

The characterisation and analysis of Ireland's river basin districts

*in accordance with Section 7(2 & 3) of the European Communities (Water
Policy) Regulations 2003 (SI 722 of 2003)*



National Summary Report (Ireland)

Compendium of public submissions and responses

April 2005

Public submissions on the National Summary Characterisation Report

Following publication of the National Summary Characterisation Report on the 22nd December 2004 a National Seminar was organised jointly by the Department of the Environment, Heritage and Local Government and the Local Authorities, and held in Athlone on the 25th January 2005. The availability of the Summary Characterisation Report and subsequent National Seminar allowed a period for all interested parties to make comments and submissions by February 16th 2005. The comments and submissions received have been integrated into the final Summary National Characterisation Report (available to download at <http://www.wfdireland.ie>). This compendium provides the detailed extracts from the submissions received and the recommendations and responses prepared on behalf of the National Technical Coordination Group.

Submissions Received

A total of twenty three organisations/individuals submitted comments in response to the publication of the National Summary Characterisation Report, these are listed below.

List of Organisations/Individuals from whom submissions were received:

- 1 An Taisce – The National Trust for Ireland
- 2 Angling Pillar in the Western River Basin District
- 3 Coastwatch
- 4 Coillte Teoranta – the Irish Forestry Board
- 5 Coomhola Salmon Trust Ltd
- 6 Environmental Non Governmental Organisation in the South Eastern River Basin District
- 7 ESB
- 8 Heritage Council
- 9 Irish Peatland Conservation Council (IPCC)
- 10 Irish Water & Fish Preservation Society
- 11 Irish Wildlife Trust
- 12 Leitrim County Council
- 13 North Western Regional Fisheries Board (NWRFB)
- 14 Mr. B F Arthure (Limerick, Private Individual)
- 15 Mr. Ian Hester (Longford, Private Individual)
- 16 Mr. David Lee (Private Individual)
- 17 Roscommon Eco Network
- 18 Save Our Lough Derg (SOLD)
- 19 Sligo County Council
- 20 Sustainable Water Network (SWAN)
- 21 Trinity College Dublin, Department of Zoology
- 22 Waterways Ireland
- 23 Wexford County Council

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Key issue 1: Correlated Maps</p> <p>An Taisce submits that the maps which are vital component of the characterisation analysis are difficult to interpret because of poor quality resolution. The pressure indices within each River Basin District provided by the Corine maps are insufficiently detailed to allow interpretation. We would suggest that more detailed maps are provided for each River Basin District to enable the identification of key land use pressures.</p>	<p>The maps contained in the report provide summary information at River Basin District level as required for the initial characterization. The summary reports to be published later this year by each RBD will have maps at a more readable scale. It is also intended that maps will be available for viewing at waterbody level via a WebGIS reporting tool which will be available over the internet in the near future. This will enable viewers to get more detailed information more easily on the water bodies in which they are interested.</p>
<p>Key issue 2: Datasets</p> <p>Spatial Planning</p> <p>An Taisce is concerned that data on the impact of changes in settlement patterns resulting from the implementation of the National Spatial Strategy (NSS) and consequent Regional Planning Guideline(s), have not been included, or even forecasted within the Characterisation Report. The NSS is the key strategic framework plan for the country for the next 15 years and the Regional Planning Guidelines (RPG) for the seven Regional Authorities are its delivery mechanism. Each RPG contains population targets and identifies Hub and Gateway growth centres. The Characterisation Report should, as a matter of first principle, map out and forecast the impact of increased population figures by RBD, within the context of the location of existing infrastructural deficiencies and planned infrastructural investments.</p> <p>Diffused Source Impacts</p> <p>An Taisce suggests that the methodology for identifying diffuse impacts would be enhanced by GIS mapping of planning permissions for unserviced sites in each RBD (see attached example of Mayo County Council permission identification maps). Local Authorities within each RBD could provide maps and data on an annualised basis. This data</p>	<p>The Characterisation Report has been prepared to satisfy the requirements of Article 5 of the WFD in accordance with the guidelines set out in Annex II. The assessment of risk is based on pressures as they are currently distributed and does not address future changes, for example those due to implementation of the National Spatial Strategy, investment in wastewater treatment facilities or agricultural sector reform. When River Basin Management Plans are being developed the implications of future changes in pressures and management measures will be taken into account.</p> <p>The information held by local authorities concerning the mapping of planning permissions for unserviced sites is not consistent across the country. Not all local authorities have a GIS database such as is available from Mayo County Council. In order to provide a consistent approach to applying the risk assessments throughout all RBDs information was extracted from the National Urban Waste Water Study and Ordinance Survey maps. This information was used to identify clusters of unserviced sites which were then used in the risk assessment.</p>

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<p>would assist in identification of the location of impacts and would facilitate forecasting of impacts.</p> <p>An Taisce suggests that there should be GIS mapping of forestry grant applications. Department of Agriculture & Food could provide this data on an annualised basis and this would assist in the identification of impacts of forestry in upland areas which source river systems.</p>	<p>Section 3.6.1 of the characterisation report acknowledges key data gaps. It notes that much quantitative data regarding diffuse source pressures is generally only available to District Electoral Division level, which does not provide adequate detail. In this respect information on unserviced sites is recorded in the National Census but only down to District Electoral Division level. During the further characterisation process the need for more detailed data will be considered.</p> <p>The Forestry Inventory Parcel System (FIPS) supplied by the Forestry Service was used for mapping of forests. The present dataset dates back to 1995 and the Forestry Service is updating the information at present and it is expected that a new dataset will be available for the further characterisation process. The FIPS dataset provides information on new forests. Further updating by reference to new grant applications will be addressed in the programme of measures where forestry pressures are identified as putting water bodies at risk of failing to meet water quality objectives of the WFD.</p>
<p>Key issue 3: Catchments under threat due to Cumulative Development.</p> <p>An Taisce wishes to identify the following areas as under threat due to significant cumulative development impacts, primarily as a result of the location of unserviced one-off house permissions in areas with unsuitable site conditions, or because of close proximity to water courses:</p> <p>Shannon region and catchment Erne catchment Mayo – river Moy area Western lakeshore and river catchment areas: Lough Corrib, Carra and Mask Robertstown Countryside Area of County Kildare – due to high water table in and peat soil conditions. Cavan - pig slurry runoff affecting the Erne and Boyne catchment.</p>	<p>The results of the risk assessment when applied to diffuse sources of pollution (including unserviced sites) is shown on Maps 3-57 to 3-63 inclusive. All of the catchments mentioned contain water bodies which are in the 1a and 1b categories (at risk and probably at risk) as a result of various pressures. The monitoring programmes will be designed to confirm the significance of known pressures on each water body. The results of the monitoring programme may also identify other pressures not previously identified as part of the Characterisation report. As part of the further characterisation process the RBD projects welcome additional information from any source which may be of assistance in the further characterisation process and in the development of appropriate programmes of measures. Each RBD project has a website containing contact details as to where information should be sent.</p>

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<p>Key issue 4: LSOs</p> <p>An Taisce suggests that a further round of consultation is established to provide for NGO input into the identification of ground water bodies for which LSO (Less Stringent Objectives (LSOs) might apply.</p>	<p>The information presented in the Characterisation Report is intended to identify a preliminary list of candidate sites for which Less Stringent Objectives (LSOs) might apply. Further investigations will be carried out as part of the further characterisation phase and as part of the monitoring programmes to justify the designation of GWBs for LSOs. The final list will be presented in the draft River Basin District Management Plan.</p> <p>In the period up to the publication of the draft RBDMP existing Management Groups, Technical Groups and the soon to be established Advisory Councils will provide a forum for further consultation on all aspects of the implementation of the WFD. Furthermore, Article 14 of the Directive requires that the draft RBDMP is made available for public comment one year before the beginning of the period to which the plan refers. This will provide a wide-ranging opportunity for consultation prior to finalisation of the Plan.</p>

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<p><u>Chapter 3, 6</u></p> <p>Key issue 1:</p> <p>Queried the basis and application of thresholds in the risk assessment process of lake impact data. Whereas it is appreciated that a methodology appropriate to the whole of the country is required and that there is no practical alternative to a system based on thresholds further input by stakeholders would have been appreciated. Main points raised are as follows:</p> <ol style="list-style-type: none"> 1. Decision over the level at which thresholds have been set should have wider input and should be part of a transparent process. 2. Because the methodology has to apply to the whole country and all its water bodies, and because there are huge numbers of water bodies of a wide range of types and with almost infinite variation in specific characteristics, there will inevitably be many such water bodies that are actually at risk, but which do not show up as such in this first assessment. 3. Thirdly, we would also point out that the method used to assess the pressures in a catchment appears to take into account only the current situation, i.e. it ignores long term and short term trends and changes. In addition the basis for assessment of pressures derives from analysis of existing water quality against known circumstances, i.e. predictions are being made on the basis of data that have a wide scatter and which include many outliers. Whilst we believe that the method is acceptable in general terms, there are the major weaknesses of the wide scatter of points and the need to make a subjective or arbitrary decision about placement of the threshold. 	<p>This is an initial risk assessment based on available information. Boundary threshold levels for Irish lakes including mean total phosphorous, mean chlorophyll_a and maximum chlorophyll_a, for the use of impact data, were established based on consultations and consensus among a wide range of technical experts. These threshold levels were developed after careful consideration of existing available historical data derived from national lake monitoring programmes and which was collected in a systematic way. All available monitoring data were screened for validity and suitability for use. Type specific reference boundary conditions were applied where sufficient data was available to type lakes in question.</p> <p>Where historical data was available over a prolonged period this was used to qualify the lake risk assessments. Where the trend indicated an unfavorable trend in concentrations of measured parameters in lakes they were reclassified into a higher risk category.</p> <p>The information and concerns expressed in the submission were considered as part of the planned further review of the “risk assessment” outcome of lakes by an Expert Technical Peer Review Group comprising the EPA, NPWS, CFB and OPW.</p> <p>Final risk assessments were determined on the basis of the expert group knowledge, historical trend information and further impact evidence available for lakes. The comprehensive review undertaken resulted in the reclassification of the major western lakes into higher risk category, including Corrib, Conn, Cullin, Carra, Mask, Carrowmore, Arrow and Gill. The final risk assessment categories were determined on the basis of sound scientific principles.</p> <p>The characterisation process is an ongoing iterative process, relying initially on the use of readily available information, and further data and information collection is foreseen.</p>

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<p>4. The data used for the assessment have been selective, i.e. not all available data and information have been incorporated. Whilst we understand and accept that limitations of time and resources have necessitated this approach, we believe that there must now be an attempt to gather and take into account further sources of information, including scientific data, expert opinion and anecdote. There is clearly a huge fund of such information available in the case of water bodies used for angling, and the inclusion of such information in the assessment may allow a much more realistic assessment than the simple application of a standardised methodology based on limited and selected data sources.</p> <p>Priority Actions:</p> <ol style="list-style-type: none"> 1. All of the Great Western Lakes (Conn, Cullin, Carra, Mask and Corrib) and Loughs Carrowmore, Arrow and Gill should be included in Category 1a (at significant risk). 2. Any lakes in category 1b should, nonetheless, be subjected to action as if in category 1a, i.e. a programme of measures, if there is clear and incontrovertible evidence of an ongoing decline in water quality and ecological status. 3. Lough Carra should be immediately identified as a special priority and subject to an urgent pilot project to address the problems of declining water quality and ecological status. 4. It should be agreed by the Management Group and incorporated into the work programme that, subsequent to submission of the final draft report to the EPA, the categorisation of any water bodies should be revised immediately if/when acceptable evidence is obtained or submitted. This would ensure that those water bodies incorrectly categorised in the draft report would immediately be subject to revised responses, e.g. if a 	

