' may also be considered as archaeological remains. Any mitigation strategies that intend to remove or remediate such contamination will need to have in-built mechanisms for dealing with such Cultural Heritage, specifically archaeological remains and associated impacts on architectural remains. For example, should a former mill pond be found to be a reservoir of contaminants any mitigation strategy that would involve its removal would also have to consider how any archaeological or architectural features or remains are treated.
6. There is limited reference to monitoring within this Scoping Report. Monitoring is a key element of SEA, and the methodology by which it is approached will help clarify the environmental success or otherwise of the proposed RBMPs.
7. In terms of the assessment of effects, it should be noted that there are cross-cutting issues between the conservation of built heritage (archaeology and architecture), nature interests, sustainable development and, potentially for this particular programme, an opportunity for increased awareness and enjoyment of the Cultural Heritage associated with waterways generally.
8. Beyond the above notes, EHS: Built Heritage considers that the draft Scoping Reports cover the relevant topics that we may need to comment on in the future. We look forward to future consultation about the RBMPs.

AIR AND ENVIRONMENTAL QUALITY

1. Air and Environmental Quality intend to submit further comments at a later stage.

WATER MANAGEMENT UNIT

1. The outline map of Neagh Bann IRBD (Fig. 1.2) does not reflect the fact that the River Blackwater forms the border between Cos. Tyrone and Monaghan.
2. The outline map of the North Eastern RBD (Fig. 1.2) does not reflect the correct location of Bangor.
3. The outline map of the North Western IRBD (Fig. 1.2) does not reflect the correct locations of either Ballybofey or Omagh.
4. Figure 3.1 of each document should include reference to both the Stockholm Convention and the OSPAR Convention in the International/EU Level section.
5. Table 3.1 of each document should include reference to the Stockholm Convention in the Environment Topic.
6. Table 3.2 of each document should include reference to the EU Dangerous Substances Directive (76/464/EEC) in the Water Topic.
7. Table 3.4 of the Shannon, Neagh Bann and North Western IRBD documents and Table 3.3 of the North Eastern RBD document should include reference to the Surface Waters (Dangerous Substances) (Classification) Regulations (Northern Ireland) 1998 (SR No. 397 of 1998) in the Water Topic.
8. Section 4.3.6 of each document should be expanded to include reference to possible inputs from agricultural chemicals especially pesticides and sheep dip, forestry, industrial chemicals, landfill, illicit dumps, commercial premises such as filling stations and transportation infrastructure as well as household usage.
9. The reports for all river basin districts use an old aquifer classification system for Northern Ireland and should be updated with the new aquifer classification system (attached).
10. The statement "rock hinder water flow" is not correct, as there are boreholes across Northern Ireland which supply households and farms. The reports should therefore reflect the fact that even less productive rock usually provides some water, which is used in Northern Ireland.

River Basin District (RBD)	section 4.2.3 water	section 4.2.8 soil and land use
North Eastern	<p>"...rocks...that hinder water seepage..."</p> <p>The majority of bedrock in the northern part of the River Basin District (RBD) consists of basalt, which is classified as an aquifer with a moderate potential productivity. Productivity ranges on a scale from poor, limited, moderate to high.</p> <p>Although the Ordovician/ Silurian bedrock of Co. Down is classified as an aquifer with a limited potential productivity, there are a number of boreholes (as in the basalts) that supply houses and farms.</p>	<p>Geological Survey of Northern Ireland (GSNI) can provide information on bedrock (solid) and superficial geology (drift, subsoil).</p> <p>Information on soils can be obtained from the Department of Agriculture and Rural Development (DARD) and the Agri-Food & Biosciences Institute (AFBI). Soil maps have previously been published by the Ordnance Survey of Northern Ireland (OSNI) on behalf of the Department of Agriculture and Rural Development (DARD).</p>
Neagh Bann	<p>"...rocks...that hinder water seepage..."</p> <p>For more information on bedrock aquifer classification in Northern Ireland please see attached report which also contains map</p>	see above
Shannon	see above	see above
North West	see above	see above

I hope this is helpful.



John Minnis

SEA Coordinator.

Unknown

From: Clarke, Eilish [eilish.clarke@doeni.gov.uk]
Sent: 25 January 2008 15:02
To: Richard Bingham
Subject: FW: DRAFT Scoping Document for the SEA of the RBMPs

Richard,

I am passing this comment on to you for information, despite it being a bit late

Regards

Eilish
Ext 30133

Tel 028 9262 3133
Fax 028 9267 6054

-----Original Message-----

From: Carswell, Mark
Sent: 23 January 2008 08:56
To: Clarke, Eilish
Subject: FW: DRAFT Scoping Document for the SEA of the RBMPs

Eilish

This arrived late from Ag Regs but worth noting.

Mark

-----Original Message-----

From: Wilson, Fiona
Sent: 22 January 2008 14:53
To: Carswell, Mark
Cc: McCavana, Kieran
Subject: FW: DRAFT Scoping Document for the SEA of the RBMPs

Mark,

Apologies for the late response

I noticed that in all of these scoping documents under the section:

'Preliminary Review of Northern Ireland Legislations, Plans, Policies and Programmes'
there is no mention under the 'water' topic of:

The Nitrates Action Programme Regulations (Northern Ireland) 2006 The Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 The Groundwater Regulations (Northern Ireland) 1998 or The Sewage Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990

As all these Regs contain provisions to prevent waterways and groundwater being contaminated with different pollutants and nutrients, I feel they should be considered in the RBMP SEAs.

Thanks,

Fiona

ext. 30102

Water Framework Directive: River Basin Districts - River Basin Management Plan/Programme of Measures :
Strategic Environmental Assessment Draft Scoping Report Templates
Environmental Protection Agency (EPA) – Comments Sections.

The following are comments in relation to the Draft Scoping Report Templates issued to the EPA in relation to the SEA for the national and international River Basin District River- Basin Management Plan (RBMP) and Programme of Measures (POMs).

The comments are based on a review of the Shannon International River Basin District RBMP/POM Scoping Report. The majority of the comments relate to the generic Scoping template and once considered can be reflected in the Scoping Reports for all RBD - RBMP/POMs.

Title Page

The title Page should include the logo of the competent authority.

Glossary /Abbreviations /References

There would also be merits in considering the inclusion of a Glossary of terms and Abbreviations as well as a section with key references referred to in document.

Section 1

Introduction:

Should there be reference to the coordinated approach to the initial phase of SEA Scoping in the introduction section.

Section 1.1 Water Framework Directive

Para 1: Sentence 1: “establishes a framework for...” consider inclusion of the following text

“the protection of inland surface waters, transitional waters, coastal waters and groundwater”.

Para 1: Delete “are” at end of line 4.

Para 2: Wherever reference to River Basin Management Plan (RBMP) should also be a reference to Programmed of Measures (POMs).

There would be merits in providing a brief description of the interrelationships between RBMPs/ POMs.

Section 1.2 RBD Text

Para 1: Line 1 – insert river between “cross border” and “basins”

Delete “in” from “largest in on island” Para 1 Line 3.

Para 5:

Line 3 - replace “dairy” with “milk”

Line 4 -several areas.... such as?

Line 6 - District boasts **several** (add) scenic landscapes...such as. Separate sentence for landscape.

WFD SEA Draft Scoping Template

EPA Comments

17 Jan 2008

Para 6:

Line 1- refer also to "protected habitats and species"

Section 1.3 River Basin Management Plan

Change title to include also Programme of Measures

Para 1

Line1 -Include throughout document reference to Programme of Measures (POMs) wherever mention RBMP.

Para 4 Contents of Programme of Measures

Clarify that bullet points reflect the Basic Measures 2 as set out in Article 11 Paragraph 3 of Water Framework Directive.

For consistency present POMs Contents in Box form as for outline contents of RBMP.

