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Implementation of River Basin Management Plans: Current Issues and Future Needs

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INTERNATIONAL CENTRE FOR
LOCAL AND REGIONAL DEVELOPMENT

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IMPLEMENTATION OF RIVER BASIN MANAGEMENT PLANS: CURRENT ISSUES AND FUTURE NEEDS

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John Driscoll is the founding Director of the International Centre for Local and Regional Development (ICLRD) and Vice President of the Institute for International Urban Development in Cambridge, Massachusetts, where he is engaged in research, teaching and consultancy activities that focus on regional and city development strategies. From 1989 to 2005, he was a senior research associate and lecturer in Urban Planning at the Center for Urban Development Studies, at the Harvard Graduate School of Design. He is currently a research fellow at the Joint Center for Housing Studies at Harvard University.

Pádraig Maguire is the Regional Planning Guidelines (RPGs) Implementation Officer with the Border Regional Authority. He began his career in 1998 with the Northern Ireland Environment and Heritage Service as a Scientific Officer, before subsequently joining Planning Service Northern Ireland in 2000. Whilst working with Planning Service, he also studied at Queens University Belfast where he attained an MSc in Environmental Planning. Following this, he joined Monaghan County Council as an Executive Planning Officer in 2005 and worked as a key member of the Forward Planning Team up until his secondment to the Border Regional Authority in 2008. Pádraig currently participates in numerous cross-border spatial planning projects, and is a member of the ICLRD Advisory Board.

This paper presents a summary of the issues raised and discussed at the River Basin Management Seminar held in Monaghan on the 17th October 2012.

December 2012.

In October 2012, spatial planners from the Irish border region, as well as scientists, policy-makers and researchers held a workshop in Monaghan Town to review the opportunities and challenges in the management of river basins, and in particular, those that cross jurisdictional boundaries. Since the adoption of River Basin Management Plans (RBMPs) in 2010 for the eight river basin districts on this island, there remain numerous challenges in terms of implementing these plans. The participants at this half-day workshop (see Annex 1) also discussed practical steps that can be undertaken to strengthen the understanding and the linkages between spatial planning and river basin management. Issues addressed during the workshop included:

- What RBMP's mean in practice for local authority planners and what further refinement of information is needed to influence river basin management plans within the border region;
- Are there particular aspects to managing the cross-border elements of the International River Basins that need to be addressed?
- How to best support the preparation of the next cycle of River Basin Management plans due to commence in December 2012 and completed for 2015.

The workshop was organised by the Border Regional Authority (BRA) and the International Centre for Local and Regional Development (ICLRD) as part of a follow-up to a series of action research reports and documentation of good practices in river basin management by the ICLR¹. The reports were part of ICLR¹'s CroSPlan I programme, an INTERREG IVA funded-project administered by the SEUPB. These reports, together with some of the presentations from the workshop are available on the ICLR¹ website (www.iclrd.org).

The Water Framework Directive and Spatial Planning

The Water Framework Directive (WFD) provides a framework for good governance and the opportunity to adopt a spatial and evidence-based approach to environmental policy implementation, through the preparation of River Basin Management Plans (RBMPs). The WFD presents synergies with spatial planning objectives, as it represents a factor in:

- Decision-making in development management (e.g. drinking water quality requirements and waste water discharge to fulfil water quality protection standards);
- Spatial plan-making (e.g. highlights surface and ground water bodies that are vulnerable to deterioration in their status and identifies where development should and should not occur);
- The development of environmentally compatible economic activities including recreational and tourism;
- Active policy integration (e.g. improving the status of water resources presenting win-win situations for human health and biodiversity); and

¹ See: *Responding to the Environmental Challenge? Spatial Planning, Cross-Border Cooperation and River Basin Management* by Creamer et al; *The Elbe River Basin District: Integrated Cross Border Management in Practice* by Cormac Walsh; and *The Connecticut River Basin: Integrating Water Quality Improvements with Regional Land Use Plans* by Shi et al.

- Spatial strategies as frameworks for policy coordination (e.g. cross-border and cross-county compatibility of development objectives in the context of river basin management).

The preparation of the first round of RBMPs has been completed. Of relevance to North-South cooperation and inter-jurisdictional cooperation are two ongoing INTERREG-funded collaborative projects in river basin management:

- The Freshwater Pearl Mussel (FPM) project, jointly carried out by Donegal County Council and Northern Ireland Environmental Agency (NIEA). The aim of the project is to deliver practical cross-border measures and guidance to protect such species and improve water quality, while tackling jurisdictional differences and stakeholder acceptance issues.
- Territories of River Action Plans (TRAP) which promotes learning on the implementation of the WFD across the EU. Shannon Development, the Mid West Regional Authority and the South West Regional Authority are three of ten EU Partners involved in this project.