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<p>water body was in 1b and is subsequently shown to have qualified for 1a, it should immediately become the subject of preparation of remedial measures.</p>	
<p>Key issue 2: Process and Timing</p> <p>1. Main concern with respect to the process and its timing is that there has been insufficient time for serious input from the public, NGOs and interested parties. Further data associated with the mapping and details of the methodology used in the assessments would have been extremely useful in interpreting the risk assessments.</p> <p>Actions:</p> <p>1. Consideration should be given to establishing a mechanism to allow ongoing and increased input into the characterisation process. Such a mechanism should involve the active seeking of further specialist advice and information, something which has not been carried out thus far.</p>	<p>The summary National Characterisation Report contains links to relevant background documents, which are extensive and cover all of the methodologies used in the risk assessment process, together with supporting background information.</p> <p>The competent authorities, local authorities and EPA, are currently preparing a WebGIS reporting tool, which will be available over the internet, to provide the public with direct access to characterisation information by water body. This will greatly enhance the level of information available to the public.</p> <p>Increased stakeholder input is foreseen in the period of further characterisation. A statutory forum in the form of River Basin District Advisory Councils (RBDAC) will be established to allow all interested parties to advise and make recommendations in the preparation of river basin management plans.</p>

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<p>Key issue 1:</p> <p>Adequate inclusion of all wetland types</p> <p>The WFD sets out to protect aquatic systems. Considerable effort went into looking at specified water bodies. However we are not registering, monitoring or counting threat or loss of small ponds, reedbeds, wet meadows and other diffuse wetlands which Ireland is particularly rich in.</p> <p>Our Land reclamation Act 1949 still stands. It is still legal to drain estuarine marsh and callows, up to EIS threshold. There is not even a register of loss available.</p> <p>In a limited Coastwatch study of one village in the SE river basin we found 65 ponds – many with connecting drains – shown on the 1940 OS maps. Five of these remained in 2003.</p> <p>Note also that Ireland has not made the Wetland inventory it committed itself to when signing the Ramsar Convention.</p> <p>Priority Actions:</p> <ol style="list-style-type: none"> 1. A national wetland inventory should be created in line with Ramsar World Wetland Convention obligations and guidelines. 2. There should be integrated research on the roles of small wetlands, from ecological value, over ground water replenishment to flood control with results used in planning and management decisions. 3. The Land reclamation act and planning act 2000 need urgent review and amendment to provide better wetland protection. 	<p>The first tier of the Register of Protected Areas in the Republic of Ireland is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Only sites on this first tier of the Register will be reported to Brussels as part of the Article 5 Report. Second and Third Tiers to the Register will be developed to include sites designated under National Legislation, such as Natural Heritage Areas (NHAs) designated under the Wildlife (Amendment) Act 2000. These lower tiers will be taken into account within the River Basin Management Plan process.</p> <p>The Characterisation Report establishes a baseline, which is being used to focus further actions necessary for the preparation of draft River Basin Management Plans by 2008. Further investigations and research will be required to address some of these information/data gaps identified within the Characterisation Report.</p> <p>While it is correct to say that Ireland has not completed a national inventory of all wetlands considerable progress has been made in the last few decades in identifying and designating wetlands of national and international importance for nature conservation. In the areas designated for nature conservation wetland habitats now form the largest habitat category both in terms of area and number of sites. This inventory work is ongoing and it is probable that further important sites will be identified in future years. In relation to the very large number of small wetlands which exist throughout the country it is unlikely that a full national inventory will be achieved in the foreseeable future. However it is expected that some of these will be identified and protected via Local Biodiversity Plans. It is also likely that the WFD will help to protect these areas by reducing pressures and impacts on aquatic systems at a catchment level. An opportunity also exists to increase public appreciation of the goods and services they provide through the possible use of small wetlands in the Program of Measures for mitigating impacts on aquatic systems</p> <p>The Programmes of Measures will in time compile the appropriate actions required to meet WFD objectives. Additional information and data which Coastwatch can provide on known impacts on wetlands or views on how the risk assessment methods can be improved would be welcome.</p>
<p>Key issue 2: Public and stakeholder Participation</p> <p>The WFD sets out to ensure public information and</p>	<p>Local authorities are currently in the process of establishing River Basin District Advisory</p>

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<p>seek participation. This report is a milestone which should have had wide public input. But especially in transitional and marine waters there was virtually no information on how this report was being drafted and no debate. The largest informal wealth of knowledge, sitting in our fishing communities was either not tapped at all, or if tapped not mentioned. When one looks into the future, one sees no plans for change. Read page 4-4 last para as example – <i>‘The assessment will require expert judgement and will be undertaken by the EPA supported by relevant authorities.’</i></p> <p>Both by the way the report was prepared and later written and disseminated, it is very unlikely to be looked at by the general public. If confined to interested public it needs real persistence plus good scientific background knowledge to understand.</p> <p>There is no indication as to how public input being sought now is going to be dealt with. Does it go into a paragraph in the final report: X submissions received or more? What kind of evaluation process does it go through? This is important information for anyone commenting, or deciding not to bother.</p> <p>The report is very condensed. This was to be a joint Coastwatch submission. Coastwatchers in Waterford, Mayo, Meath and Wexford were originally interested to contribute. But apart from general views as to key points, even volunteers working on water did not have the will to try and follow the map forest and separate text.</p> <p>This serious flaw can only be rectified if public participation is reconsidered and pathways laid out right at national level from consideration of issues to dissemination of final decisions.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Public participation in national committees. You could start with inclusion of NGOs who 	<p>Councils to facilitate public participation. The function of the RBDACs will be to: <i>“consider matters relating to the preparation of river basin management plans and other matters relevant to the protection and use of the aquatic environment and water resources in the district and to advise and make recommendations on these matters to the relevant public authorities.”</i></p> <p>RBDs are the relevant administrative units for water management and therefore the appropriate level for stakeholder involvement.</p> <p>Every effort has been made to access relevant datasets which could be used in the initial characterisation. The RBD authorities would welcome any suggestions regarding the provision of new datasets not identified to-date which could assist in the further characterisation process.</p> <p>The competent and relevant authorities are assigned responsibilities for implementing the Regulations (SI 722, 2003). This does not preclude public consultations. Public participation is also being facilitated through the RBDACs.</p> <p>The content of the December Report was determined by specific requirements from the EU Commission which was detailed and technical in nature. Individual RBD reports are currently being prepared which will be tailored for public consumption. The feedback received from stakeholders will greatly assist this process.</p> <p>Where appropriate comments and corrections have been incorporated into the national and RBD reports. All detailed submissions and responses have been recorded in this compendium which will be posted on the http://wfdireland.ie website hyperlinked to the national summary report. A summary of Main issues raised in the submissions have been incorporated into the national report. This will serve as a public record and will provide valuable input to the development of further characterisation work, monitoring programmes and the Programme of Measures.</p> <p>The characterisation report is technically detailed as required by the EU Commission, however, the publication of individual RBD reports and the commissioning of a WebGIS, which will be available over the internet and will increase accessibility and comprehension of the characterisation results.</p>

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<p>have experience and a record of achieving public participation.</p> <ol style="list-style-type: none"> 2. Have a mobile exhibition to support web info – like 5 year development plans so people can see maps and those without computers (e.g. most in the fishing community) can still be included and contribute their wealth of knowledge. 3. Explain how feedback will be handled. The best example I have come across in Ireland was the Ballymoney village development plan with Wexford CoCo. By draft 2 we had every submission point listed in a table with county council planner reaction and hence final acceptance, rejection or amended inclusion. 	<p>See above.</p> <p>This suggestion will be considered. It would be most relevant to facilitating public comment on the draft River Basin Management Plans due to be published in 2008.</p> <p>It is expected that the summary of submissions in the National Summary Report and this compendium will meet this need.</p>
<p>Key issue 3:</p> <p>Information</p> <p>While information gaps were identified, the gathering of data with the public and accessing stakeholder knowledge is not set out. This reads like a government baseline which will be added to by experts who have the same short hand of abbreviations so they don't need a glossary of terms at the end.</p> <p>In one year of wetland work with 12 primary schools we gathered a significant amount of new ecological data on small streams, saltmarsh channels and dune slacks for which there was no official data available. There is still no official conduit to put this data anywhere. Hence its usefulness is limited.</p> <p>Action:</p> <p>Rethink data in and output. Link to actions in Issue 2 above.</p> <p>Link data sets – eg National Biodiversity Plan and that proposed biological data bank should be set out in a way directly useable for the WFD.</p>	<p>Suggested datasets from organisations would be welcomed and their applicability considered during the further characterisation phase.</p>

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<p>Codes:</p> <p>Map 3.148 and 3.149 : While 3.148 Eastern RB gives codes and explanations of same, the SE just gives risk codes. Fine in working group, but extra hurdle for interested public who is opening that map.</p>	<p>Keeping maps uncluttered and accessible has been a priority. Efforts were made to standardise maps across RBDs for the December 2004 report. However, there were some differences. All maps have now been completely standardised for the final report sent to the European Commission in March 2005.</p>
<p>In the ERBD map of pressures, 3.2 dredging is not included as a pressure. If you asked a Boyne fisherman he would see that as a most serious omission.</p>	<p>Dredging is included as a pressure on the Boyne. It is just not specifically mentioned in the 3.2 legend. It is taken into account as drained channels.</p>
<p>ERBD map of pressures 3.2 shows most of Wicklow including S of Arklow as coniferous forest. If member of the public lives there and knows there isn't any such forest S of Arklow he/she will distrust lots of other data.</p>	<p>The green on Map 3.2 is background and not coniferous forest. Since this may be possibly confusing coloration has been modified.</p>

Submission Ref: 4

Organisation: Coillte

Contact: Dr. Philip O'Dea

Query Description	Recommendation/Response
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03,</p> <p>Chapter 1, Introduction, Page 2 'Areas with >10% conifer may be at risk'</p> <p>The threshold of 10% is unacceptably cautious and has no relation to national and international standard thresholds used in forest and water guidelines. For example, in the UK Forest & Water Guidelines, 4th Edition [2003] 30% is used as the threshold, defined as closed canopy conifer forest above 300m altitude (altitude limit does not apply in SACs).</p>	<p>The Forests and Water guidelines say that NO forest should be planted in areas where hardness is less than 12 or alkalinity is less than 10 mg/l CaCO₃ respectively; consequently, it might be argued that a >0% threshold could be applicable in this instance.</p> <p>The issue of a 300m threshold is also considered unreasonable in the Irish context, as some of the most acid sensitive areas in the country, for example Connemara, are located below 300m.</p>
<p>Chapter 3, Screening and Mapping for Pressures, Page 6, 3.2 - FIPS Database</p> <p>This database is dated and should be amended to take account of the more up to date databases available from Coillte and the Forest Service's National Forest Inventory.</p>	<p>It is acknowledged that the FIPS database is not ideal, however for the purposes of characterisation, it represented the best fit bearing in mind the requirement for a national database covering all forestry, not just Coillte commercial parcels. The National Technical Coordination Group would welcome Coillte assistance in guiding monitoring to assess potential problem areas.</p>
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03,</p> <p>Chapter 3, Screening and Mapping for Pressures, Page 7, Table 1 - Forestry</p> <p>Components within the forestry sector activity do not include forest road construction.</p>	<p>It is agreed that road construction is one of the most damaging impacts of forest operations.</p>

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<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</p> <p>Appendix A, Risk Criteria Table A2 (River Water Bodies), page 25 Sectoral activity under forestry should also include felling and road construction along with planting/ground preparation.</p>	<p>The tests applied are in the judgement of experts, reasonable tests and arise from the availability of data which allows an expert group to carry out a reasonable risk assessment. This can be updated at a later stage.</p>
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</p> <p>Appendix A, Risk Criteria Table A3 (Lake Water Bodies), page 30 Sectoral activity under forestry should also include felling and road construction along with planting/ground preparation.</p>	<p>The tests applied are in the judgement of experts, reasonable tests and arise from the availability of data which allows an expert group to carry out a reasonable risk assessment. This can be updated at a later stage.</p>
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</p> <p>Appendix A, Risk Criteria Table A3 (should be A5 – Coastal Water Bodies), page 35 Sectoral activity under forestry should also include felling and road construction along with planting/ground preparation.</p>	<p>The tests applied are in the judgement of experts, reasonable tests and arise from the availability of data which allows an expert group to carry out a reasonable risk assessment. This can be updated at a later stage.</p>
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</p> <p>Test SD4 (Forestry) – Test a – Acidification Data Sources FIPS Forest Parcel Database – out of date</p>	<p>It is acknowledged that the FIPS database is not ideal, however for the purposes of characterisation, it represented the best fit bearing in mind the requirement for a national database covering all forestry, not just Coillte commercial parcels</p>
<p>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</p> <p>Step 1 – ‘Generate Map of Critical Forestry from FIPS’ This map should only include coniferous forestry after canopy closure and above 300m altitude.</p>	<p>We would expect all such forests to achieve canopy closure by 2015 (the WFD target date). As noted above, altitude is not relevant in this instance as acidification is a function of local weather conditions in WFD.</p>