Section 1.4.2 Scoping

Figure1. 4 - Last Text Box –change “**Issue Scoping Report**” to Issues “**Draft Consultation Scoping Report**”

Section 1.4.3 SEA Guidance

A Consultation Draft Strategic Environmental Assessment (SEA) Process Checklist was posted on the EPA website www.epa.ie on 18th January 2008 for a six week consultation period. The “Checklist” can be viewed and downloaded at the following link: <http://www.epa.ie/downloads/consultation/name,24012,en.html>

Section 2 KEY FACTS

1st Bullet point- refer to “**prevention of further deterioration**”.

General

The Key Objectives should correctly reflect those aspects set out in Article 1 a to e of the WFD inclusive and the associate provisions set out therein.

It would be extremely useful if there could be a Figure included in the Draft Scoping Report showing the key stages in the SEA and RBMP/POM – making process. This would also highlight to the prospective SEA Team and the RBMP/POM Team, the need for integration at key stages in both the SEA and RBMP/POM making processes. This could be linked with Figure 1.3

The contact provided should be the agreed contact within the respective River Basin District Authority.

Section 3 –PLAN CONTEXT

Figure 3.1 Draft Hierarchy of Plans

The following should be included:

International EU level

- SEA Directive
- Floods Directive
- Draft/Proposed Soils Directive

WFD SEA Draft Scoping Template

EPA Comments

17 Jan 2008

- EIA Directive- relevant in the context of projects which may emerge from the RBMPs/POMs
- Major Accidents (Seveso Directive)
- Sewage Sludge Directive
- Urban Waste Water Treatment Directive
- Plant Protection (Products) Directive
- Nitrates Directive
- Integrated Pollution Prevention Control Directive

National level:

National Climate Change Strategy 2007-2012

Note; National Biodiversity Plan is currently under review.

Regional Level

Regional Waste Management Plan

Local Level

Heritage/Biodiversity Plans

Table 3.1 Preliminary review of International Legislation, Plans, Policies and Programmes

Consider including the following

Biodiversity

Ospar Convention

Waste

Include relevant Waste related Directives

Table 3.3

Energy

National Climate Change Strategy 2007-2012.

Section 4 –ENVIRONMENTAL BASELINE

Introductory Paragraph

Line 1- Replace “legislation “ with reference to the Water Framework Directive and SEA Directive.

Section 4.1 Current State of the Environment

Bullet Points

Include LANDCOVER as potential source of data.

Refer to the Northern Ireland State of the Environment Report (Currently in Draft?)

Include Central Fisheries Board and relevant Regional Fisheries Boards.

Include Waterways Ireland as potential source of information.

Discovery Ireland Programme may be a potential source of information on features of archaeological value.

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For last Bullet Point in Page 22, there may be merits in referring specifically to the information and outputs required under Article 5, Article 6 and relevant data associated with the monitoring programme established under Article 8 of the WFD.

Section 4.2 Preliminary Baseline

Section 4.2.1 Flora, Fauna and Biodiversity

Para 2 –The link between protected sites and water should be highlighted. In particular the nature and extent of wetlands and related habitats and species e.g. Shannon Callows.

Para 4- Useful to refer to the source of this information. Is this the current situation taking into account the most recent NPWS information.

Para 6 –The National Biological Records Centre is also a potential source of information relating to biodiversity, flora and fauna.

Section 4.2.3 Water

Comments re: Shannon International RBD

Should highlight that water levels on the Shannon are managed.

Highlight the “vulnerability” of the groundwater resources within the “karstified limestone geology”.

Section 4.2.4 Air and Climate

Comments should be provided where possible relevant to air quality in the specific RBDs.

There may be relevant monitoring data available from licensed facilities e.g. power plants.

Section 4.2.5 Cultural Heritage

Para 1 – “lacustrine” – replace with “estuarine/coastal/ marine.

Para 2 – Refer to industrial archaeological features associated with water features- e.g. mills, canals etc.

Para 5 - Refer to “ Register of Battle Sites”.

Section 4.2.6 Landscape

Refer to Landscape Character Assessments and status within the local authorities within the RBDs.

Section 4.2.7 Material Assets

Comments re: Shannon International RBD

Para 1 - Give examples of intensive agricultural enterprises.

Line 5 – add “significant” as appropriate before “areas of forestry and peatlands”.

Line 6 - add “a range of” before scenic landscapes and give examples. Separate text on “fishing and boating” from “landscape” text.

Para2- “*Urban Waste Water Discharges in Ireland -A Report for the Years 2004 and 2005*”, (EPA 2007).

There would be merits in referring to a need for advanced planning and a phased approach to prioritizing the introduction of new and the upgrading of sub standard systems.

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Section 4.2.8 Soil and Land Use

Confirm Aerial Photography, CORINE and LAND Cover data will be used as appropriate.

Merits in including land use zoning, Integrated Coastal Zone Management and Flood Risk/ Management under this section also.

Section 4.2.9 Inter relationships

Line 1 -“SEA Directive” throughout.

Table 4.1 Consider the potential for interrelationships between Human Health and Biodiversity (Convention on Biodiversity?) and Material Assets wastewater treatment infrastructure.

Section 4.3 Existing Environmental Pressures/ problems.

Include environmental issues re: infill of wetland sites and general loss of wetland sites through reclamation, drainage.

Include water supply as an issue for consideration- this has particular relevance for the Shannon IRBD in the context of the “*Greater Dublin Water Supply –Major Source Development*”. Note Phase II of the development of this strategy and the associated SEA is currently underway. This can also copy to Section 4.3.8 Abstraction

Section 4.3.1 Waste water and Industrial Discharge

Line 6- Replace “pf” with “of”.

Refer to EPA publication – “*Urban Waste Water Discharges in Ireland -A Report for the Years 2004 and 2005*”, (EPA 2007).

Refer to “Infrastructure Needs Surveys” of all local authorities within RBD, in relation to surface and foul drainage (e.g. Current capacity, level of treatment and future predicted needs). In addition, refer to the requirement for licensing of discharges from wastewater treatment plants.

Section 4.3.2 Landfills, Quarries, Mines and Contaminated Lands

Refer to EPA publication –Code of Practice – Environmental Risk Assessment for Unregulated Waste Disposal Sites, (EPA, 2007).

Section 4.3.4 Wastewater from Unsewered Properties

Line 2- insert “an increasing” before “demand...”

Section 4.3.5 Forestry

Reference should be made to relevant national Guidelines for the Forestry sector.

Section 4.3.6 Usage and discharge of Dangerous Substances

Provide detail “other mines” which are being assessed in the Shannon RBD.

Section 4.3.7 Physical Modifications

Line 7 –Should read “Listowel”.

Section 4.3.8 Abstraction

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Refer to “*Greater Dublin Water Supply –Major Source Development*”. Note Phase II of the development of this strategy and the associated SEA is currently underway.

Additional Issues

Would consider the issue of Flooding meriting a separate heading.

Section 4.3.9 Local Issues

Consider a separate heading should be included dealing with “Bathing Waters”.

Section 4.3.9.1 Invasive/ Alien Species

Include other alien species such as *Lagarosiphon major* (*Curly leaved water weed*), and possibly also *Pelagica noctiluca* (*mauve stingers*).

Would also be merits in referring to “algal blooms” including “toxic algal blooms”. Reference should be made to the need for co-ordinated eradication, control and awareness campaigns regarding “alien/ invasive species”. The Central Fisheries Board will be able to advise on the nature, extent and success of any programmes already in place.

Section 5 SCOPING

Section 5.1.2 Temporal Scope

Para 1- Refer again to RBMP and POMS. Clarify the timescale for review applies to both.

Where refer to “range of effects” – include the full range of effects as required under the SERA Directive.