Now that RBMPs are coming to the end of the first cycle and authorities and agencies will soon be moving into the second cycle, there is an opportunity to learn from the progress made since the transposition of the WFD throughout the EU, to identify best practise where it exists, and determine what can be done in the future to improve the effectiveness of implementing RBMPs on the island of Ireland.

Key Emerging Issues and Trends

Arguably, RBMPs as currently formulated are difficult to translate into planning measures as they lack concrete objectives and actions, the issues are identified in generic or scientific terms, objectives are often aspirational and the plans are too voluminous and are not spatially-referenced. Moreover, current legislation states that development plans must “take account” of RBMPs, but local authorities do not appear to have the capacity or competence to translate the programmes of measures and recommendations from RBMPs into development plans. Reasons cited for this are that local authority staff do not appear to have the skill-sets required to do this work. Overall, the lack of guidance, ‘know-how’ and clarity in RBMPs are critical aspects affecting implementation. In addition, there are interesting cross-disciplinary communication challenges between scientists and planners involved in preparing and implementing RBMPs.

Strengthening Evidence

Significant progress has been made in recent years in sustainable development (due to EU legislative requirements on water, biodiversity, impact assessment, etc.), through the provision of better evidence-base (e.g. scientific quantitative and qualitative data and mapping) and undertaking impact assessment to inform strategic thinking and decisions. A strong evidence base is a pre-requisite to good decision-making in planning. However, there can be challenges in communicating scientific mapped outcomes and policies to planners; for example, there are difficulties in translating the significance of high/extreme risk areas from Geological Survey of Ireland mapping to planners. The evidence-base has to be communicated into a meaningful set of issues, policies and actions to inform planning

enforcement and management. These are further affected by three key considerations constraining the effective use of RBMP information for planning:

- *Diversity of information:* Data comes from many sources and is presented in many forms. As a result, broad expertise is required to access/replicate/interpret these data. In addition, there are significant access, availability and data gap issues, which need to be addressed and considered in order to provide meaningful and usable information required to inform planning;
- *Diffuse information:* Information can be extracted from numerous sources, including scientific publications, development plans, SEA/EIA/AA and sectoral guidance. For effective use of all relevant information, there is a need for a centralised resource base (e.g. environmental assets register), as well as for distilling handbooks and sector-specific guidance to provide pragmatic and practical guidance for planners; and
- *Difficulties of interpretation:* the interpretation of data by planners can be further constrained by the lack of absolutes (i.e. subjective information), the occurrence of interactive/cumulative effects, and the geographical scale (e.g. limitations on the level of detail provided for the efficient use and administration of water management units).

Geographical Scale of River Basin Planning and Implementation

River Basin Districts on the island of Ireland are natural catchments and do not adhere to administrative boundaries. Experience would indicate that stakeholders from both jurisdictions are more likely to participate in a process and get involved when they can relate directly to areas and issues that impact their communities. Given the spatial scale of River Basin Districts, it can be difficult for persons to translate regional issues down to the local spatial scale. However, when considering a smaller geographical area, it is easier for stakeholders to relate to specific areas, rivers and lakes within the catchment that may require measures to improve quality. Detailed analysis also provides the grounds for effective implementation.

In Northern Ireland, to facilitate the implementation of RBMPs, river basins have been broken down into smaller catchment management areas. This partitioning has provided a better focus for the action plans, spatial planning functions and management of catchments including working with local and regional stakeholders. The NIEA considers that this approach of Local Management Areas (LMAs) is working well and will facilitate implementation.

Communication of Measures and Benefits

There is a need for constant communication and mechanisms to resolve potential issues between RBMP implementation and spatial planning, particularly in the areas of waste water treatment, urban development, forestry and agricultural pressures and water quality needs. For example, in Ireland, the Department of Environment, Community and Local Government (DoECLG) is currently in discussions with Coillte Forestry regarding concerns relating to biodiversity and water quality protection from forestry, roads (potential contamination during construction) and agriculture sectors (risk of not being able to deliver the RBMPs in light of pressures from horticulture and animal rearing). Better communication with councillors is also required to reconcile policies for protecting water with that of promoting rural areas. Specialist information needs to be interpreted and presented in an understandable manner and

format to encourage greater engagement by different stakeholders. There is also a need to establish more formal linkages between agencies, sectors and stakeholders to support implementation.