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	is known on low lying granites in WRBD.
<p>'The risk score can be expressed as a percentage of the total area of the buffered area adjacent to the watercourse.' – The meaning of this sentence is open to confusion. 'Buffered area' has not been defined in the text.</p> <p>Table 3 – 'Risk Assessment Matrix for acidification from Upland Forestry' The threshold levels should apply only to forestry after canopy closure and certain altitude? In addition, the threshold level for 1b should be at least 30% (as per comments made above). Appropriate amendments to the other risk categories would naturally follow. There is no sound basis for the second criterion under 1b</p>	<p>There is no mention of “buffering” in the SD4a (acidification) test. However, SD4B (suspended solids) does contain buffering. Buffering in this context is a Geographical Information System term. It is a defined area around a feature. In this instance if more than 5% of an area (which is within a 60m buffer from river) adjacent to a river has critical forestry types present on a significant slope (>15%) and on vulnerable soils (peat or sandstone derived soils) then the potential for erosion is considered high.</p> <p>Research indicates that at a 30% threshold, severe damage to fishery ecosystems in acid sensitive catchment has already occurred, and that measurable effects are evident after 20% coverage. Since good ecological status is represented by an extremely limited or no anthropogenic effect, it seems sensible to err on the side of caution. Similarly, it seems a reasonable precaution to include the second criterion under the precautionary principle.</p>
<p>Impact Data – 'Re-designation table' Why is hardness the parameter used when under page 17, Table 16 of the '<i>Pressures and Impacts Assessment Methodology Draft Report 12/8/03</i>, alkalinity is the parameter used. The use of alkalinity itself is highly questionable, particularly in light of recent national research [Giller, P.S. & O'Halloran, J., Forestry and the aquatic environment: studies in the Irish context. <i>In Hydrology and Earth System Sciences, European Geosciences Union, Vol. 8, No. 3, June 2004</i>].</p> <p>Table 3 is very unclear, particularly in relation to the basis on which it is formulated. –Furthermore, how are the varying areas of forestry in catchments taken into account?</p>	<p>The Forest and Water Guidelines give thresholds for both alkalinity and hardness. The impact data threshold of 8mg/l CaCO₃ suggested in the methodology is more “generous” than the F&WG to allow for the nature of the test.</p> <p>The approach is fairly standard, and was intended to mirror that used by the Groundwater Working Group in their tests. The test is lenient – it only assesses those areas adjacent to river water bodies (2nd order +). If the 1st order tributaries were included, then the outcome would be more Risk. If a factor of whole catchment occupancy of forests were to be added, then there would be more water bodies at risk. It should be noted that the tests are designed to identify areas where forest encroaches most closely to water bodies featuring steep slopes (>1:7) and on highly erodible soils. Only where those three situations occur does the risk test consider them. In these circumstances, it is considered that movement</p>

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	of suspended solids is possible in certain conditions, and thus should be subject to further investigation.
<p>Test c – Eutrophication Table 2 – What is the basis for 10% forest cover?</p>	See comments above in relation to Chapter 1, Pressures and Impacts Assessment Methodology Draft Report
<p>Practitioner’s sheet – Test SD6 (Dangerous Substances from Agriculture)</p> <p>Test c – Forestry Table 3 – What is the basis for 10% forest cover? Also, where is the established basis to formulate such a questionable methodology to determine the potential for pollution from dangerous substances used in forestry?</p>	From knowledge and experience of the impact of synthetic pyrethroids it is felt that the issue should be addressed via a screening tool which would help to direct some focussed monitoring (as is the intention of all these tests). If SPs are used to treat young trees, then the presence of these trees alone constitutes a risk. The test attempted to reduce the potential risk area by selecting an upper percentile.
<p>General comments</p> <p>As can be seen from all of the above, there are many questions and criticisms to be answered and resolved. These should ideally have been resolved earlier by having forestry experts represented on the Working Group on Characterisation and Reporting. It is patently obvious that such advice was not obtained in the formulation of the risk assessment methodologies pertaining to forestry, resulting in weakly and inadequately formulated documents. Involvement of forestry experts in the consultation process at the highest level will be essential if a proper risk assessment process in forestry is to be initiated and progressed. To proceed with the documents as presently conceived with respect to forestry would not result in realistic and soundly based conclusions. To counter this possibly and inevitable waste of national resources, we are asking that methodologies with respect to forestry be re-addressed with expert input from forest agencies/bodies.</p>	<p>A transparent and commonsense approach was adopted to narrow down risk areas for further investigation. A number of experts in the area of acidification impacts on water were engaged in the process from the EPA and Limnology Unit, University College Dublin.</p> <p>Coillte’s comments to the debate are welcomed and it is felt that that Coillte’s full co-operation with the release of their databases and input in the siting of suitable monitoring systems will be an integral feature of the next stage of the WFD implementation, along with that of the Forest Service and Coford.</p> <p>It is acknowledged that more time might have allowed for more refined methodologies, but the risk results as generated in the Article V report represent a first pass at identifying the areas where impacts might occur from the pressures from forestry activities.</p>

Query Description	Recommendation/Response
<p>The Water Framework Directive represents a supreme opportunity to reverse the worrying trend of on-going deterioration of Irish, let alone European, water quality.</p> <p>“At Risk”: if our understanding is correct, the determining criteria for classification may well be the economic limitation upon the State’s financial resources to address a plethora of problems, as sites categorised as “At Risk” carry a requirement for immediate rehabilitation within the schedule of the first River Basin District Management Plan. If this is the case, our fear is that water bodies which should be classified as “At Risk” or “Probably At Risk” may escape their true classification...we would argue that it would be better to at least call them what they are and then develop a prioritisation regime which would eventually address them all.</p>	<p>The Characterisation Report establishes a baseline, which is being used to focus further actions necessary for the preparation of draft River Basin Management Plans by 2008. Further investigations and research will be required to address some of these information/data gaps identified within the Characterisation Report.</p> <p>Economic criteria are not used in the determination of risk categories. They will be considered at a later stage when developing the Programme of Measures and the RBD Management Plans.</p> <p>There is a requirement in the Directive to identify groundwater bodies to which Less Stringent Objectives (LSOs) might apply and surface waters which are defined as heavily modified water bodies (HMWBs). In the former case the WFD requires the listing in the Characterisation Report of groundwater bodies for which LSOs may be specified. These objectives may be set in cases where a body of water is so affected by human activity that it may be unfeasible or unreasonably expensive to achieve good chemical status within two further river basin planning cycles (i.e. by 2027). In the latter case a HMWB, which, as a result of significant physical alterations by human activity, is substantially changed in character and cannot, therefore, meet good ecological status, it will be required to meet an objective called good ecological potential.</p> <p>In these limited number of cases the water bodies identified for these categories will have to be justified on economic grounds.</p>
<p>Roads and planning:</p> <p>We note that the stated parameters for the capacity of roads to contribute to pollution are restricted to copper/zinc/total hydrocarbons. Though there may be other chemical substances to be included as well (including contribution of car tyre constituents), we are further concerned about the effects which roads have upon siltation as well as run-off patterns. We would strongly urge the incorporation of such references as TIA (Total Impervious Area, in relation to m² / km² of catchment, as well as the straightforward km (roads) / km² (catchment), both of which have been demonstrated to indicate aquatic habitat degradation (and resultant “Q” devaluation) beyond a certain threshold. We also presume that Characterisation is in reference to longer-term County Development (and other relevant) Plans which will assist in anticipating future “At Risk” judgements.</p>	<p>The methodology for the risk assessment for diffuse pollution from roads was based on readily available data and what was considered by expert opinion to be appropriate criteria and thresholds to determine the risk from this potential pollution source.</p> <p>In the case of road usage the criterion used for the determination of risk assessment was the average annual daily traffic (AADT). Traffic volume is a more appropriate measure of risk than the area or length of road surface versus catchment area, both of which are relatively high in Ireland although the traffic volumes on most rural roads are very low by international standards. It is acknowledged that there may be other constituents of road runoff and effects of siltation resulting from road runoff which need to be further investigated. This investigation will be undertaken as part of the further characterisation process.</p> <p>The risk assessment did not take into account the County Development Plans or the National Spatial Strategy. It was based on pressure and impact data, supported by predictive data which will be verified by monitoring.</p>

Query Description	Recommendation/Response
<p>Maps:</p> <p>The maps supplied with the Characterisation Report cannot be considered “comprehensible” by the public...their access is complicated and confusing, and there is no backup data to list and name the various water bodies. Furthermore, together with a readable list of classification of water bodies, there should perhaps be a one or two-line synopsis of why each water body is classified as it is.</p> <p>Wherever existing or future Data sets rely upon Ordinance Survey bases, the copying or propagation of these will be subject to Copyright law together with royalty payments...if this is the case, it will severely restrict the ability of citizens to communicate with each other issues relevant to the WFD process.</p>	<p>It is intended that the further development of the national and project specific web sites will make access to maps more easily available to the public. The development of the web sites will also include access to background document used in producing the Characterisation Report. It is also intended to produce Summary Reports for each RBD which will provide specific information such as lists of water bodies at risk.</p> <p>Maps and documents produced as part of the RDB projects will, for the most part, be available to view and downloaded, from the various River Basin District websites. Where documents or maps are protected by copyright the rights of the authors / suppliers must be respected. Interested parties are free to make reference to documents which can be viewed on the web site.</p>
<p>Register of Protected Areas:</p> <p>“Irish National Register of Protected Areas” (with particular reference to Map 2-25, Designated Salmonid Waters, RPA 1, Article 6 Annex iv (i)) are to benefit being guaranteed “no deterioration in existing status”. Given that this classification (of salmonid status) is beyond the remit of the WFD, and, that these waters (Protected Areas) are by definition presumed to be Q5, we are concerned that marginal Q4/Q5 sites, which would include much upland stream order 1/2/3, often proximate to large (50ha+) afforested areas which are scheduled for clear-felling / replanting (and all of the perils associated with these activities), will not be adequately classified to anticipate their imminent deterioration and we are concerned that the WFD process pre-empt the above salmonid-status classification and classify all Irish water-bodies as such to signal the extent of our collective aspirations.</p>	<p>The classification system for Good Quality Status for all water body types including fisheries has yet to be established. The Classification of Salmonid status will ultimately be replaced by the new classification system. It should be noted that ‘Council Directive 78/659/EEC on the Quality of freshwaters needing protection or Improvement in order to Support Fish Life’ will be repealed with effect from 13 years after the date of the WFD coming into force. The designation of Protected Areas does not necessarily mean that the existing water quality standard is Q5. The diffuse risk assessment considered the pressures from forestry activities. Water bodies were classified in accordance with the criteria and thresholds set out in the methodology. In many upland areas water bodies were classified in the 2b – “Not at Risk” Category when the impact data indicated Q4 status or better. For such water bodies Article 4 of the WFD requires Member states to implement measures to prevent deterioration of the status of all bodies of surface waters. These measures will address the impact from activities such as clear felling.</p>
<p>Public awareness:</p> <p>Characterisation should include an assessment of the current status of Public Awareness of how water quality is impacted by the wide range of human activity in pursuit of livelihood,</p>	<p>The importance of raising public awareness is acknowledged. Under Annex VI Part B of the WFD supplementary measures that address public awareness and education will be part of the programme of measures.</p>