Section 5.2 Scoping of Strategic Environmental Assessment

Clarify “responsible agency”

Table 5.1 Additional Issues for inclusion and consideration

Note “Impacts”/ “Effects” refers to the full range of effects as set out in Annex I of the SEA Directive.

Biodiversity, Flora and Fauna

Requirement for Appropriate Assessment under Article 6 of the Habitats Directive
Effects on invertebrates.

Soil / Geology

Effects of discharges on receiving aquatic sediments – e.g. metals.
Forestry includes –Afforestation / Deforestation

Water

For Bullet Point “*Maintaining Good Quality Status*”, consider replacing with “*Maintaining High and Good Status Sites*”

Include the following additional points:

Effects of point source discharges

Integrated Coastal Zone Management

Effects on Drinking Water Quality

Effects on Bathing Water Quality

Good ecological potential for Heavily Modified Water Bodies

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Good ecological potential for Artificial Water Bodies e.g. canals.
Integrated Coastal Zone Management

Section 5.3 Parts of the RBMP to be Assessed

Table 5.2 Proposed Parts of the RBMPs (and POMs!) to be assessed.

Items 2, 3, 4 and 6, while not being assessed, these will, however, form the basis of and also inform the assessment. There would be merits in acknowledging this in Table 5.2.

Section 6 FRAMEWORK FOR ASSESSING ENVIRONMENTAL EFFECTS

Section 6.1 Draft SEA Objectives

The Draft SEA Objectives should be presented and discussed at Workshop with key Stakeholders during the SEA Process for RBMPs/ POMs.

Table 6.1 Draft SEA Objectives

Objective 1

Consider inclusion of Soil Biodiversity

Objective 3

Consider inclusion of Water Conservation

Objective 7

Consider inclusion of Planned Phased introduction of upgraded wastewater treatment Infrastructure.

Section 8 ALTERNATIVES

Consider placing “Section 7 –Alternatives” between Section 5 and 6.

There would be merits in exploring the Alternatives set out and other potential alternatives by way of a Workshop(s) with key staff within the RBMP /POM Project Team, the SEA Team and key stakeholders.

Section 7 PROPOSEED CONSULTATION TIMETABLE AND METHODS

Consider including relevant timescales also for the preparation of the RBMPs/POMs.

Section 9 NEXT STEPS

Line1 -Include throughout document reference to Programme of Measures (POMs) wherever mentions RBMP.

Para 3- Replace Final Scoping Report with “Draft Consultation Scoping Report” or equivalent, to reflect the ongoing nature of the scoping process.

Para 4-Line 1 –Include text in bold - “**environmental assessment process** and the drafting of the Environmental Report.”

Para 4-Line 2 -Replace “should” with “will”.

APPENDICES

Include relevant Appendices.

WFD SEA Draft Scoping Template

EPA Comments

17 Jan 2008

Unknown

From: nathy.gilligan@opw.ie
Sent: 17 January 2008 17:17
To: Richard Bingham
Cc: info@shannonrbd.com; tmcnally@Donegalcoco.ie; ofinn@GalwayCoCo.ie; Sean.OBreasail@CorkCoCo.ie
Subject: SEA Draft Scoping

Richard

(Copies sent to Jean Hartery, Tony Mc Nally, Olivia Finn & Sean O Breasail for their records as these RBDs had all previous circulated emails requesting feedback)

We have two comments to add as our feedback to the draft RBD SEA Scoping documents in circulation at present. These comments are of a generic nature and are applicable to all RBD drafts.

* Table 3.3 - Replace "Arterial Drainage Act 1945" with "Arterial Driantage Acts, 1945 and 1995" which will include the Arterial Drainage (Amendment) Act, 1995. The associated text "Summary of Objectives" is an extract from the legislation but we suggest re-phrasing it to make it easier for public to read e.g. "Deals with the improvement of lands by drainage and the preventing or substantially reducing the flooding of lands. Sets up the process of Arterial Drainage Schemes and provides for the maintenance of these works. Also implements a number of drainage and flood reduction related measures such as approval procedures for bridges and weirs and iterates reporting requirements for Drainage Districts."

* Our understanding of the ethos behind the SEA Directive is to strive for proper balance between the three pillars of sustainable development i.e. Environment, Social & Economic. Correctly, the Scoping process addresses aspects as prescribed in the legislation but as a general observation, we find little reference to the social / economic balance in the current Scoping documentation. On the assumption that there are going to be some very "hard hitting" recommendations emanating from the WFD process, it may be prudent to include some explanation of how an environmental / social / economic balanced decision will be achieved. This issue has been touched upon at some RBD Management Group meetings with an example as follows: For a catchment containing Freshwater Pearl Mussel, a blanket restriction on many classes of development may be recommended by WFD, but if this action would have serious social and economic impacts on the region, how will the SEA dovetail with the WFD requirement to attain a sustainable solution?

Regards

Nathy Gilligan
Environment Section
OPW
Headford 093 35456

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29 November 2007

AN ROINN COMHSHAOIL,

OIHDREACHTA AGUS

RIALTAIS ÁITIÚIL

DEPARTMENT OF

THE ENVIRONMENT, HERITAGE

AND LOCAL GOVERNMENT

Our Ref: G2007/679

Mr. Tony McNally,
Donegal County Council,
County House,
Lifford,
Co. Donegal.

Re: Strategic Environmental Assessment for River Basin Management Plans and Programmes of measures for the Shannon IRBD- Clare, Cavan, Cork, Galway, Laois Leitrim. Limerick. Longford, Mayo Meath Offaly Roscommon, Sligo, Tipperary and Westmeath. (Scoping Environmental Report)

A Chara,

We refer to your recent notification requesting this Department's comments in relation to the above. Outlined below are the built heritage recommendations and nature conservation recommendations of the Department of the Environment, Heritage and Local Government.

DÚN SCÉINE

Archaeological:

LÁNA FHEARCAIR

The potential impacts on any riverine, lacustrine or maritime archaeological heritage should be taken into account. In assessing impacts on archaeological heritage regard must be had to the following:

BAILE ÁTHA CLIATH 2

International Conventions

DÚN SCÉINE

The European Convention on Protection of the Archaeological Heritage known as the Valletta Convention of 1992. This was ratified by Ireland in 1997 and requires that appropriate consideration be given to archaeological issues at all stages of the planning and development process.

HARCOURT LANE

DUBLIN 2

National Policies, Plans and Programmes

National Heritage Plan (2002) - accessible at www.environ.ie. The core objective is to protect our heritage. In this regard the 'polluter pays' principle and the precautionary principle are operable. Specifically in regard to archaeological heritage the 'Framework and Principles for the protection of the archaeological heritage' document (1999) sets out the archaeological policies and principles that should be applied by all bodies when undertaking or authorising development.

Tel: +353 1 888 3109

Fax: +353 1 478 0806

Relevant Policies and Plans at County Level

County Development Plan and Local Area Plans. Drafts of these documents should always be forwarded to this department for comment.

Archaeological Heritage

The area's monuments can be identified from the Record of Monuments and Places for the various counties. Those in areas likely to be effected by any proposals arising from the proposed management plan or programme of measures should be identified and there should be a commitment to undertake a full archaeological assessment in advance of any works that may impact on such monuments.



Architectural Heritage:

'Architectural Heritage' is a material asset, which is to be taken into account in Strategic Environmental Assessment. The attached Appendix 1 is put forward as guidance in this respect.

The content of the Appendix is set out in so far as it applies under S.I. Nos. 435/2004 and 436/2004.

Nature Conservation:

The Environmental Report should address and include:

Identify and protect biodiversity.