Environmental Considerations

Strategic Environmental Assessment (SEA) was originally designed and intended to ensure that environmental considerations are central to decision-making in plans and programmes. SEA is also seen to be important as the cumulative impact of development is considered, and this was seen as one of the major advantages of SEA over Environmental Impact Assessment (EIA). Many of the relevant environmental issues and problems within RBDs are correctly identified in environmental reports, but due to the voluminous nature of these documents, the key messages do not appear to get translated into both RBMPs and development plans. This would appear to be a key weakness in the development of plans. To complicate matters further, the key decision makers (local authority members) do not appear to review environmental reports and brief themselves properly to ensure that they are fully informed of relevant issues before deciding on the strategy, policy and objectives in the plan.

Flood risk assessment is the only aspect of river basin management that appears to be given due consideration by planners and duly incorporated into spatial plans. Reasons cited for this include the fact that the DoECLG issued guidance on flood risk management in 2010, which could suggest that similar guidance should be prepared for RBMPs. RBMP guidance could include spatial approaches that relate to planning, as well as multi-functional policy instruments, such as green infrastructure for the provision of recreation and amenity, biodiversity protection and enhancement, flood risk amelioration, and protection of water cycles and water quality.

Improving the Effectiveness of Implementation

The implementation of the WFD and associated RBMPs has a very strong governance component and the requirement for effective cooperation. There are institutional silos to overcome in certain sectors and sector-specific approaches as they are operationalised, particularly when dealing with water discharge licences and the Nitrates Directive. Moreover, as the RBMPs were delivered, it became apparent that the sectoral “glue” was lacking, together with supporting structures to facilitate coordinated and collaborative implementation. Despite good cooperation between the DoECLG in Ireland and the NIEA in Northern Ireland in preparing and finalising the cross-border RBMPs, there is limited direct North-South coordination on their implementation.

The clarification in Ireland regarding river basin management will help to create clearer institutional lines of responsibility through a new 3-tier model to improve the implementation of the RBMPs, in collaboration with the Environmental Protection Agency (EPA) and local authorities. Although details on roles and responsibilities are yet to be defined, the model takes a hierarchical approach to addressing RBMP implementation:

- First Tier – led by the DoECLG, it will represent the meeting point for all key sectors (e.g. local authorities, ministries and other Governmental departments). This first tier will address policy issues (and tackle the current patchiness in policy implementation);

- Second Tier – it will be led by the EPA and deal with the plans and programmes to be drawn for the next RBMP cycle;
- Third Tier – local authorities will identify the practical steps for implementation of RBMPs as they have local knowledge and expertise on what happens on the ground, and have links with electoral representatives and stakeholders.

This model will also foster improvements in communication within the DoECLG, as well as promote further cooperation between the EPA, local authorities and the NIEA. It is anticipated that these links will facilitate and improve implementation structures. The EPA and the local authorities are currently drafting proposals as to what is needed (e.g. resources, structures) to adopt the 3-tier model and implement the first round of RBMPs.

To strengthen the existing structures, it is also proposed that the *Water Policy Regulations (Statutory Instrument No. 722 of 2003)* are reviewed to clearly set out roles and responsibilities, and to strictly enforce them. This would be informed by the ongoing EU Commission comparative study on pressures and measures on the basis of an assessment of RBMPs ('Blueprint to safeguard Europe's Waters') and the review of EU freshwater policy and legislation ('Fitness Check'). Although the study is yet to be completed, it has already been revealed that there is a lack of integration across sectors in all Member States. However, there are also significant lessons to be learnt from some EU Member States with regards to sectoral collaboration, particularly on RBMPs and land use planning, agriculture and forestry, as well as on cross-border coordination and cooperation.

Opportunities for Action

As noted in ICLRD's previous research and documentation of good practices in river basin management, the environment of the island of Ireland plays a key role in the quality of life of its citizens, the attraction of visitors and the decisions of foreign companies to locate here. Environmental quality is also a significant EU priority and the increasing emphasis on a territorial agenda recognises that land-use change and environmental quality are closely related; with the nature, scale and location of development impacting on both the generation and resolution of environmental issues.