Query Description	Recommendation/Response
<p>recreation, and domestic management, and how this baseline corresponds to existing water quality problems as well as how PA amendment assists in reversing this trend. Population and, moreover, population density, is the defining factor in areas where all water bodies (from ground to coastal) are considered “At Risk”. Public Awareness education must be seen to be critical to the success of meeting “Good Status” objectives by 2015. Simply, people must learn how to buffer their activities. We strongly urge that Public Awareness actions must figure prominently in any Programme of Measures.</p>	
<p>Various comments:</p> <p>Page ii (Paragraph 14): we suggest that the following text be added to the end of this paragraph to assist in clarifying the situation: “Equally, further characterisation may reveal previously undocumented data which will lead to current “good status” water bodies being reclassified as “at risk”.”</p> <p>Full application of the “precautionary principle” implies by definition that we seek to reveal and address all problematic water bodies as they are known over the course of this process.</p> <p>Section 1.2, (pg 1-2), paragraph 9: Again, we suggest that the following be added: “Furthermore, as it is ultimately people who pollute...”</p> <p>Section 1.3.4 (pg. 1-7); Should not the National Coordination Group include relevant Environmental NGO participation?</p> <p>2.3.5: Areas designated for the protection of habitats (including birds): “Salmonid waters, SAC’s, cSAC’s, pcSAC’s, and SPA’s and pSPA’s will be included within the Register as areas protected for water dependent species and habitats (Map 2-25). Again, we would hope that future data will extend this range.</p>	<p>The implementation of the Water Framework Directive will be an iterative process. Relevant data that becomes available will assist in further characterisation.</p> <p>It is intended that all “at risk” waters will be identified.</p> <p>The section gives an overview of the Water Framework Directive. The proposed addition would not be appropriate.</p> <p>The National Co-ordination Group brings together the relevant public authorities, so as to facilitate the efficient implementation of the Directive. Appropriate measures for the involvement of Environmental NGOs at RBD level through the River Basin District Advisory Councils will be put in place.</p> <p>If additional areas are designated under any of the relevant Directives they will be added to the Register of Protected Areas.</p> <p>Information on the pressures on each water body is held in data sets which are in GIS format. The information will be updated and reviewed to reflect changing circumstances. Environmental Management Systems are being developed at</p>

Query Description	Recommendation/Response
<p>3.1 Identification of Human Activities/3.1.1 Overview: “The risk assessment presented in this Characterisation Report relates to current pressure and does not attempt to predict the effect of any future changes in human activities. The implications of future changes in pressures and the management of these activities looking forward to 2015 will be considered as part of a further characterisation process and will be incorporated into the draft RBMP’s in 2008”: Whilst this is understandable with reference to time-frame and available resources, we are concerned that where this is apparent and imminent threat to aquatic (and ecological) integrity, such as clear-felling of forestry or major new road construction, that these considerations figure in the current classification. We do not comprehend the mechanism for future reclassification due to changes brought about by new human activities.</p> <p>3.1.1, paragraph 5; “...all data and information should be made available to the public”: Again, dissemination of this data may contravene OS copyright on base geographical information.</p> <p>Table 3-1, Irish Risk Assessment Reporting Categories: Our comment above regarding the Note on Risk Assessment is again relevant here as, given that the Process must prioritise, yet it is important not to ignore those waters currently assessed as 2b (water bodies not at significant risk)</p> <p>3.1.2, Step 1 – Identification of Human Pressures: Not to be pedantic, but this section deals almost exclusively with <i>general</i> sources of pressures...consistent with our brief of Public Participation and Awareness being integral to the WFD process, we would like to see Pressures ID also refer to specific and personal acts of resource mismanagement resulting in degradation, e.g., under “Point Source Pressures” we learn that Urban Wastewater Treatment Plants (UWWT) are cited as a contributing problem; yet it does not trace this problem to true source such as single household contribution of substances which inhibit proper UWWT function. We believe that ID, <i>at this stage</i>, of pressures which are brought to bear upon resource integrity by individual action will lay the basis for the early implementation of best-practice principle in</p>	<p>circumstances. Environmental Management Systems are being developed at National and RBD level which will identify the procedures for updating information. RBD Management Plans are required to be reviewed and updated every six years. Any additional information will be used to reclassify water bodies where necessary, direct the monitoring programmes and update the programme of measures.</p> <p>See response above.</p> <p>See response above.</p> <p>See response above.</p> <p>See response above.</p>

Query Description	Recommendation/Response
<p>every-day life. Such an approach would place Ireland in the vanguard of WFD response within the context of EU nation interpretation.</p> <p>3.3 River risk assessments, paragraph 3: “All rivers in Ireland are considered as potential salmonid fishery habitats; consequently high reception sensitivity thresholds were adopted throughout the river assessments.” This statement represents the high aspirational ideals of the WFD and is to be lauded and, if put into practice, would rectify many of our above comments.</p> <p>Table 3-4, Impacted protected water bodies (in preparation): Is this available yet?</p>	
<p>Specific Local Comments relevant to SWRBD</p> <p>2.3.1: Areas designated for the Abstraction of water intended for human consumption: does this include the Snave water scheme in the lower reaches of the Coomhola River? We would place this at risk because of the un-ameliorated disused landfill site in the townland of Kealanine (Glasabui Stream-tributary to Coomhola River).</p> <p>Table 2.11, Breakdown of Lake types by RBD; Given that classification is at an early stage, yet why is there no reference to any type 3 lakes in the SWRBD? Lakes such as Loughs Barley, Nambrackderg, Akinkeen, and Coomcloghenane in the Caha Mountains, as well as others in the Iveragh in Kerry, must be considered jewels (not alone for some of them harbouring rare Arctic Char populations), and must fall within the remit of WFD conservation.</p> <p>Map 3-73: We are unable to definitively read this map, but we have concerns for the integrity of the Coomhola in the immediate future, consistent with statements elsewhere in this Consultation documents. With clear-felling of coniferous forestry imminent in the upper catchment, we fear silt deposition as well as phosphate enrichment to follow when it</p>	<p>Snave water scheme is included in the map identifying areas for the abstraction of water intended for human consumption. According to the relevant authority, there is no information to suggest that the landfill is affecting water quality. However, this will be verified during further characterisation.</p> <p>The WFD requires that lakes greater than 50 hectares (although all lakes >5ha have been reported) be classified and reported to the Commission. Furthermore, lakes which are used for the abstraction of drinking water are included in the definition of Protected Areas. The Characterisation Report has been updated to also include lakes which are representative of SAC areas. The Type 3 lakes within the SWRBD do not fall into any of the above categories and are therefore not included in this initial characterisation process. The RBDMP will include measures to ensure that good quality status is maintained in waters where such status currently exists.</p> <p>Water bodies within the main channel of the Coomhola River have been classified as mainly 1b and 2b (“Probably at Risk” and “Not at Risk”) while water bodies in the upper catchment are characterised in all four risk categories. The response to the “General Comments” addresses the issue of clear felling adjacent to water bodies not at risk.</p>

Query Description	Recommendation/Response
is replanted. If the Coomhola River is classified as not being at substantial risk, we would disagree on this basis.	

Submission Ref: 6

Organisation: Environmental NGOs – SERBD Interest Groups Network **Contact:** John Fitzgerald

Query Description	Recommendation/Response
<p><u>Chapter 3</u></p> <p>While much of the Characterisation Report covers an extensive array of impact pressures and has provision for review and change built-in, I would be concerned about its lack of emphasis on road surface run-off as well as “straight piping” of storm water into water bodies. These include all roads and impervious surfaces such as car parks, major housing and retail developments, as well industrial parks.</p> <p>The pressures from these types of activities are ongoing and have major DPSIR attributes and negative dynamics for receiving waters. They are an emerging risk that cannot be ignored and provision must be made for their proper inclusion within the Characterisation Report - as “point source” discharges or included under a “specific stormwater category” of its own.</p> <p>There is also some concern amongst the ENGO’s as to the data used in the risk analysis of rivers and lakes. This concern applies mainly to those in the West, North West and some Midland waterbodies. In view of amount of concern expressed a review of the data sources would be recommended so as a more clearer picture of the pressures can be ascertained and remedial action can be applied.</p>	<p>Road runoff will be investigated in greater detail during further characterisation. The assessment was based on the available information at the time.</p>

Query Description	Recommendation/Response
<p><u>Future issue for Programme of Measures</u></p> <p>There is some reference in environmental literature and in city and county development plans, to a system known as Sustainable Urban Drainage Systems (SUDS). At the moment this system is at best aspirational, vague and in the main another engineering crusade. Technological solutions are proposed to intercept stormwater pulses and run-off. This in turn only creates an accumulation of toxic sewage that has to be disposed of elsewhere?</p> <p>The SUDS system therefore should be absorbed by the remit of the Water Framework Directive so as the problem of surface run-off can be dealt with satisfactorily.</p>	<p>Options regarding measures to address pressures such as road surface water run-off will be addressed in the development of Programmes of Measures. This process is about to commence. Comments will be considered during this process.</p>

Submission Ref: 7

Organisation: ESB **Contact:** Jack O'Keefe

Query Description	Recommendation/Response
<p>Chapter 4</p> <p>Key issue 1: In relation to the NWRBD, Lough Nacung and Dunlewy Lough, on the Clady river, have both been provisionally designated as 'Heavily Modified'. However, the Clady River downstream of Gweedore Weir has not been designated as 'Heavily Modified', even though only about 10% of the natural flow is put down this section of the Clady River.</p>	<p>The Clady river has now been designated as 'Heavily Modified' on foot of the information provided.</p>

Query Description	Recommendation/Response
<p>Chapter 2</p> <p>Typologies – lakes Lakes <50ha have not been covered unless they are within a protected area. It is acknowledged that the timescale is short within which to carry out the initial characterisation; however, it is recommended that the threshold of 50ha be reconsidered in further characterisation work.</p>	<p>The threshold of <50ha is in accordance with EU Article 5 reporting guidelines. However, as part of the review since December 2004 lakes between 5ha and 50ha which are located in protected areas have been included. This has resulted in an additional 565 lakes being considered.</p>
<p>Protected areas At the moment, sites of nature conservation value designated under the Birds and Habitats Directives are included in this register. It is recommended that this criteria be extended to cover RAMSAR sites, biosphere sites, and water dependent proposed NHAs. Given the emphasis on ecological values in the WFD, the criteria for inclusion of sites of nature conservation on the register should be broadened. It is recognised that the tight time scale for the present report may have led to a narrower interpretation of the Annex IV v. It would be important in the long term to include sites of national and regional interest in addition to those of European interest.</p>	<p>Sites of national interest are already on interest to RBD's as significant water bodies in their respective areas.</p> <p>The first tier of the Register of Protected Areas in the Republic of Ireland is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Only sites on this first tier of the Register will be reported to Brussels as part of the Article 5 Report. Second and Third Tiers to the Register will be developed to include sites designated under National Legislation, such as Natural Heritage Areas (NHAs) designated under the Wildlife (Amendment) Act 2000. These lower tiers will be taken into account within the River Basin Management Plan process.</p>

Query Description	Recommendation/Response
<p>Background documents</p> <p>pHMWBs The guidance notes make it clear that p HMWB have been selected on the basis of hydromorphological status. However it may be worth considering the effects of activities that cause major change to the natural ecology such as the impact of certain fishing activities on the status of fishing grounds where the fishing methods adopted cause major changes to natural communities (e.g. benthos). It will be important to clarify when assigning reference values, whether or not these modified environments are regarded as natural or heavily modified.</p> <p>pAWB</p> <p>There are a number of disused navigations in the RBDs that may qualify as pAWB. Please see the list below.</p> <p><u>Eastern River Basin District</u></p> <p>Boyne Navigation Longford Branch of Royal Canal Grand Canal, Kilbeggan Branch Grand Canal, Naas Branch extension to Corbally Grand Canal, Milltown Feeder Grand Canal, Blackwood Feeder Grand Canal, Mountmellick Branch: Phase 1 to Portarlington <i>(Not entirely sure whether this is in water or not – ask Waterways Ireland)</i></p> <p><u>South Western River Basin District</u></p> <p>Tralee Ship Canal, Blennerville Lombardstown Canal, Munster Blackwater: 8km from Mallow towards Dromagh (ever completed).</p> <p><u>N-S Share projects</u></p>	<p>Fishing activities referred to, such as bottom trawling, have a physical impact on the environment. These impacts are not a basis for designation of pHMWBs by reason of hydromorphological status. The risk of such impacts are accounted for in the marine, fishing and aquaculture risk assessment.</p> <p>The disused navigations identified by the Heritage Council have now been incorporated into the list of provisional AWBs. The competent authorities are grateful for this additional information.</p>