Information on the nature conservation designations (SACs, SPAs and NHAs) within the IRBD including site synopsis, maps and any finalised management plans should be provided in the Environmental Report. Sligo, Leitrim, Roscommon, Cavan and Longford have an extremely rich and varied natural heritage. Large sections of the Shannon system have European conservation designations i.e. Special Areas of Conservation (SAC) and Special Protection Areas (SPA). These included the Middle Shannon Callows SAC 216 & SPA 4096 and Lough Ree SAC 440 & SPA 4064. Large areas have also been designated as Natural Heritage Areas or are listed as proposed Natural Heritage Areas e.g. the Suck River Callows NHA 222 (also SPA 4097) and Lough Bofin & Lough Boderg pNHA 1642. It is important that all sites (including designated, candidate and proposed sites) within the IRBD are included in the Environmental Report. Many sites are awaiting formal designation and it is imperative that the Environmental Report recognises these ecologically important and sensitive areas. Information and the boundaries of sites with nature conservation designations are available from NPWS (Site Designations Section or www.npws.ie). The Department of the Environment, Northern Ireland should be advised to seek the most up-to-date digital boundaries available from NPWS.

Sites with nature conservation designations are intended to form the national network of sites of national and international importance for biodiversity. They do not however include all areas of biodiversity or natural heritage importance, and this should be recognised in the Environmental Report. Information on sites/areas that are known to contain sensitive non-designated habitats (including Annex I, EU Habitats Directive), especially freshwater and wetland habitats, should be included.

Sensitive surface waters (lakes and watercourses), catchments and floodplains within the plan area, e.g. designated Salmonid Waters and their catchments and other ecologically important and sensitive freshwater and associated habitats including floodplains, lakes and wetlands. These are areas that are sensitive (especially Salmonid waters) to any forms of pollution, siltation or nutrient enrichment, including from development, surface water run-off, outlets from wastewater systems, in-channel works, etc.

Information on sites/areas that are known to support populations of rare and protected species, including, rare plants that are legally protected under the Flora Protection Order, 1999, and other noteworthy species e.g. Otter (EU Habitats Directive Annex II species), etc. Information on rare and protected species is available from NPWS.

Information on important bird sites in the IRBD, including I-WeBS data, bird counts, etc. and information on important breeding sites. Information can be sourced from BirdWatch Ireland & NPWS (Birds Unit).

Information from national surveys of wetlands, blanket bogs, raised bogs fens, turloughs, Badger, Otter, Red Grouse, Hen Harrier, Kingfisher, Peregrine Falcon, Irish Hare, Frog, etc. – various published and unpublished reports and surveys.

Threats to ecological connectivity or physical/ecological links between sites, areas and features outlined in 1 above. Ecological networks are being lost or fragmented.

Development. Since the onset of the Celtic Tiger there is an ever increasing demand for all types of land for development including afforestation and aquaculture. The use of land and water within the IRBD for development must be documented. Associated closely with development is the increasing demand for ground and freshwater for water abstraction and the need to identify new sources e.g. Greater Dublin Water Supply. The Shannon is being investigated as a possible future water source for the Greater Dublin Area. The loss of important non-designated floodplains, lakes and wetlands due to growing pressure from development (including infilling) and subsequent change to the risk of flooding must be a consideration in preparing the IRBP and POM. The protection of wetlands, the maintenance and protection of floodplains, flood zones and floodplain function is paramount in the protection of our water resource. The siting of development away from sites with unsuitable soils, geology or ground conditions (including deep peat soils, wetlands, areas prone to flooding) must be a consideration. There are also issues relating to effluent from urban wastewater treatment and wastewater treatment systems for single houses and larger developments, including their siting and maintenance, and associated risks to surface waters and groundwater.

Recreation and amenity. The use of waterways within the IRBD for recreation and amenity activities must be documented. There is a risk of habitat fragmentation and loss of ecological connectivity as a result of recreation or amenity development. Any amenity or recreation development in or near surface waters should follow best practice with regard to protecting surface waters from pollution or siltation, and from the invasion and spread of invasive non-native species. Best practice should also be followed with regard to construction of paths or walkways near surface waters, including the design and construction of bridges/culverts, and with regard to consultation with the relevant statutory bodies. Bridges/culverts should be designed to allow for the movement of fish, otter, macro-invertebrates, and other aquatic species under all but extreme flow conditions; dry mammal ledges may also be required. Amenity and recreation development should follow sound ecological principles with regard to design, location, construction and operation of any facilities, including any landscaping, screening and provision of lighting. Planting or landscaping in any areas of ecological value should be of native species only, and these should be of local provenance and in keeping with the local vegetation and ground conditions. The IRBP and POM should also address restrictions on the use of jet-skis from the perspective of noise and disturbance to wildlife.

Invasive species. Amenity and recreation are facilitating the invasion and spread of invasive non-native species (e.g. Zebra Mussel or Curly Leaved Pondweed (*Lagarosiphon major*)) in our freshwaters. It should be noted that the movement of boats and other craft between water bodies presents a real threat of introducing or spreading these non-native invasive aquatic species. This should be highlighted in the study, and discouraged.

Other sources of data for the Environmental Report:

FIPS habitat indicator mapping, soils and subsoils, available from the EPA;

Surface waters, including lakes and watercourses, and coastal waters, available from the EPA;

Data on fish stocks and fisheries from the Shannon Regional Fisheries Board.

Should a decision be taken to carry out a Strategic Environmental Assessment, this Department will be pleased to provide further advice on the contents of the Environmental Report at scoping stage.

Please note that the European Commission has re-emphasised the importance of retaining hard copies of screening decisions on planning authorities' files.

Kindly forward to the following address a notification of the Council's decision on whether a Strategic Environmental Assessment will be undertaken:

The Manager,
Development Applications Unit,
Department of the Environment, Heritage and Local Government,

Dún Scéine,
Harcourt Lane,
Dublin 2.

If you have any further queries please do not hesitate to contact the undersigned.

Mise le meas,


Teresa Halloran,
Development Applications Unit.

Appendix 1

Proposed River Basin Management Plan and Programme of Measures for the Shannon International River Basin District

Scoping of Strategic Environmental Assessment - Architectural Heritage

1. Introduction

Of its nature the proposed River Basin Management Plan and Programme of Measures are likely to amount to being 'high level' documents. Significant effect on architectural heritage usually occurs at specific site locations, i.e. at a 'low level'. However, there is a potential in putting forward plans or programmes that some specific proposals or projects may be included which would have an predictable impact on significant elements of architectural heritage within the administrative area of the programme.

While such projects are likely to be subject to Environmental Impact Assessment in their own right, the SEA for the plan or programme should be aware of and take note of any possible impact.

The following is put forward within that context.

1.1 As set out in Section Table 4B of the "Guidelines for Regional Authorities and Planning Authorities", among the list of Environmental Protection Objectives is "Cultural Heritage", viz.

Promote the protection and conservation of the cultural, including architectural and archaeological, heritage

1.2 It should be noted that the Guidelines also suggest in Table 4B that valued natural and historic landscapes, and features within them, should be conserved and enhanced. Some of these historic landscapes and features may constitute part of the architectural heritage of a locality.

1.3 As set out in Section 1.7 of the Guidelines, Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan before a decision is made to adopt that plan.

The effect on architectural heritage should be taken into account as part of the systematic appraisal of policy options at the various stages in preparing the proposed River Basin Management Plan (RBMP) and Programme of Measures (POM) for the Shannon International River Basin District (IRBD). It should follow from this that any proposals included in the RBMP/POM relating to the physical form of a locality are influenced in a positive manner by giving due recognition to significant elements of architectural heritage in the vicinity. This should assist in establishing a better built and natural environment within the administrative or catchment area taken in by the RBMP/POM.

1.4 As noted in Section 3.14 of the Guidelines, certain strategic issues will already have been determined in the current development plans for the various counties or administrative areas within the plan/programme areas and, in turn, may have set some parameters for the RBMP/POM.

1.5 The SEA process in relation to the RBMP/POM can be used to add value to plan-making by using the existing architectural heritage of a locality to establish both a sense of place and local identity within the administrative or catchment area taken in by the RBMP/POM.