Given the key role of spatial planning in both proposing and regulating development, and managing and balancing the pressures placed upon land and its surrounding watercourses and habitats, it is critical that environmental management and spatial development strategies are no longer prepared in isolation of each other and that River Basin Management Plans, especially in the context of cross-border cooperation, are also firmly rooted in a model of collaboration and negotiated governance. Increased cooperation in the Irish border region among central and local government agencies and departments, land owners, the private sector and civil society on each side of the border offers an opportunity for the border region to become an exemplar in the planning and implementation of cross-border/international river basins in Europe.

The workshop presentations together with the discussion among the participants generated a number of recommendations to improve the implementation of the RBMPs in three areas:

- Implementation of River Basin Management Plans (RBMPs);
- Transferability of RBMPs into Spatial Planning; and
- Supporting Future Cooperation.

Implementation of River Basin Management Plans:

- Developing expertise in environmental planning (i.e. capacity building and training planners);
- Sharing expertise to ensure a full understanding of the information available; enhancing communication channels between scientists and planners;
- Integrating assessment methodologies and monitoring systems;
- Identifying sectors with potential for "large" impacts (e.g. farming, forestry, waste water treatment and industry), and fostering communication and cooperation in the preparation and implementation of RBMPs measures and actions;
- Improving communication across administrative boundaries (both North-South and across counties);
- Improving inter-agency coordination and cross-jurisdictional cooperation. The potential role of the Loughs Agency in river basin management and cross-border cooperation was highlighted in this regard;
- Promoting strategic leadership, communication and engagement with elected representatives and other stakeholders for political acceptance, resource allocation and prioritisation;
- Ensuring consistency between RBMPs;
- Managing human and economic resources optimally to tackle key river basin management problems (as opposed to the current scattered approach) and focus on key areas, freshwater resources, species and water quality issues; and
- Recognising the added value of RBMPs across different sectors (e.g. rewarding farmers that protect water resources).

Transferability of RBMPs Actions into Spatial Planning:

- Prepare RBMP guidance for local authority officials;
- Ensure that revised RBMPs provide clear, spatially-specific and easily transferable objectives for spatial planning (e.g. through the identification of areas with specific problems and formulation of measures/actions to address such problems);
- Provide evidence-based maps and data that results in a range of policies that address water quality vulnerability (e.g. vulnerability to water deterioration status and where to promote/avoid development; identifying flood risk areas, meadows/wetlands, SACs and SPAs, areas with water quality issues or of particular environmental sensitivity, areas where SUDS may provide practical solutions, hot-spots of environmental degradation and areas with capacity to absorb development);
- Facilitate access to the evidence-base through common data infrastructures, such as GIS, for data integration, coordination, access and visualisation; and
- Enforce monitoring and follow up, and develop clear and targeted indicators to monitor RBMP implementation (what cannot be measured cannot be managed).

Supporting Future Cooperation:

- Investigate opportunities to tap into future funding sources (e.g. future INTERREG V Programme 2014-2020) to support collaboration between jurisdictions and across sectors to mobilise resources to improve the next round of RBMPs;
- Set up a resource library on river basin management – the ICLRD can host on its website; and
- Explore opportunities for hosting future events to discuss emerging issues, good practices and opportunities for action in river basin management.

Annex 1: River Basin Management Seminar Attendees

Damian Allen	Principal Officer in the Water Quality Section of the Department of Environment, Community & Local Government (DoECLG)
Neale Blair	University of Ulster and Assistant Director, International Centre for Local and Regional Development (ICLRD)
Chris Boomer	Principal Planning Officer, Northern Ireland Planning Service
Caroline Brady	Director, Border Regional Authority
Donal Casey	Senior Executive Chemist, NWNB iRBD Coordinator
John Driscoll	Director, International Centre for Local and Regional Development (ICLRD)
Marice Galligan	Acting Senior Planner, Cavan County Council
Ainhoa Gonzalez	Researcher, National Institute for Regional and Spatial Analysis (NIRSA), NUI Maynooth and ICLR D
Sinead Harkin	Executive Planner, Donegal County Council
Jim Hetherington	Senior Research Associate, ICLR D
Pádraig Maguire	Regional Planner, Border Regional Authority
Alison McCaw	Northern Ireland Environment Agency
Tony McNally	Project Manager on Sub Basin Management Plans for Fresh Water Pearl Mussel, Donegal County Council
Terry Savage	Senior Executive Planner, Louth County Council
Rosie Smith	Border Regional Authority
Ciarán Tracey	Senior Planner, Leitrim County Council
Bronagh Treanor	Intern Planner, Border Regional Authority
Cormac Walsh	Research Associate, ICLR D
Alvin Wilson	Northern Ireland Environment Agency