Query Description	Recommendation/Response
<p>Ulster Canal</p> <p><u>South Eastern River Basin District</u></p> <p>Lismore Canal, Munster Blackwater: 2.4km with one lock constructed Slaney Navigation: 31km from the sea to Enniscorthy Bridgetown Canal: from Ballyteigue Bay to Duncormick Castlebridge Canal: from River Slaney to Castlebridge and River Sow to Poulsack Ballybrennan & Drinagh Canal: 6.4km from River Slaney to Ballybrennan and Drinagh Clodiagh Navigation, River Suir: short tidal navigation to Portlaw</p> <p><u>Western River Basin District</u></p> <p>Eglinton Canal, Galway Cong Canal (in list already)</p> <p><u>Shannon River Basin District</u></p> <p>Early Shannon Navigation Works Roosky: old canal to west of river with locks dating back to the 1780s. Athlone: old canal to west of river with one lock and a guard lock originally built in the 1750s but lock rebuilt in 1806. Banagher: old canal west of river with harbour, lockhouse and lock which was built in the 1750s and rebuilt in 1806. Meelick: old canal to east of river with lockhouse and lock which was built in the 1750s and rebuilt in 1806. Limerick to Killaloe Navigation: Original navigation 14km with 11 locks, three canal sections linked by stretches of river.</p> <p>Stretches of the Longford Branch of Royal Canal</p>	

Query Description	Recommendation/Response
<p>General comments</p> <p>Publicising the information</p> <p>When bringing the contents of the Characterisation Report to wider publics, it may be worth considering:</p> <ul style="list-style-type: none"> • Hosting workshops with the relevant consultants on specific topics, dividing the audience into small groups (as carried out in the WRBD on its information day 9 February). • Holding information workshops on a targeted basis so that the information will be presented at a relevant level of detail. • Providing information at the information events on the devising of methodologies used and establishment of thresholds to allay suspicions. • Explaining the short time scale for consultation re the Article 5 report. <p>The project offices and consultants have shown themselves to be very willing to accommodate interested parties who wish to see RBD mapping. However there is some disparity between RBDs on access to GIS. This may lead to confusion among the wider public.</p>	<p>The RBD Projects have collectively engaged in various forms of general and targeted information workshops in the preparation of the Characterisation Report. It is intended to examine the optimum method of encouraging participation and facilitating access to information in the future. These suggestions will be considered as part of that examination.</p> <p>The WFD imposes a tight schedule. It has been a major task to meet the Article 5 reporting deadline. The six-week period between publication of the draft report and the deadline for submission of comments on same should not necessarily be viewed in isolation. This has not been the same in each district due to differing start-up dates in each district. However, public meetings were held and advertised nationally, radio interviews given, leaflets published and, in some districts, "Initial Characterisation Reports" published and comment invited on same.</p> <p>RBDs are working together to develop WebGIS reporting tool which will be available over the internet to support stakeholder participation.</p>
<p>Queries</p> <p>Will the characterisation report result in new inter departmental /agency/authority protocols for gathering data? Will measures be taken in the short-term to alleviate risk where this is certain and reasons evident?</p>	<p>SI722 sets out administrative responsibility in this area. There are no immediate plans to effect change to those arrangements.</p> <p>This will be a matter for individual authorities and public bodies in their respective areas to examine and decide on the best course of action.</p>

Submission Ref: 9

Organisation: Irish Peatland Conservation Council

Contact: Caroline Hurley

Query Description	Recommendation/Response
<p>General comment</p> <p>While IPCC welcomes this opportunity to submit observations on the Characterisation Report, a month for this process is not long enough. The document is lengthy and all the information in it is not easily accessible - hence the consultation period should be longer.</p>	<p>The WFD imposes a tight schedule. It has been a major task to meet the Article 5 reporting deadline. The six-week period between publication of the draft report and the deadline for submission of comments on same should not necessarily be viewed in isolation. The RBD Projects have separately and collectively, engaged in various forms of general and targeted information workshops in the preparation of the Characterisation Report. This has not been the same in each district due to differing start-up dates in each district. However, public meetings were held and advertised nationally, radio interviews given, leaflets published and, in some districts, "Initial Characterisation Reports" published and comment invited on same.</p>
<p>Chapter 1 - Introduction</p> <p>The IPCC would like to highlight that the process of developing the Characterisation Report is an ongoing, iterative process. While the present report is based on current knowledge, it should be updated as new information comes to light. In this regard, IPCC may submit new information in the future if it is of relevance to the Characterisation Report.</p>	<p>Characterisation is an ongoing process. New information of relevance will be welcome.</p>
<p>Chapter 1.6.1 Documents: Register of Protected Areas</p> <p>The Register of Protected Areas only seems to be available in map form. If downloading from the internet, specific software for these maps is needed and this greatly reduces the accessibility of the information in the report. A list of the Register of Protected areas with grid-references is referred to in the Characterisation Report as being available from www.compass.ie. However, this webpage was found to be inaccessible. IPCC requested the information from info@compass.ie but no reply was received. IPCC strongly feel that this information should be made easier to access.</p> <p>In relation to the Ground Water Dependent Terrestrial Ecosystems (GWDTEs), the IPCC are particularly</p>	<p>Several initiatives are underway to make access to information easier. These include commissioning of a WebGIS reporting tool, which will be available over the internet and will increase accessibility and comprehension of the characterisation results.</p> <p>The register at present includes a considerable number of designated sites. The fens and bogs described by the IPCC will be of considerable interest to those formulating</p>

Query Description	Recommendation/Response
<p>concerned with fens and bogs. While the IPCC are glad to see that all SACs and SPAs which support GWDTEs have been included in the Register of Protected Sites, we are concerned that there are a number of important fens and bogs lying outside of this network. The IPCC propose that the National Heritage Areas which support GWDTEs should also be included in the Register of Protected Sites to comply fully with the Water Framework Directive. While the GWDTEs within NHAs may not be of European importance, they are certainly of national importance and enhance the overall network of European sites.</p>	<p>catchment management proposals in River Basin Districts.</p>
<p>The identification of fen sites to be included in the Register of Protected Sites requires further analysis than just the fens located within SACs, SPAs and NHAs. This is because there has been no national fen survey conducted by the National Parks and Wildlife Service, and hence fens are not sufficiently represented in the NHA network. The IPCC conducted a National Fen Survey (Crushell, 2000), which identified 83 fen sites with a recorded conservation value lying outside of the NHA network in whole island of Ireland (List of Sites will be faxed). IPCC propose that these 83 sites should be included in the Register of Protected Sites in addition to those lying within the NHA network.</p>	<p>The first tier of the Register of Protected Areas in the Republic of Ireland is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Only sites on this first tier of the Register will be reported to the European Commission in Brussels as part of the Article 5 Report. Second and Third Tiers to the Register will be developed to include sites designated under National Legislation, such as Natural Heritage Areas (NHAs) designated under the Wildlife (Amendment) Act 2000. These lower tiers will be taken into account within the River Basin Management Plan process.</p> <p>The sites described by the IPCC will be of considerable interest to those formulating catchment management proposals in River Basin Districts.</p>

Submission Ref: 10 Organisation: Irish Water & Fish Preservation Society **Contact:** Geoff Cooper

Query Description	Recommendation/Response
<p>Key issue 1: Specific issue with problem of “great rafts of foam” on the R. Shannon below Drumsna, through Lough Boderg, Roosky, Lough Forbes, Tarmonbarry, Knappogue and onto Lanesboro In November 1998. The relevant statutory authorities were all notified. Appearance of the foam also coincided with an alleged crash in fish catches. Local business people formed the Irish Water And Fish Preservation Society to investigate the problem.</p>	<p>This is a specific issue raised in relation to a particular stretch of the R. Shannon. The Shannon RBD Project will follow up the issues raised in the submission with the relevant statutory authorities to see what were the findings of their investigations into these complaints and revert back to the IWFPS.</p>

Query Description	Recommendation/Response
<p>Future changes in pressures</p> <p>In the report several references are made regarding the initial assessment of risk does not address future changes in pressure management such as the agricultural sector reform. The IWT would like to highlight and bring attention to the Draft Farming Agreement that has been drawn up between the Farming Organisations and the Department of the Environment on review of the Habitats Regulations. The IWT is concerned about this agreement since it was done without consultation with any other concerned groups. The main concerns with this agreement are regarding rivers and lake margins during the implementation of designation. According to the agreement “ The Department will implement a revised approach to designation of marginal areas along rivers. (a) The revised SAC will include bank-side only to 2.5metres from the riverbank. If embankments or other features are present which will curtail direct run-off, the margin can be further reduced accordingly. According to farming guidelines for farming beside watercourses, applying slurry avoid direct contamination of watercourses by leaving adequate buffer strips ranging from 10 – 300 metres. The recommended buffer strip to leave when spreading organic waste for rivers and lakes is 20 metres. In the Draft Farming agreement there is no mention of buffer zones or clear indication on type of farming practices. The implications of this agreement on water quality in light of the characterisation reports should also be taken in the pressures and impacts for the risk assessment in the future.</p> <p>As we do not have data of the individual water bodies as described and illustrated in the document we will not be commenting at this present time on the characterisation or reference conditions. However we will make some general comments on the report as follows.</p>	<p>The initial characterisation is based on available information and sets a baseline. The purpose of the baseline is to identify data / information gaps and from there to initiate actions to address them. It is only when sufficient and reliable data is available (including trend data) that predictions about impact of future changes in practices by 2015 (e.g. farming, forestry) will be possible. Adequate information should be available by 2008 when the draft River Basin Management Plans will be published.</p>

Query Description	Recommendation/Response
<p>Report Structure</p> <p>Information provided in the Executive Summary and Chapter 6: Summary and Conclusions is clear and easy to understand for the public. However it may be argued that the other chapters were written in a complicated way, which is sometimes hard to follow. In order to enable effective public participation, when creating future reports the care should be taken that the wording and the structure of the report is clear and simple especially since public participation is a vital part of the Water Framework Directive process.</p>	<p>The content of the December National Summary Report was determined by specific requirements from the EU Commission which was detailed and technical in nature. Individual RBD reports are currently being prepared which will be tailored for public consumption. The feedback from stakeholders will greatly assist this process.</p> <p>The characterisation report is technically detailed as required by the EU Commission. However, the publication of individual RBD reports and the commissioning of a WebGIS reporting tool, which will be available to the public over the internet, will increase accessibility and comprehension of the characterisation results.</p>
<p>Uncertainties and next steps</p> <p>In chapter 6, table 6.3 provides an excellent summary of the uncertainties and next steps to be taken for the impact of human activities. We have reservations about some 'next steps' that we feel were not well defined for example, "The knowledge of morphological pressures needs to be improved", our question is "How?", there is no suggestion of forming central database or how they are actually going to address the problem. Details of how the relevant working group are going to address these gaps are lacking within the document. Other issues that do need clearer next steps are for lack of data about farmyard storage facilities, alien species, fishing activities and protected areas compliance.</p>	<p>In Chapter 6 the summary of uncertainties and next steps are general at this point. Detailed planning of work programmes to address these has already started early in 2005 through the various expert working groups established to implement the Regulations (SI 722, 2003).</p>
<p>Candidate groundwater bodies to which less stringent objectives (LSO) may apply</p> <p>Chapter 6.1.1, the report states that the WFD requires specification of groundwater's to which less stringent environmental objectives should be applied. Although we understand reasons why it is not possible to achieve the good ecological status, such classification must not be interpreted as meaning that nothing should be done and that it allows for further degradation of groundwater quality. It could be</p>	<p>Detailed investigations of the candidate groundwater bodies to which less stringent objectives will be carried out to assess their applicability more accurately. Even if eventually selected for the purpose of the RBMP the status of these water bodies will not be allowed to deteriorate any further.</p>