1.6 The SEA process should also identify the implication of the scale, type and location of significant development envisaged in the vicinity of structures of architectural heritage merit, including demesne or institutional lands, during the life of the plan/programme and the perceived effect of that development on those elements of the architectural heritage.

1.7 Information in respect of the architectural heritage of any locality should inform the content of the RBMP/POM from the outset. In assembling the baseline description of the current physical environment, as recommended in Item B of Table 4A of the Guidelines, the extent of the architectural heritage can be described in general terms.

As structures of merit have a physical presence, much of the information relating to the architectural heritage of the administrative or catchment area taken in by the RBMP/POM will be evident on the maps used in the work of establishing new proposals. In addition, any areas of architectural heritage significance, including demesne lands or structures in proximity to the extent of RBMP/POM, should be taken into account in any such proposals.

2. Defining Architectural Heritage

2.1 The term "*architectural heritage*" is defined in the Architectural Heritage (National Inventory) & Historic Monuments Act, 1999, as meaning – "*all*

(a) structures and buildings together with their settings and attendant grounds, fixtures and fittings,

(b) groups of such structures and buildings, and

(c) sites,"

which are of architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

2.2 Section 10 (2) of the 2000 Planning and Development Act states that, among others, a development plan shall include objectives for-

"(f) the protection of structures, or parts of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest;

(g) the preservation of the character of architectural conservation areas".

2.3 For guidance on what is encompassed by the term "*architectural heritage*", it is recommended that reference is made to Sections 2.5.4 to 2.5.20 of the "*Architectural Heritage Protection, Guidelines for Planning Authorities, 2004*" issued by the Department of the Environment, Heritage and Local Government.

2.4 For guidance on what is encompassed by Architectural Conservation Areas (ACA), it is recommended that reference is made to Sections 3.3 and 3.4 of the "*Architectural Heritage Protection, Guidelines for Planning Authorities, 2004*" issued by the Department of the Environment, Heritage and Local Government.

3. Level Of Detail And Datagaps

3.1 Depending on the nature and scale of the plan, Section 4.15 of the Guidelines suggests that some of the following baseline data may be relevant -

A statistical overview of the area, taking in its physical size, its current and estimated future population, population density, settlement sizes, broad mix of land uses, etc.

A description of the physical environment of the area, including topography, landscape characteristics, availability of natural resources

Location and type of protected areas (Special Areas of Conservation, Architectural Conservation Areas, etc.) and Protected Species, and the extent to which they are experiencing, or are likely to experience, development-related pressures

3.2 Within the administrative or catchment area taken in by the RBMP/POM in Counties Clare, Cavan, Cork, Galway, Laois, Leitrim, Limerick, Longford, Mayo, Meath, Offaly, Roscommon, Sligo, Tipperary and Westmeath it may be that some structures which could be considered to constitute the architectural heritage of the county may remain to be considered as such. The RPS is a subset of the architectural heritage of a locality which the planning authority considers specifically to of special interest under specific headings.

The opportunity exists to determine if other structures of architectural heritage merit exist and remain to be identified in the various localities taken in by the proposed RBMP/POM. It should be recognised that structures of architectural heritage merit, though not put forward for inclusion in the RPS, may still contribute to the identity of a locality. This should be taken into account in the RBMP/POM. The natural and built environment of these four counties is unique in form and character. The contribution of any features the built heritage which give identity to and enhance that uniqueness should be given recognition in the RBMP/POM.

3.3 Existing known datasets can be used to inform the work of identification of the architectural heritage of the locality. This include -
survey work undertaken by the planning authority for the purpose of compiling current development plans or for setting out a new development plan
relevant NIAH survey work of various areas within each of the counties
Survey work carried out by local interest groups or other parties
Published sources

3.4 As noted by Section 4.7 of the Guidelines, Article 5 of the Directive states that the Environmental Report shall include information that may be “*reasonably*” required. As set out in Section 4.8 of the Guidelines, while this means is that SEA involves collating currently available, relevant environmental data; it does not require “*major new research*”. Where data deficiencies or gaps exist, the Guidelines accept that this can simply be acknowledged in the Environmental Report.

3.5 However, it is not expected that significant gaps in the dataset relating to architectural heritage should arise in the RBMP/POM. A survey of areas to be taken in by the RBMP/POM, carried out for the purpose of planning new proposals, is likely to identify most of the significant elements of the built environment in those localities. If a competent architectural heritage assessment is made of that information, it will identify any elements of architectural heritage merit in these localities. In turn these structures should be given due recognition, as appropriate, in setting out the physical land-use planning in the RBMP/POM.

3.6 An opportunity should also be taken as part of this process to identify any areas of special character within the RBMP/POM which should be preserved by means of one or more Architectural Conservation Areas of appropriate extent within Counties Clare, Cavan, Cork, Galway, Laois, Leitrim, Limerick, Longford, Mayo, Meath, Offaly, Roscommon, Sligo, Tipperary and Westmeath. This would apply to the various towns, villages or other settlements within each of the counties. It would also apply to demesne or other lands where the character is of value and is worth preserving.

3.7 This does not call for “*major new survey work*” but rather taps into standard procedures used in setting out the RBMP/POM. However, on foot of any survey work which is to undertaken in any event, any particular structures which are identified and are, in the opinion of the planning authority, are of special interest should be put forward for inclusion in the RPS in the County Development Plan.

4. Scope of Baseline Information to be included in Environmental Report and "Do Nothing" Scenarios

4.1 It is suggested in Section 3.16 of the Guidelines that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities.

It is recommended that work on the RBMP/POM should proceed in parallel with making a continuous review of the effect of proposals on the architectural heritage of Counties Clare, Cavan, Cork, Galway, Laois, Leitrim, Limerick, Longford, Mayo, Meath, Offaly, Roscommon, Sligo, Tipperary and Westmeath.

4.2 As suggested in the Guidelines, Item B in Table 4A creates two main requirements, viz. a baseline description of the current physical environment within the area, with particular reference to those aspects of the environment which are experiencing plan-related problems at present, or are likely to be significantly affected by implementation of the plan. a "*do-nothing*" scenario: an estimate of how current environmental conditions would change over time without implementation of the plan, i.e. as if there were no plan.

4.3 Section 4.13 of the Guidelines states that the purpose of the baseline description is to identify the current state of the environment, against which the likely effects of implementing the plan can be assessed. It follows from this that the plan's impacts can be estimated as the difference in environmental conditions with and without implementation of the plan.

4.4 If the purpose of the RBMP/POM is to bring about significant and appropriate change in the river basin management of the IRBD then there may be implications for all structures of architectural heritage merit within the catchment area. However, the implementation of a RBMP/POM may represent a positive opportunity for those structures. In a "*do-nothing*" or "*do-minimum*" scenario it may be that under-use or a lack of use will mean that they have either no viable future or that their continued existence is threatened. This aspect should be addressed in the SEA process.

If structures of architectural heritage merit are incorporated, as appropriate, in new plans or programmes within the IRBD, they can be promoted to have either a continued use or appropriate new use. This may present an opportunity for those structures to have a viable and continuous future while contributing to the sense of identity and establishing a sense of place in various localities across the IRBD.

5. Monitoring and Cumulative Effects

5.1 In monitoring the outcome of the RBMP/POM, it is likely that "*qualitative indicators*" rather than "*quantitative indicators*" are more appropriate in adjudging subsequent environmental impacts on the architectural heritage in a locality.

5.2 Section 1.9 of the Guidelines states that the SEA process will play an important role in addressing the cumulative impacts of individual projects. An influence in this respect will be cumulative effect of new structures placed in proximity to structures of architectural heritage merit. Where the quality of design of new structures complements existing items of architectural heritage merit, these new structures will enhance the character of the area concerned. Indeed they may be recognised in time as constituting elements of the architectural heritage of the locality. Emphasis should be placed in the RBMP/POM in setting standards for the quality of the design of all new structures within the IRBD where the provision of such new structures is set down as part of the RBMP/POM.