Query Description	Recommendation/Response
<p>argued by the industry and other potential polluter's that if it is not possible to improve the water quality why should they invest in expensive water treatment technologies.</p>	
<p>Register of Protected Areas</p> <p>In regards to Chapter 2 of the report on 'groundwater dependent terrestrial systems', the IWT would feel that although commendable that SACs are being included and assessed, we would feel that those systems outside such designation should not be forgotten for their local ecological importance and be included in this assessment.</p> <p>During this document protected sites compliance and the register of protected areas has been mentioned. However it would seem that protected would just mean Special Areas of Conservation & Special Protection Areas. Should protected areas" not also include for assessment National Heritage Areas (NHAs), wildfowl sanctuaries, Ramsar sites and Salmoid Waters as their designation of protection have not been mentioned throughout the document and they would have water bodies in need of characterisation. Table 3.3. states that " Water bodies containing designated sites failing to achieve the mandatory standards in the Bathing Waters Directive were considered to be at risk of failing to achieve their objectives", however their has been no mention of what will happen when water bodies within SACs and SPAs sites are failing to achieve good ecological status under the Habitats Directive and what remedial actions will be taken to maintain the integrity of the site as indicated under Article 6 of the Habitats Directive. Is SACs and SPAs compliance according to the Bathing Directive or what? This should be made clearer.</p>	<p>The first tier of the Register of Protected Areas in the Republic of Ireland is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Only sites on this first tier of the Register will be reported to Brussels as part of the Article 5 Report. Second and Third Tiers to the Register will be developed to include sites designated under National Legislation, such as Natural Heritage Areas (NHAs) designated under the Wildlife (Amendment) Act 2000. These lower tiers will be taken into account within the River Basin Management Plan process.</p> <p>For water bodies covered under several protected areas designations the most stringent will apply.</p>

Query Description	Recommendation/Response
<p>The IWT also find it difficult to understand how during the past five years that 'Protected area compliance', availability of national dataset were either unavailable or limited. We do agree that there is a large amount of biological data to be collected however did they not have sufficient time to submit those findings for this characterisation report. The National Parks and Wildlife Service (Previously within Duchas) have been collecting baseline data within Candidate SAC in preparation for Management Plans. The IWT would question why this data has not been made available and will it be improved by the establishment of a National Biological Record Centre.</p>	<p>Datasets held by NPWS in relation to protected areas such as candidate SACs do not necessarily contain information in relation to water status or impacts on water status.</p> <p>What information is available is not readily available in electronic and usable format</p> <p>NPWS did undertake an exercise to collate specific datasets <i>ie</i> the Fresh Water Pearl Mussel Impacts on the SACs and alien species information (see below)</p> <p>These are now recognised deficiencies to be addressed during next phase of WFD implementation</p>
<p>Q System</p> <p>The IWT were delighted to see that Q value system was not the only method of determining water quality and ecological status as we believe that this system does not always represent the true picture especially in relation to aquatic wildlife. As the report mentions the Nore Pearl Mussel that is on the verge of extinction as there is no reproduction of juveniles within a sensitive 5 year period. The IWT feel that their assessment of populations declining or failing to recruit should be considered in the overall context along with the Q system.</p>	<p>Review and revisions of the risk assessment since December 2004 has now incorporated new information on freshwater pearl mussel (<i>Margaritifera</i>) populations. In the SERBD applying the precautionary principle, this has resulted in the percentage of river water bodies 'at risk' (1a and 1b) increasing from 78% to 85%.</p>
<p>Time for consultations</p> <p>The above as outlined in the submission of the IWT in response to the public participation process. The IWT would feel that in the following reports that more time be given to address such sizable documents and to allow us to consult with our experts.</p>	<p>The authorities were bound to statutory reporting deadlines hence the tight timeframe for consultations. The report was made available immediately on the internet on the date of submission to the EPA (22nd December 2004). The deadline for submitting the final report to the EU Commission was enshrined in the WFD.</p>

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Key issue 1: Lough Gill has been classified as 1(b) - probably at risk in the recent risk assessment report. Recommendation that this classification be adjusted to 1(a) category - at significant risk, for the following reasons:</p> <ol style="list-style-type: none"> 1. There are two major drinking water abstractions from the lake - namely the North Leitrim Regional Water Supply and Sligo and Environs Regional Water Supply. The North Leitrim RWSS is currently supplying drinking water to Manorhamilton and Drumahair and will be producing in the region of 3,500m³/day. Design capacity 180m³/hr. This plant is not referred to in the Drinking Water National Monitoring Programme prepared by EG Pettits in 2003 as production at the plant had not commenced at that time. 2. The lake has experienced severe blue green algae blooms almost annually, which has threatened the continued supply of water to the Regional Water Supply in Sligo in the past. 3. The presence of zebra mussel has been detected in the lake in 2004. 4. There are 2 No. Urban Waste Water Discharges in the lake catchment at Manorhamilton and Drumahaire and a further Section 4 licence discharge from St Angela's College along the lake shore in Co. Sligo. <p>Priority Actions:</p> <ol style="list-style-type: none"> 1. Review status of Lough Gill. 	<p>The information and concerns expressed in the submission were considered as part of the planned further review of the "risk assessment" outcome of lakes by an Expert Technical Peer Review Group comprising the EPA, NPWS, CFB and OPW. Final risk assessments were determined on the basis of the expert group knowledge, historical trend information and further impact evidence available for lakes. The comprehensive review undertaken resulted in Lough Gill being placed into the higher risk category 1a – at significant risk under LW1 Lakes Risk Assessment_Impact Data. The final risk assessment categories were determined on the basis of sound scientific principles.</p> <p>The presence of Alien species such as Zebra mussel was considered in the lake risk assessment methodology in the context of its ability to mask the nutrient dynamics of lakes and the consequences this might have for the risk assessment process.</p> <p>The additional water abstractions from Lough Gill for Leitrim were included in the water abstraction register used to assess the abstraction risk from this lake.</p> <p>Separate point source assessments were carried out on all major point sources in the catchment of Lough Gill.</p>

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Key issue 1:</p> <ol style="list-style-type: none"> 1. The loss of Arctic Charr (<i>Salvelinus alpinus</i> L.) populations from Lough Conn has been the primary reason for its categorization. The Board believes that significant ecological changes have already occurred in this lake which, although not strongly reflected in results from mid water chlorophyll and total P samples, are evident in the frequent accumulations of algal scums in the littoral zones, and significant changes in fish populations. 2. Cullin has, undoubtedly, shown significant signs of eutrophication since the early 1990's. In addition to the well documented blooms of filamentous algae which occurred in the lake between 1995 and 2000, a very dramatic decline in salmonid numbers and an explosion in cyprinid numbers have accompanied the accelerated eutrophication process on this lake. The fact that the proliferation of filamentous algae has declined in recent years is largely reflective of the incorporation of tertiary treatment in the sewage plant at Castlebar, which is thought to be the main source of eutrophication on L. Cullin. While the Board welcomed this development, it has expressed serious concerns in recent times in relation to the treatment plant's capacity. It is the view of the Board that Lough Cullin remains very much at risk in terms of its water quality, and its characterisation under the Water Framework Directive risk assessment process should reflect this. 	<p>The information and concerns expressed in the submission were considered as part of the planned further review of the "risk assessment" outcome of lakes by an Expert Technical Peer Review Group comprising the EPA, NPWS, CFB and OPW. Final risk assessments were determined on the basis of the expert group knowledge, historical trend information and further impact evidence available for lakes. The comprehensive review undertaken resulted in the reclassification of the major Western Lakes including Loughs Conn, Cullin and Gill into the higher risk category 1a – at significant risk. The final risk assessment categories were determined on the basis of sound scientific principles.</p> <p>The characterisation process is an ongoing iterative process, relying initially on the use of readily available information, and further data and information collection is foreseen.</p>

Query Description	Recommendation/Response
<p>3. Although less well known as a recreational fishery, L. Gill is nonetheless an important salmonid lake. In 1997 a management plan was published describing a variety of physicochemical and biological characteristics of L. Gill. In this report references are made to concerns over the frequent appearance of localised algal blooms. Sediment core samples were analysed which revealed “a significant increase in the rate of phosphorus and algal pigments deposited in recent years”. Sligo county council have expressed extreme concern in relation to the water quality of L. Gill in the last 2-3 years and all available evidence from the Council suggests that the accelerated eutrophication, which was described from the sediment cores in 1997, is ongoing.</p> <p>Priority Actions:</p> <p>1. The North Western Regional Fisheries Board feels that a strong case must be made for an adjustment in the risk analysis of Lough Cullin and Lough Gill, which the Board understands have been characterised as category 1b rather than 1a water bodies which would be more appropriate for these lakes</p>	

Query Description	Recommendation/Response
<p>Chapters 1, 3</p> <p>Key issue 1: Having read the December 2004 report, I should like to comment on risk categories 1b and 2a referred to in chapters 1 and 3 viz: "Probably at significant risk and probably not at significant risk". They are absurdities. Probability significance and risk occur in actuarial practice, operations research, and many other areas. They are technical terms and are usually associated with probability distributions, critical areas of distributions, point estimates, and parameters such as mean and variance. But this kind of material does not appear in the report nor do any of the references suggest this material was used either.</p> <p>I have to consider, of course, what was asked for. Table 1.5 sets out the EU requirements under three categories. Risk categories are implied but not defined. I take it that it was up to the member states to decide what they meant by risk. If the Ireland report was not to be a technical risk analysis, it could be something else. Expert opinion might do, and I can see that the EPA were heavily involved in the data. They have been at it for so long now that they would have more knowledge than anyone else. But why split the middle category called for by the EU? It seem that there is a reluctance to say "we don't know". Instead we have two categories which amount to popularised technicalities and nobody quite sure what the situation is or is not.</p>	<p>The purpose of the risk assessment is to try to identify which water bodies are at risk of failing the environmental objectives set out by Article 4 of the Water Framework Directive.</p> <p>The precautionary approach has resulted in water bodies being categorised into two broad groups based on the level of confidence. Firstly, those water bodies where there is high confidence that the water body is impacted (1a – at risk) or not impacted (2b – not at risk). Secondly, those water bodies where confidence in the outcome of the risk assessment is lower i.e. category 1b (probably at risk) and category 2a (probably not at risk) will require further characterisation. This can arise for a number of reasons: (i) much of the information needed to decide whether there is an impact is not available (information on pressures, water body sensitivity, susceptibility and impacts), (ii) there is currently incomplete understanding of the impact of some pressures and (iii) there is variable confidence in the risk assessment methods used. Follow up actions to increase confidence will include; additional monitoring, data collection or refinement of risk assessment methods.</p> <p>Consequently, four risk categories have been defined for Ireland. This allowed for maximum consistency with UK approach to facilitate international RBD characterisation</p>

Query Description	Recommendation/Response
<p>Throughout the report risk categories are added in a manner which raises questions. Percentages representing relative frequencies can be added, but are the categories themselves additive? In the summary Table 6-1 categories 1a “At risk” and 1b “probably at risk” are added to give a “Total at risk” category. This is a nonsense. If one wanted to combine the two categories in the sense of 1a union 1b, one could produce a category “At risk or (exclusive probably at risk”. But this is not what appears in row 3 column 1 of Table 6-1. It is possible that the four categories 1a, 1b, 2a and 2b were intended as a ranking arrangement rather than quantitative analysis. If such were the case, then the scaling could not be more than ordinal scale. But percentages are at least on interval scale i.e. isomorphic with the system of arithmetic, whereas ranking is not.</p> <p>Bearing in mind that the report is intended to be read by someone in Brussels, if that is where they live, he or she could be confused by the five categories in Table 6-1. They asked for information under three headings and they got five. So they are going to have to sort out how the five categories could be divided into three. I wonder what arithmetic they will bring to bear?</p> <p>I note, however, from Table 6-2 that action will be taken with respect to categories 2a and 1b. Hopefully the situation will become clearer.</p>	