Allihies, County Cork, Ireland
<http://www.friendsoftheirishenvironment.org>

Seán Ó Breasail, Project Co-ordinator
South Western River Basin District
5 Eastgate Avenue, Little Island
Co. Cork
10 January, 2007

Re: Draft Scoping Report for the proposed Strategic Environmental Assessment [SEA] and its Environmental Report for the South Western River Basin Management Plan

Dear Mr. O'Breasail;

We refer to the above document which you have kindly circulated for comment to the ENGO Network SWAN.

While we appreciate that you are under no legal obligation to accept comments at this stage and that there will be a further opportunities to be consulted when the actual assessment process begins in early 2008, we would hope to draw your attention to a number of issues that we have identified as potential weaknesses in the Draft Scoping Report in order that they be addressed as early in the SEA process as possible. If our comments at this stage are not appropriate, we would be grateful if you could ensure that they are taken on board subsequently.

We note the Advice of the Department of Marine and Natural Resources on the purpose of Scoping:

The purpose of scoping is to identify the likely extent (geographic, temporal and thematic) and level of detail for the assessment and the information to be included in the SEA and Environmental Report. Scoping, in particular should identify those issues that are of most importance so that these can be addressed in most detail. Scoping should ensure that all relevant issues are identified and addressed in an appropriate manner. The scoping process identifies the issues that are likely to be important during the SEA process and eliminate those that are not of significance. While scoping is primarily focused on identifying the impacts to be assessed and which of these are the most important, scoping should also address other issues including:

- Types of reasonable alternatives which ought to be considered*
- Information and studies needed to characterise the existing environment*
- Methods used to predict the magnitude of environmental effects*
- Criteria against which the significance of effects should be evaluated*
- Any further consultations to be carried out*
- Environmental objectives and targets*

Yours, etc.,

Tony Lowes

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Company No. 326985. Directors: Caroline Lewis, Tony Lowes.

COMMENT ON DRAFT SCOPING REPORT FOR THE PROPOSED STRATEGIC ENVIRONMENTAL ASSESSMENT [SEA] AND ITS ENVIRONMENTAL REPORT FOR THE SOUTH WESTERN RIVER BASIN [SWRBD] MANAGEMENT PLAN

KEY POINTS:

- the use of permissive words such as '*may*' or '*where feasible*'. The subjective quality can lead to uncertainties in interpretation of responsibilities at a later stage.
- protected sites and species within this RBD must be listed separately from national sites
- the status of the water bodies in the RBD should be listed
- material asset baseline should include marine resources, including marine geological resources
- soil and land use should include the scope, impact or evaluation of sedimentation of rivers and estuaries caused by soil erosion
- the phosphorous and nitrogen load from unsewered properties and forestry is not given
- there is no recognition of the far higher water quality requirements for the protected Fresh Water Pearl Mussel.
- the drainage of land and the change of land use to forestry on peat soils is not being defined using the definition for peat soils given under the 'Nitrates Regulations'
- other invasive species should be listed and monitored, including marine species. Rhododendron and Japanese knotweed should be included in this list as they grow extensively along stretches of rivers within the aquatic zone.
- the suggestion that 'short-term assessment may not be very constructive' infringes obligatory requirements under Phosphate Regulations and must consider the short term environmental impacts of the RBDP in conjunction with other legislative requirements, plans, or programmes and their timeframes.
- SEA Objectives to protect human health in undertaking water management activities should include the protection of bathing waters
- the hyporheic zone has not been considered.

At the outset, we would draw your attention to the use of permissive words such as 'may', 'should' or 'where feasible'. The subjective quality can lead to uncertainties in interpretation of responsibilities at a later stage.

Baseline

4.2.1. Flora, Fauna and Biodiversity

We are concerned that the Preliminary Baseline section on Flora, Fauna and Biodiversity refers only to the national number of protected sites while the relevant issue is the number of protected sites within this River Basin District including coastal and marine areas.

Similarly, while listing the number of species of plants recorded nationally as endangered, vulnerable, rare and intermediate, the relevant information would be the number of these species contained in this River Basin District, including coastal and marine districts.

4.2.3 Water

While outlining the catchments, lakes, marine waters and groundwater influences, the Scoping Report gives no indication of the status of the water bodies including estuarine and marine.

4.2.7 Material Assets

While indicating the intention to compile information on infrastructure, including rail, road, water supply, wastewater treatment, *etc.* as part of the material assets baseline, no mention is made of marine resources, including marine geological resources which may be under threat through extraction, *etc.*

4.2.8 Soil and Land Use

While the Draft Report suggests that information on soils in the district will be gathered from the Geological Survey of Ireland and Teagasc databases and additional aerial mapping and Corine data 'may' be used to examine land cover, no mention is made of the scope, impact or evaluation of sedimentation of rivers and estuaries caused by soil erosion.

Further, the use of word 'may' is as noted above inappropriate in this document. Land cover would give key information relating to land use and indicate potential areas of soil erosion and inappropriate land management and should be a commitment of the Scoping process, not a discretionary possibility.

Existing Environmental Pressures / Problems

While this Draft report summarises the Significant Water Management Issues (SWMI) previously identified for the South Western RBD, if the two sources in Wastewater and Industrial Discharges [4.3.1] and Agriculture [4.3.2] make up 'over' 41% of the yearly phosphorous load and 86% of the nitrogen load, where do the missing 59% and 14% respectively come from and how is this going to be addressed?

What proportion of the phosphorous and nitrogen load is estimated to come from unsewered properties? [4.3.3]

What proportion of the phosphorous and nitrogen load is estimated to come from forestry? [4.3.4]

While recognising that afforested areas include sensitive salmon and trout spawning areas' which is 'underpinning the need for adequate control on forestry operations in sensitive areas'

there is no recognition of the far higher water quality requirements for the protected Fresh Water Pearl Mussel.

Further, forestry on peat soils (using the definition for peat soils given under the 'Nitrates Regulations') as well as forestry on steep slopes on mineral soils result in significant soil erosion, particularly in the west due to high and intense rainfall. These land use considerations must form part of the scoping process of the SEA.

The ongoing drainage of land for agriculture and forestry particularly on peat soils (using the definition for peat soils given under the 'Nitrates Regulations') has a significant impact on flooding and water quality absent from this Draft report [4.3.6 Physical Modifications].

Alien Invasive Species

Aside from the eight 'species of main concern in Ireland' which the EPA identified, four of which have this Draft Report notes have now been found in the South Western District, it is vital that other invasive species are listed, including marine species, and monitored. Preventative and remedial measures for part of the POMs as invasive species are one of the biggest threats to native biodiversity. Rhododendron and Japanese knotweed should be included in this list as they grow extensively along stretches of rivers within the aquatic zone. Any impact of marine invasive species should be considered.

Temporal Scope

This Draft Report states that

The RBMP will cover the period from 2009 to 2013, with the RBMP to be reviewed after five years. In line with the legislation, short, medium and long-term impacts will be considered during the assessment. However, short-term assessment may not be very constructive as implementation of the Plan, and the associated Programme of Measures, will take time to be implemented and take effect; therefore, the results of such an assessment are likely to be similar to a 'business as usual' scenario for the short-term. As such assessments will be made for 2013 (as a medium term horizon) and 2030 (as a long term horizon), which represents the life of the current WFD.

The requirement for monitoring and therefore assessment of status under the Phosphate Regulations are clear and obligatory. Any SEA must consider the short term environmental impacts of the RBDP in conjunction with other legislative requirements, plans, or programmes and their timeframes.