Query Description	Recommendation/Response
<p>Key issue 1: In 3.1.4 Significant Pollution Pressures on Surface Water - In Ireland Environment Report 2004 quote “confirms that a significant portion of nutrient loss from Agriculture occurs during winter months so when plant and algae growth are lower therefore the resultant impact is not as severe”. This may be so but the potential contribution of phosphorus from lake sediments in lakes by recycling. Must be taken into consideration. Conclusion – winter spreading of slurry contributes to this build up of phosphorus in lake sediment and so is indirectly significant. This statement in 3.1.4 is misleading and should be detracted. Ref 5 Lake Water Quality – Lough Leane Catchment Monitoring and Management System –2 nd Interim Report. There are many other anomalies in the report but the time scale for submission is too short to address them.</p>	<p>It was necessary to incorporate this comment from the Environment Report 2004 to prevent misinterpretation of the annual loading estimates presented in the Initial Characterisation Report. The Shannon RBD consultants were responsible for the preparation of the Lough Leane report and are cognisant that the timing of nutrient load release is significant and varies between individual systems. Issues such as these will be addressed in detail during the further characterisation process.</p>
<p>Key issue 2: Insufficient back up data for Dangerous Substances. Lack of enforcement on construction sites (road construction etc) by the local authorities with regard to diesel spillages at refueling of equipment - compressors, water pumps - where spillages are frequent because of mishandling and lack of monitoring procedures and supervised provision. Lack of BATNEEC standards right across the spectrum of the building construction industry. No inventory of fuel use is used to cross check fuel –in fuel -out ratio because of lack of calibration etc on hand pump tanks etc. Record report indicating deficiencies are absolutely essential if we are to correct this anomaly of insufficient data where Hydrocarbons a List I Substance under the dangerous Substances Directive. This can be applied to List 2 Substances similarly.</p>	<p>Any pressures that are identified as a threat to the achievement of “good status” by a water body will be addressed in the River Basin Management Plans.</p>
<p>Key Issue 3 :Importance of Birds as Environmental Indicators As macroinvertebrates are used as biological indicators of water quality, so too birds are also indicators –for example declining numbers of waders on Lough Ree represent the</p>	<p>Annex V specifies the biological elements to be used in assessing surface water status</p>

Query Description	Recommendation/Response
on-going loss of Q5 Value rivers on the Shannon system.	
<p>Key Issue 4: Impact of Recreational Activities Sports/recreation activity on Lough Ree and other lakes on the Shannon System – jet-skis, power boats, cruisers, potentially threaten quality with Hydrocarbon emissions. Threat from commercial shooting which is now increasing at an alarming rate on Lough Ree and elsewhere along the Shannon system One lead shot pellet injected by a bird will take three painfully slow weeks for it to kill that bird. Fauna , birds and fish are an integral part of the ecosystem and so play a key role in maintaining the correct balance biological -chemical parameters of water quality.</p>	<p>Any pressures that are identified as a threat to the achievement of “good status” by a water body will be addressed in the River Basin Management Plans.</p>
<p>Key Issue 5: Importance of Wetlands Wetlands are essential as a filter for water and source of food. Lack of understanding of the essential function of wetland systems leads inevitably to their irreversible rehabilitation. An inventory of Wetlands within the ShRBD is needed.</p>	<p>The first tier of the Register of Protected Areas in the Republic of Ireland is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Only sites on this first tier of the Register have been reported to the EU as part of the Article 5 Report. Second and Third Tiers to the Register will be developed to include sites designated under National Legislation, such as Natural Heritage Areas (NHAs) designated under the Wildlife (Amendment) Act 2000. These lower tiers will be taken into account within the River Basin Management Plan process and will include wetlands which are part of NHAs.</p>
<p>Key Issue 6: Restrictions on Development No more development on or within the basin of Risk A1 and A2 lakes on ShRBD FROM Lough Key down</p>	<p>The risk assessment carried out for the Article 5 report is the beginning of an iterative process into the identification of waterbodies at risk of failing to meet their environmental objectives, and which feeds into the river basin planning process. The issue of restrictions on development would be more appropriate for consideration in the preparation of the Programme of Measures and the River Basin Management Plan.</p>

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Key issue 1: Identification of rivers at risk. Table 3-13 River water bodies affected by morphology pressures - South Western RBD shows 12 water bodies at 1a, 220 at 1b, 186 at 2a and 237 at 2b. Looking at maps 351 and 373, I failed to locate the rivers which you say are at risk. Also, the point source assessment, Table 3-14, indicates a moderate portion of Irish water bodies are at risk; again the same problem. Even if the rivers were specified in a summary report it would make it so much more interesting to see at a glance.</p>	<p>Due to the scale of the maps and the colour coding of water bodies at risk, the identification of rivers by name on the maps has not been possible. Summary reports are being produced for each RBD and it is intended that they will provide maps and / or lists which will make it easier to identify the rivers or sections thereof which are at risk. A WebGIS reporting tool is currently being developed which will provide public access over the internet to the characterisation details at water body level.</p>

Query Description	Recommendation/Response
<p>Key issue 1: Concerned that there is under-estimation of the level of risk of the upper Shannon area, particularly from industry with point-source pollution (related to IPPC which is self-monitored) and also from sewage and illegal dumping of construction refuse. I cannot see any maps that would allow me to be more specific. There should be more areas indicated as definitely at risk.</p> <p>In the upper Shannon it is claimed that most of the normal fish stock has disappeared and there has been non-natural sticky foam observed for several years which has gone largely uninvestigated. This is alleged to have been accompanied by massive fish kills at times. The statutory authorities have been experienced as being uncooperative in their so-called investigations.</p>	<p><u>(i) Risk Assessment</u> The Risk Assessment process is iterative and will improve as information/data availability improves. It is likely that some risk designations will change as a result. All risk assessments are based on the best available information and knowledge. Characterisation is an iterative process and consultation with stakeholders will be ongoing.</p> <p><u>(ii) Access to maps</u> The competent authorities, local authorities and EPA, are currently preparing WebGIS reporting tools to provide the public with direct access to characterisation information by water body</p> <p><u>(iii) Non-natural foam/fish kills</u> The Shannon RBD Project will follow up the issues raised in the submission with the relevant statutory authorities to see what were the findings of their investigations into these complaints and revert back to Roscommon Eco-Network.</p>
<p>Key issue 2: I am also concerned about point-source pollution on the River Rye in the Eastern region. (While this is not in our immediate region, it is a similar kind of pollution problem that I have been made aware of, also in a case where there is self-monitoring of IPCC, with unusual tumours and cysts reported in livestock and domestic animals. Again, the lack of the relevant maps makes it difficult for me to be more specific.</p>	<p>The Eastern RBD would be interested in any further information regarding this comment. The ERBD has provided as much detail as possible on the maps provided, including point sources. The maps are necessarily district-wide for the Article 5 report.</p>

Query Description	Recommendation/Response
<p>Key issue 1:</p> <p>Access to Information Considerable difficulty in accessing information on the Characterisation process - maps hard to decipher, particularly in the format used on the web site; difficult to pinpoint the rivers lakes etc referred to. Suggest that complete lists in textual form should be provided in future. Recommend that copies of all documents and maps should be available in each local authority for inspection. Use of cd-roms would be helpful to voluntary people working on home computers with slow download speeds (DEHLG has already helpfully piloted this idea).</p>	<p>Every effort will be made to ensure that copies of all documents and maps will be available in each local authority for inspection in the future. Consideration will also be given to the use of CD-Roms for making information more easily accessible. The competent authorities, local authorities and EPA, are currently preparing a WebGIS reporting tool to provide the public with direct access to characterisation information by water body over the internet.</p>
<p>Key Issue 2:</p> <p>Diffuse Pollution Don't understand that no lakes in the Shannon catchment are "at risk" from diffuse source pollution in Table 3-21. From our own local experience of Lough Derg where access to the shoreline is restricted by North Tipperary Council each Summer we know that water quality is not as it should be. Based on the "mini catchment studies" carried out as part of the Lough Derg and Lough Ree Catchment Monitoring and Management System the contribution and source of diffuse pollution is clear. While we acknowledge that in Table 3-22 eight lakes in the Shannon IRBD have been summarized as 1a at risk, we are not clear as to how actions taken based on this designation will translate with reference to Diffuse Pollution given that the lakes are not directly classified at risk under that heading.</p>	<p>A 1b category results in further characterisation which will address diffuse sources. Since much of the river network is at risk from diffuse source pollution then management of these sources will remain a priority in the Derg & Ree catchment and nationally.</p>
<p>Key Issue 3:</p> <p>Point Source Pollution Concerned that some of the information on which assessments are based may be out of date - specifically urban wastewater treatment plants, which are at or near their design capacities. It is essential to factor in planned growth in the town and villages serviced by them in order to make a true assessment of waters under threat from discharges of</p>	<p>The fact that the Risk Assessment was based on the current situation and did not take account of projections to 2015 is acknowledged. It should be remembered that this is an initial assessment of water bodies at risk and that there will be further work done in this area to improve the classifications between now and the draft RBMP in June 2008.</p>

Query Description	Recommendation/Response
<p>WWTPs. Proper planning demands that infrastructure is put in place before development takes place. Also the cumulative effect of settlements below the 2000 population threshold of the Urban Wastewater Directive must be considered.</p> <p>Also in regard to point source pollution from Local Authority Licensed Industry the findings of the Lough Derg and Lough Ree Catchment Monitoring and Management System need to be noted.</p>	<p>The findings of previous reports (e.g. Lough Derg and Lough Ree Catchment Monitoring and Management System) will be taken into consideration when developing the draft RBMP for the Shannon RBD by 2008.</p>
<p>Key Issue 4:</p> <p>Economic Analysis of Water Use SOLD supports the full implementation of the Polluter Pays Principle. We feel that more research is needed into the area of economics and WFD in Ireland. A socially equitable model must be developed which will be broadly acceptable and fair to all sectors.</p>	<p>The EAWU was compiled with limited available data and there is a need to increase information in this area. Economics will play a key role in the Programme of Measures.</p>
<p>Key Issue 5:</p> <p>Groundwater Bodies for which lower objectives are to be specified Hope that any lower objectives being specified in this regard would not be seen as in any way prejudicial to efforts to provide sustainable rehabilitation of sites with problems relating to mining. In respect of the Shannon IRBD we refer in particular to Tynagh and Silvermines.</p>	<p>The candidate groundwater bodies and their associated surface water bodies listed in this Characterisation Report will undergo detailed evaluation before confirmation of LSO or derogation applicability. Consultations with relevant stakeholders will be part of this next phase. The report confirms that all practicable steps should be taken to prevent any further deterioration of the status of these waters</p>
<p>Key Issue 6:</p> <p>Public Awareness/Trust SOLD ran a series of three information meetings about the WFD in the Lough Derg area in November/December 2003. The overwhelming response coming from those meetings was that they had little information about the WFD and they did not trust current administrative systems to deliver real improvements in water quality. In the intervening 15 months the level of information has improved but the doubt regarding the outcome is still very much a feature. Historical failures to implement water pollution legislation by statutory agencies and local authorities have helped to reinforce this doubt</p>	<p>The Shannon RBD Project is keen to work in partnership with SOLD and other NGOs to increase awareness among the general public about the WFD and help to establish trust in the process.</p>

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Key issue 1: Following our discussions in relation to exchange of information and moving towards advancing the implementation phase of the River Basin Project, I enclose herewith a copy of Professor Murray's report on investigations carried out recently in Lough Arrow. You will see from this that there has been a deterioration in water quality, particularly in the last ten years and this, allied to the discovery of zebra mussels in the lake has led to its designation as being definitely at risk. Professor Murray has also prepared a report on work carried out for us on Lough Gill (copy enclosed) which would similarly indicate a deterioration in water quality and again this, allied to the confirmed presence of the zebra mussel and also taking into account the extraction from the lake for both Sligo and now Leitrim, would require in my view a review of its status.</p> <p>Priority Actions:</p> <ol style="list-style-type: none"> 1. Confirm status of Lough Arrow. 2. Review status of Lough Gill. 	<p>The information and concerns expressed in the submission were considered as part of the planned further review of the "risk assessment" outcome of lakes by an Expert Technical Peer Review Group comprising the EPA, NPWS, CFB and OPW. Final risk assessments were determined on the basis of the expert group knowledge, historical trend information and further impact evidence available for lakes. The comprehensive review undertaken resulted in the confirmation of the risk status of Lough Arrow as being 1a – at significant risk and Lough Gill into the higher risk category 1a – at significant risk under LW1 Lakes Risk Assessment_Impact Data. The final risk assessment categories were determined on the basis of sound scientific principles.</p> <p>The presence of Alien species such as Zebra mussel was considered in the lake risk assessment methodology in the context of its ability to mask the nutrient dynamics of lakes and the consequences this might have for the risk assessment process.</p> <p>The additional water abstractions from Lough Gill for Leitrim were included in the water abstraction register used to assess the abstraction risk from this lake.</p> <p>The characterisation process is an ongoing iterative process, relying initially on the use of readily available information, and further data and information collection is foreseen.</p>