This Draft Report should in fact maximise opportunities to optimize the information collection and reporting processes so that information collected can be used to satisfy all appraisal requirements.

On: **Page 31 in Table 5.2** Proposed Parts of the RBMPs to be Assessed the draft report states that :

*5 A list of the environmental objectives established under Article 4 of the WFD for surface waters, groundwater and protected areas.
Yes – The strategic objectives/direction of the RBMP will be assessed. The specific objectives set for each water body will not be assessed as they are set for a local level and are beyond the strategic scope of the assessment.*

We assume that a SEA will be carried out for each water body and this should be stated here.

This table also contains:

7 A summary of the programme or programmes of measures adopted under Article 11 of the WFD.

Yes – All substantially new “national” measures will be assessed. Measures which relate to the continuation of existing activities (e.g. existing legislation) are not proposed to be assessed.

However, these will be captured in the assessment of the overall strategic direction of the RBMP.

8 A register of any more detailed programmes and management plans for the river basin district dealing with particular sub-basins, sectors, issues or water types, together with a summary of their contents.

Yes – Where sub basin measures are identified, these will be assessed where they are significant. Again, only substantially new measures will be assessed.

Under points 7 and 8 all measures should be assessed in order to evaluate their combined impact.

and

Point 9 A summary of the public information and consultation measures taken, their results and the changes to the Plan made as a consequence.

No, this is a statement about the consultation arrangements put in place. SEA consultation arrangements may be incorporated into this. The SEA Statement may also be incorporated into this.

We disagree with this evaluation – Point 9 is not merely a statement about consultation arrangements but included the results of any such consultation. We contend that as the SEA forms part of the consultative process it is essential that a summary of the public information and consultation measures taken, their results and the changes to the Plan made as a consequence.

In Table 6.1: the draft report states that SEA Objectives to protect human health in undertaking water management activities are to

- *Protect drinking water areas (including private abstractions)?*
- *Contribute to the mitigation of floods and droughts?*

The objectives should include the Protection of bathing waters

Under 6.3 IMPACTS, MITIGATION AND MONITORING the draft states:

‘Where significant adverse impacts are identified during the SEA process, relevant and appropriate mitigation measures will be provided in the Environmental Report. In order to ensure implementation of the recommended measures, monitoring arrangements will be provided and where feasible will include details as to the frequency of monitoring, and analysis and reporting on monitoring.’

Where feasible should be omitted. It is vital that monitoring frequency and data are made available to all stakeholders.

In addition we note that

1:Pressures on the Marine environment are not adequately addressed:

In determining the likely significant effects of the plan or programme regard should be had to the need for the sustainable development of the inland and marine fisheries resource (including the conservation of fish and other species of fauna and flora, habitats and the biodiversity of inland and marine water ecosystems).

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Consideration should be given to potential significant impacts on:

- Water quality
- Surface water hydrology
- Fish spawning and nursery areas
- Passage of migratory fish
- Areas of natural heritage importance including geological heritage sites
- Designated marine protected areas
- Biological Diversity
- Ecosystem structure and functioning
- Seabirds and marine mammals
- Fish and shellfish cultivation
- Sport and commercial fishing and angling
- Amenity and recreational areas
- Mineral and aggregate resources
- Sediment transport and coastal erosion
- Navigation
- Other legitimate use of the sea

(Source

http://www.dcmnr.gov.ie/Marine/Environmental+Assessment/Environmental+Assessment.htm#Scoping_Requirements accessed 02 January 2008)

2: The hyporheic zone has not been considered.

The term 'hyporheic zone' is used to refer to the zone beneath and adjacent to a river or stream in which groundwater and surface water mix. This zone can extend for some distance either side of a river channel and can be a direct path for pollutants into the aquatic environment.

Why is the hyporheic zone important?

The Water Framework Directive is beginning to drive a more integrated approach to the management of the aquatic environment. The understanding of flow and pollutant behaviour within aquifers and within rivers channels is relatively good, but the understanding of processes that occur at the interface of these systems, in the hyporheic zone, is poor. In order to deliver a more integrated approach to improving the aquatic environment there needs to be a greater focus on the role of the hyporheic zone.

(source <http://www.hyporheic.net/inforesources.html> accessed 07 Jan 2008)

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Dear Tony,

We have gone through the document attached and would take issue with some aspects, most particularly in regard to the references to the forest sector. We would like to draw your attention to the following:

Page 33, Section 5.2 Scoping of Strategic Environmental Assessment Topics, Table 5.1 Scoping of SEA Issues –

Soil, 1st bullet point.

We would question the following -

- Are not the 'impacts of forestry on the water environment' covered under bullet point 7, 'influence on land use practices (eg. fertilizer application) ?. Should this be included in the next section for water?.

Water, 2nd bullet point.

- (Suggested change) Should 'Water pollution from point of diffuse sources' not read 'Water pollution from point OR diffuse sources' Page 42, Section 7 Alternatives, Table 7.1 While we understand that this table is only an example which has been deliberately formatted to generate debate, we think that the proposed alternatives attached to the various SEA objectives could be deemed mischievous, demonstrating a lack of understanding of the sector, the statutory requirements on forestry apart from the WFD nor a proper understanding of the many positive benefits as much as the potential negative impacts of forestry on water quality. Also in Table 7.1 the suggestion of "Stricter Controls" suggests that strict controls are not already in place, i.e. that there is non compliance with Forest Service Codes of Practice and that there is less than adequate regard for environmental protection in the forestry sector.
- Also on Page 42 – Alternatives. We would recommend the inclusion of local authorities with the examples given.
- If you would like to discuss this further, please don't hesitate in contacting me or Dr. Philip O'Dea at our laboratory (01-2811451).

Yours sincerely,

Michael M. Delaney
Environment.

Unknown

From: Enda Thompson [ethompson@shannonrbd.com]
Sent: 17 January 2008 09:55
To: 'TONY MC NALLY (Labs)'
Cc: Richard Bingham
Subject: FW: SEA of Shannon IRBD
Follow Up Flag: Follow up
Flag Status: Red

Hi Tony

It's just been brought to my attention that we got one response from our MG members in relation to the SEA – see below

Enda

*Enda Thompson
Project Co-ordinator
Shannon IRBD Project
Mulkear House
Newtown Centre
Annacotty
Co. Limerick
Tel ++353 61 337914
email: ethompson@shannonrbd.com
Web: shannonrbd.com*

From: Jean Hartery [mailto:info@shannonrbd.com]
Sent: 17 January 2008 09:48
To: 'Enda Thompson'
Subject: FW: SEA of Shannon IRBD

Hi Enda

We just got the one!

Jean

From: Alan Coghlan [mailto:acoghlan@sfpc.ie]
Sent: 14 January 2008 09:34
To: info@shannonrbd.com
Subject: SEA of Shannon IRBD

Attn Jean Hartney

Page 25 Para one

There are four main port facilities on the Shannon Estuary – Aughinish Alumina, Moneypoint, Foynes and Ted Russell Dock Limerick.

Foynes and Limerick are small in terms of the annual tonnage going through both Aughinish and Moneypoint. Shannon Foynes Port Company are the statutory body charged with the management of the Estuary.

In relation to the Environmental Baseline study – we have commissioned a water quality and shoreline baseline

study against which study the effects of any marine pollution incident. In other words it is used as the standard to which the affected area must be remediated.

Full pollution plans are published and exercised regularly.

Alan Coghlan

Capt. Alan Coghlan

Harbour Master Shannon Estuary
Pilot Superintendent & Port Security Officer
Shannon Foynes Port Company
Email: acoghlan@sfpc.ie
Ph: 069 73103

Unknown

From: TONY MC NALLY (Labs) [tmcnally@Donegalcoco.ie]
Sent: 24 January 2008 10:26
To: Jervis Good
Cc: Richard Bingham; Jennifer Haddow; Grace Glasgow
Subject: RE: SEA Scoping for SWRBD (G2007/784) & SERBD (G2007/785)

Jervis

the draft scoping reports are being finalised at the moment and will be posted to the RBD websites by the end of January. Consultancy services to take forward the next phase of the SEA are currently being procured. As you point out SEA is a process, and scoping will remain 'open' throughout the process. However, during the Environmental Assessment consultants will certainly consult with NPWS on Habitats Directive and Appropriate Assessment issues.