Submission Ref: 20

Organisation: SWAN

Contact: Sinéad O'Brien

Query Description	Recommendation/Response
<p>Key issue 1: Limited time was available for comment and also, the technical annexes, vital to a full and complete analysis of the report were unavailable during the submission period. We feel that the time allowed for comment was wholly inadequate, given the lengthy and highly technical nature of the document.</p>	<p>Limited time was available for comment due to the demanding statutory deadlines imposed on the EPA and Local Authorities by the Water Policy Regulations. Characterisation is an iterative process and consultation with stakeholders will be ongoing.</p>
<p>Chapter 3</p> <p>Key issue 2: Members had difficulties accessing and interpreting the maps associated with the Characterisation Report. The current risk assessment maps are a wholly inadequate representation of the risk designations of individual water bodies. It is impossible for our members to make specific comments on risk assessments for water bodies in their RBDs as, even with the help of Ordnance Survey maps, it is extremely difficult to identify individual water bodies.</p>	<p>The competent authorities, local authorities and EPA, are currently preparing a WebGIS reporting tool to provide the public with direct access to characterisation information by water body over the internet.</p>

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<p>Chapter 3</p> <p>Key issue 1: Lough Carra has been categorised as category 1b, that identify lakes as "probably at significant risk of failing the environmental objectives", rather than category 1a that defines lakes as "at risk". The characterisation report sets a general boundary of 20 µg TP/l as the threshold for high alkalinity lakes. This gives rise to two main concerns.</p> <ol style="list-style-type: none"> 1. First that a boundary of "good" status as defined by the 20 µg TP/l assumes that the boundaries set by the 1998 nutrient Regulations as mesotrophic reflect a state that can be considered generally as not degraded (i.e. good). This follows on from the logic of the 1982 OECD scheme (as modified by the EPA), and which does not really incorporate the concept of reference state as required by the WFD. It assumes that mesotrophic equates with good status. I understand that the 1998 regulations as a response to the EU Dangerous substances Directive of 1976 has been challenged by the EU and is the subject of pending proceedings. 2. Second, of greater concern but also related to the concept of reference state, is the fact that there is a substantial body of data that demonstrates a decline in the ecological quality of Lough Carra (and, incidentally Loughs Conn and Cullen). This view comes from not only the extensive data collections done by my own research group but also that of the CFB and EPA. A steady increase in trophic state has also been supported by data collected from sediment cores and, in addition, there is considerable anecdotal evidence of an increase in macrophyte cover. 	<p>Given the short time period to undertake risk assessment it was essential to establish boundary threshold levels for the use of impact data, mean total phosphorous, mean chlorophyll_a and maximum chlorophyll_a, which would be applicable to all Irish lakes. These threshold levels were developed after careful consideration of existing available historical data derived from national lake monitoring programmes and which was collected in a systematic way. All available monitoring data was screened for validity and suitability for use. Type specific reference boundary conditions were applied where sufficient data was available to type lakes in question.</p> <p>Where historical data were available over a prolonged period this was used to qualify the lake risk assessments. Where the trend indicated an unfavorable trend in concentrations of measured parameters in lakes they were reclassified into a higher risk category.</p> <p>The information and concerns expressed in the submission were considered as part of the planned further review of the "risk assessment" outcome of lakes by an Expert Technical Peer Review Group comprising the EPA, NPWS, CFB and OPW.</p> <p>Final risk assessments were determined on the basis of the expert group knowledge, historical trend information and further impact evidence available for lakes. The comprehensive review undertaken resulted in the reclassification of the major western lakes into higher risk category 1a (at significant risk), including Lough Carra.</p> <p>The final risk assessment categories were determined on the basis of sound scientific principles.</p>

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<p>Priority Actions:</p> <ol style="list-style-type: none"> 1. Given the high importance of Lough Carra, the delay in adopting a programmes of measures, that will result from a designation as category 1b compared with 1a does not conform to a precautionary approach as indicated as appropriate in the national categorisation report. Owing to their regional and international importance, and the evidence of eutrophication it is suggested that such an approach is, indeed, applied to all of the Great Western Lakes. 	<p>The characterisation process is an ongoing iterative process, relying initially on the use of readily available information, and further data and information collection is foreseen.</p>

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Organisation: Waterways Ireland **Contact:** Cormac McCarthy

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<p>Chapter 4</p> <p>Key issue 1: The development of ecological assessment and classification systems will be one of the most important and technically challenging aspects of the Water Framework Directive. We would request that Waterways Ireland be a key stakeholder on the technical group set up to quantify “Good Ecological Potential”.</p>	<p>The determination of GEP for pAWB's and pHMWB's must be complete by December 2008. The assessment will require expert judgement and will be undertaken by the EPA supported by relevant authorities. The EPA will consult widely with stakeholders in this process and inputs of relevant data and expertise will be sought.</p>
<p>Chapter 4</p> <p>Key issue 2: Navigations require management through many different mechanisms such as dredging, weed cutting and use of herbicides. These issues need to be contemplated and addressed in the coming work in order to ensure full and effective compliance with the Directive.</p>	<p>Programmes of measures aimed at achieving the objectives established under this Directive must be drawn up and fully operational by 2012. These measures shall protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving good ecological potential and good surface water chemical status by 2015.</p>

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<p>Chapter 1</p> <p>Introduction- Overview of Directive and implementation of Directive as set out in legislation responsibilities of competent Authorities. Comment introduction quite long</p>	<p>Considering the wide audience it was important to provide an extensive introduction to the Water Framework Directive and it's implementation to put the Characterisation Report in context.</p>
<p>Chapter 3</p> <p>Water results for indicating groundwater do not take into account private well results because it is felt they were not abstracting enough to be representative of groundwater. Therefore, Wexford areas at risk are few i.e because may not be served by a public groundwater scheme. However, in the Creacon Area outside New Ross where EU has a reasoned opinion in relation to nitrates in groundwater is not considered area in South west at risk probably because this area is generally serviced by the Taylorstown surface water supply.</p>	<p>The threshold for groundwater abstractions required to be registered is 10m³. Those above 100m³ will be required to be monitored. To determine the overall status of a groundwater body it was critical to have a sufficient pumping rate to assess water quality over a wide area Sampling points are adequate to assess whole groundwater bodies. Localised elevations in Nitrates for example would not have been picked up. Surface water supply from Taylorstown has no bearing on the groundwater risk assessment.</p>
<p>Chapter 3</p> <p>Further Characterisation required here- Appears project may not be aware of all the unlicensed point source pollution applications within Wexford (ie these are application received and in place but not got any licences yet. See Excel Table of current unlicensed discharges. Most of these were existing without licences and we are following up I also enclose list of Caravan sites most of which need discharge licences also Closed Landfill sites appear to be missing from data sets used Illegal Landfills sites appear to be missing from data sets used</p>	<p>During further characterisation datasets for these pressures will be sought from the relevant authorities.</p>

Query Description	Recommendation/Response
<p>Chapter 3</p> <p>Wastewater treatment plants don't appear to depend on loading or where there are changes in loads and how facilities are improved, PE, or performance nor does it take account of where a plant has been invested in and upgraded how that has improved water quality. Further Characterisation required.</p>	<p>The risk assessment method does depend on the performance of the discharging facilities as it assesses compliance of monitoring data against licence conditions. There is a need for monitoring improvements in some cases. There is also a need to improve the management of monitoring data. This is currently being addressed using the computer based LabInfo monitoring database developed by the Local Government Computer Services Board to manage all monitoring data.</p>
<p>Chapter 3</p> <p>Agriculture</p> <p>In relation to forestry it appears to be based only on slope there is more to forestry than slope, account is not taken of pressure of future target plantation and aerial fertilization. It was noted at the management meeting by a forestry representative that studies didn't show disimprovements as a result of aerial fertilization in general however, forestry uses rock phosphate a slow release fertilizer and studies should use biotic indices as they will show long term effects that may not be determined by chemical methods. There is no correlation shown between soil type, slope and water quality.</p> <p>There has been no correlation the predicted water quality improvements as a result of the Nitrates Directive and reduction in livestock numbers in agriculture in the coming years due to the Fishcler proposals (FAPRI Food and agriculture policy research institute have also predicted a fall in livestock numbers in Ireland.)</p> <p>The anticipated uptake in REPS hasn't been acknowledged.</p> <p>Not included in point source pressures were,</p> <ul style="list-style-type: none"> · Farmyards (suggest LPS land parcel numbers are used to estimate the number · Unlicenced food sector · Sheep dip areas (In relation to Sheep impacts it was based on greater than 1/2 Lu/Ha) <p>Comment Further Characterisation Required</p>	<p>The initial characterisation is based on available information and sets a baseline. The purpose of the baseline is to identify data / information gaps and from there to initiate actions to address them. It is only when sufficient and reliable data is available (including trend data) that predictions about impact of future changes in practices by 2015 (e.g. farming) will be possible. Adequate information should be available by 2008 when the draft River Basin Management Plans are published.</p> <p>The risk factors used in forestry risk assessments were considered to be the most appropriate by experts.</p>

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<p><u>Chapter 3</u></p> <p>Ecosystems and terrestrial Habitats Comment Further Characterisation required. Data sets appear incomplete recommend proposed protected sites are included.</p> <p>Transitional It appears that transitional waters bathing waters were not included in the risk assessment. It is also unclear where Lady's Island lake fits on the classification.</p>	<p>Datasets will be improved as part of further characterisation.</p> <p>All designated bathing waters under the Bathing Water Regulations (S.I. 155, 1992) were included in the risk assessment. Lady's Island was classified as a transitional lagoon (TW6) under transitional water types and was included in transitional waters risk assessments.</p>
<p><u>Chapter 3</u></p> <p>Account would not appear to have been taken of our Development plans and proposed areas for population growth. The report appears to have not examined improvements in the last 10 years due to improvements nor tried to predict-projected improvements in water quality through investment . eg. Based on improvements what would be the result of installing a new WWTP in a location. Storm overflows say at risk it overflows, 6 times a year but this information is not known.</p> <p>Comment Further Characterisation required.</p>	<p>As above. The initial characterisation is based on available information and sets a baseline. The purpose of the baseline is to identify data / information gaps and from there to initiate actions to address them. It is only when sufficient and reliable data is available (including trend data) that predictions about impact of future changes in practices by 2015 (e.g. farming) will be possible. Adequate information should be available by 2008 when the draft River Basin Management Plans are published.</p>
<p><u>Chapter 3</u></p> <p>Septic Tanks The survey/assessment on septic tanks did not account for area where drainage is a known problem (Macamore Soils) nor what was the general date of the septic tank systems, Pre SR6 we had soak holes are therefore are of greater risk some piped directly to drains.</p> <p>Comment: Further Characterisation required.</p>	<p>Drainage property of soils was a factor used in this assessment. As pointed out information was not available on age of septic tanks. This is important information, which will be addressed during further characterisation.</p>

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<p><u>Chapter 3</u></p> <p>Concerns over the approach taken, there doesn't appear to be a correlation between individual risk factors and water quality. One would expect for different catchments different risk factors. Expect that each sub-catchment would have critical factors and therefore you could identify what measures to focus on.</p> <p>If you had a basic water quality map showing areas of poor and good water quality, then look at the various risks and determine what is associated with good water quality and poor water quality. You would then expect that sub-catchments would have critical factors so one can identify what measures to do.</p>	<p>Where adequate data were available risk assessments were based on correlations between causative factors and monitored impact information. The Nitrate and Phosphorus risk assessments for groundwater and surface waters were based on correlations with landuse patterns and took receptor sensitivity (type of receiving water) into account. In the case of groundwater risk assessments pathway susceptibility was also accounted for.</p>