Regards
Tony

-----Original Message-----

From: Jervis Good [mailto:jervis_good@environ.ie]
Sent: 23 January 2008 12:14
To: TONY MC NALLY (Labs)
Cc: Eamonn Meskell; Enda Mooney; Linda Patton
Subject: SEA Scoping for SWRBD (G2007/784) & SERBD (G2007/785)

Tony,

The NPWS regional offices received an SEA scoping request re the above last December. Due to workload we were unable to respond formally to the request by the deadline, and there was also an outstanding issue concerning the status of certain freshwater pearl mussel populations. However, because of the complexity of the collision of three Directives (WFD, SEA & Habitats Directive) it would probably require a meeting with the SEA consultants to disentangle the relevant issues. Since SEA is a process, regional NPWS staff (at least the Divisional Ecologist, Southern Division) will be available to meet SWRBD or SERBD (re R. Suir: Tipperary & Waterford) consultants concerning protected area measures, if you still require input.

Regards,

Jervis.

Jervis Good,
Divisional Ecologist,
NPWS - Southern Division.
021 - 4619903.



Northern Ireland Freshwater Taskforce
c/o WWF Northern Ireland
13 West Street
Carrickfergus
BT38 7AR

20 February 2008

Richard Bingham
RPS Consulting Engineers
Elmwood House
74 Boucher Road
BELFAST
BT12 6RZ

Dear Richard

Comments from The Freshwater Task Force on the Draft Scoping Reports of the Strategic Environmental Assessments of Neagh Bann, North Western and North Eastern International and National River Basin Districts

Thank you for this early opportunity to comment on the draft scoping study for Northern Ireland's river basin management plans.

In general the scoping reports appear to be very comprehensive however the Freshwater Taskforce (FWTF) would like to note the following specific points:

Section 3.1 Interaction with other relevant plans and programmes.

The River Basin Management Plans (RBMP) will be implemented over a six year period. It is therefore important that forthcoming EU, national and local plans and programmes are taken into consideration within the SEA wherever possible. We note in particular the following:

- EU Floods Directive
- EU Soils Directive
- EU Climate Change Adaptation Paper
- EU CAP, following mid-term health check
- UK Marine Bill
- UK Climate Bill
- NI Landscape Scale Management
- NI Sustainable Development Second Implementation Plan
- NI Wildlife Order – updated



Section 4.1 Current State of the Environment

The FWTF would like to note the potential value of the following data to this exercise, accepting that some or all may already be included implicitly in the list presented:

- Landscape Character Report
- Tellus Project data, including but not confined to information on soils
- Contaminated Land Register – Council registries of old landfill sites
- EHS databases for heavy industry – IPPC / IPRI

Section 4.4.2 Population and Human health

FWTF would like a specific reference to environmental pressures and costs of provision of water services associated with information on population.

Section 4.2.9 Interrelationships

Integrated coastal zone management should be included in this section.

Table 5.1 Soil

The term Nitrate Vulnerable Zones should not be used here as the whole island has been given total territory classification under the Nitrates Directive.

Table 5.2 Point 7

FWTF is concerned that the SEA will only assess new national measures. The recent SWMI consultation proposed that standards of several regulations would be raised and the FWTF wonders if this will constitute enough change to merit the inclusion of such regulations in the SEA?

Table 5.2 Point 9

During the SEA of the Rural Development Programme, the Department of Agriculture and Rural Development issued an updated intermediary programme to stakeholders, showing alterations to the proposals to accommodate the SEA. It also included boxed comments where they felt they could not incorporate changes recommended by the SEA giving the rationale for their decision. It made for a very open and transparent process and one which would be welcome from DOE during the RBMP planning process.



Table 6.2 Additional draft SEA objectives from Stakeholders

The FWTF welcomes proposed additional objectives S2 and S3 and suggests they replace Objective 3 while ensuring the detailed assessment criteria from all three are captured.

FWTF does not believe that objective S4 belongs within the SEA. While recognising the need for RBMPs to meet the objective as stated in S4, this should be assessed via Regulatory and Economic impact assessments along with Rural Proofing in Northern Ireland.

Table 6.3 Draft Objective 4 Contribution to mitigation of, and adaptation to, climate change

Draft indicators in this section should include number of times sluice gates in waste water treatment plants have to be opened to alleviate storm water pressures.

More details on what exactly will be incorporated into the GHG sequestering facilities would also be useful. Do they, for example, include both ecological and mechanical?

Flood risk to *existing* development as well as new development should be included.

Table 9.2 Proposed Timescale for SEAs

There is an error in the dates; January 2007, February 2007 and March 2007 should all be 2008.

We hope you find these comments useful and that you will be able to address our concerns and we look forward to further engagement on this issue.

Yours sincerely

Alex McGarel
Northern Ireland Freshwater Taskforce Secretary

Unknown

From: Enda Thompson [ethompson@shannonrbd.com]
Sent: 18 March 2008 16:17
To: Richard Bingham
Cc: Grace Glasgow; Alan Barr
Subject: FW: Fw: SEA Scoping report for Shannon IRBD

Richard

Please see comments below on SEA Scoping report for consideration and reply as necessary.

Rgds

Enda

Enda Thompson
Project Co-ordinator
Shannon IRBD Project
Mulkear House
Newtown Centre
Annacotty
Co. Limerick
Tel ++353 61 337914
email: ethompson@shannonrbd.com
Web: shannonrbd.com

-----Original Message-----

From: Brian.McKeever@hse.ie [mailto:Brian.McKeever@hse.ie]
Sent: 18 March 2008 15:46
To: ethompson@shannonrbd.com
Cc: Fergus.Barry@hse.ie
Subject: Re: Fw: SEA Scoping report for Shannon IRBD

Enda,

Thank you for your e-mail of the 5th. inst concerning the above very comprehensive and interesting document.

The main thing that struck me was on page 26. You are relying on EPA databases for information on the quality of groundwater. These may not be

sufficient.

There may information in e.h.o. offices or Official Food Microbiological Laboratories arising from the sampling of private wells by environmental health

officers that might prove more useful in this regard..

You refer on page 33 to the problems posed by septic tanks. Yet this does not seem to feature on page 26 in terms of quantifying the extent of the

problem. Perhaps the population data will be a useful indicator of the likely density of septic tank development.

However the need for some quantification of the septic tank effluent issue needs to be addressed in my view as I feel this is an area where there is

scope for greater research.

Also, I think farmyard pollution, combined with improperly designed and badly located bore holes may be an even more significant threat to groundwater

in the region.

Regards,

Brian McKeever, Principal e.h.o.,

Cavan-Monaghan (tel. 049 4373410).

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Tá eolas atá príobháideach agus rúnda sa ríomhphost seo agus aon iatán a ghabhann leis agus is leis an duine nó eagraíocht sin amháin a bhfuil siad seolta chucu a bhaineann siad. Cuir in iúil don Riarthóir Idirlinne led thoil má tá an ríomhphost seo faighte agat trí dhearmad, Teagmháil: FSS an Oirthuaiscirt: admin_sweep@maile.hse.ie
In ainneoin go ndearnadh próiseáil ar an ríomhphost seo trí chóras frithvíreas uathoibríoch, tá freagracht ar ghlacadóir a chinntiú go bhfuil an teachtaireacht (ceangaltáin san aireamh) sábháilte agus ceadaithe le n-úsáid ina suíomh oibre féin.
