

ANNEX 3: INTERVIEWS - Laura Burke



Laura Burke

Director-General of the Environmental Protection Agency (EPA)

1 – The Environmental Protection Agency (EPA) is a multifaceted organisation, which is acting on several critical themes, with Water being one of them. How is EPA responding to the grand challenge of “Achieving Sustainable Water Systems for a Sustainable Economy in Europe and Abroad”?

Overall, while water quality in Ireland is good relative to other EU countries, Ireland faces some considerable challenges in the coming years to meet the requirements of the WFD and other water directives. The three main challenges for water quality management are to eliminate serious pollution associated with point sources (waste water treatment plants); to tackle diffuse pollution (pollution from agricultural activities and septic tanks); and to use the full range of legislative measures in an integrated way to achieve better water quality. There is a pressing need to develop site-by-site actions for the water bodies reported as being at less than good status. By prioritising a subset of these each year, improvements can be made in rivers in the short term (with a slightly longer recovery time for lakes and estuaries).

Protected Water Resources are a key Environmental Goal for the EPA and we have identified Clean Water as a Strategic Priority in our most recent Statement of Strategy 2013- 2015. In this Strategy we identify the need for ‘Clearly defined roles, responsibilities and resourcing for the EPA in water governance and as a regulator for Irish Water in relation to drinking water quality and waste water discharges’. I am glad to say that there has been significant progress in this area, as can be seen from the answer to Q2, where the new governance arrangements for the Water Framework Directive in Ireland are discussed.

Water research is considered a priority within the EPA research programme (total budget for the programme approximately €9m pa) and it is highlighted as one of the three pillars (along with Climate and Sustainability) of the programme for the period 2014-2020. The EPA Research’s water pillar deals with groundwater, surface water, transitional and coastal water; as well as wastewater, drinking, bathing and shellfish waters. Over 70 research reports have been published by the EPA in the past 10 years in the area of Water, including policy support for WFD, novel treatment technologies, early warning systems, monitoring of priority substances, management strategies and more.

2 – Ireland is facing important challenges to achieve the targets of the Water Framework Directive (WFD). In your opinion, what are the largest barriers that hinder the application of important measures to improve water quality? What do you expect of cross-border cooperation concerning the matter?

One of the key barriers to successful implementation identified in the first set of River Basin Management Plans was the governance arrangements that were put in place. The published River Basin Management Plans noted that: “The current administrative systems are fragmented along administrative lines and do not facilitate analysis, identification and implementation of the most cost-effective solutions to manage water quality at river basin level. An RBD can cover the areas of responsibility of a large number of bodies e.g. 18 local authorities in the case of the Shannon RBD. Furthermore, the implementation of many of the measures necessary to achieve the objectives of the plans is the responsibility of national rather than local authorities.”

ANNEX 3: INTERVIEWS - Laura Burke

To address this barrier the overall governance structures for the implementation of the Water Framework Directive in Ireland have been reviewed. The review concluded that the governance arrangements were overly complex with no single body having ultimate responsibility for delivery of the Water Framework Directive. As a result of this review, the Minister for the Environment, Community and Local Government is putting in place new governance structures and administrative arrangements for the implementation of the second cycle.

Regulations were made in July 2014 to give effect to these new governance structures. Ultimately the Minister for the Environment, Community and Local Government will adopt the final river basin management plans. The new arrangements consist of 3 inter-locking levels that are proposed for effective governance and delivery. In summary the three tiers are

Tier 1: National Management and Oversight: Led by the Department of Environment, Community and Local Government (DECLG)

Under the new arrangements, the Minister for the Environment, Community and Local Government at Tier 1, has clear responsibility for policy, legislation and ensuring the provision of adequate resources for implementing the Directive. It is at this level also that the draft river basin management plan(s) and programme(s) of measures will be refined and finalised in consultation with key Departments and state agencies before presentation to the Minister for approval. A Water Policy Advisory Committee has been established under the new regulations to assist the Minister and its functions and membership are set out in the new Regulations.

Tier 2: National Technical Implementation and Reporting: Led by the EPA

Significant new responsibilities have been assigned to the EPA at Tier 2, including the crucial role of drafting environmental objectives, undertaking catchment characterisation, preparing template river basin management plan(s) and compiling common programme of measures for further development and input by local authorities at Tier 3 and finalisation and approval by the Minister.

Tier 3: Regional Implementation: Led by the local authority sector

The local authorities, operating at Tier 3 will lead implementation and enforcement of measures on the ground and have key responsibility for ensuring compliance with the Directive on public participation including consultation on draft river basin management plan(s) that are developed from the template plans prepared by the EPA. DECLG will be putting specific administrative arrangements in place to coordinate requirements with Northern Ireland in relation to cross-border waters, encompassing water management units of the Neagh-Bann, the North Western and the Shannon River Basin Districts which flow into or out of Northern Ireland. As the key aims of the WFD are to maintain the existing satisfactory water status where present in surface waters and groundwater and to achieve good status where the status is currently unsatisfactory, the governance structures and administrative arrangements must support this in every way possible. As such, it is essential that the relevant Government departments, State agencies and local authorities work in close partnership to meet Ireland's obligations under the WFD in as efficient and effective a manner as possible.

3 – Please comment the relevance of EPA's partnership in Water JPI in setting the foundations and directions of the EPA Water Research Programme?

Ireland's waters are one of our major natural resources. Plentiful availability of good quality water offers a significant competitive advantage to sectors such as agriculture, industry and tourism. Water is a resource that must be carefully managed, and improving water quality status is a national priority for Ireland. The EPA Research's water pillar deals with groundwater, surface water, transitional and coastal water; as well as wastewater, drinking, bathing and shellfish waters. It will support the emerging policy & implementation research needs in relation to the implementation of the Water Framework Directive (WFD), as well as marine research considerations to support to the formulation and implementation of policies.

ANNEX 3: INTERVIEWS - Laura Burke

In addition, the EPA is coordinating a multi-agency transboundary programme of research on Environmental Impacts of Unconventional Gas Exploration & Extraction (UGEE), which has significant water elements, and is included under Thematic area 5: Emerging and Cross-cutting Issues. The overall aim of the water pillar is to support relevant water policy and to protect our water environment, contributing to achieving excellent water quality in Ireland. The EPA Research's water pillar has a strong focus on policy and has been driven by national regulations and European Directives.

Policy-related research plays a vital role in ensuring that EU and national policies are implemented in the most cost-effective manner. A long-term water research programme is an essential component of Ireland's role in protecting its water resources and meeting its requirements under water-related EU directives and national policies. Ireland has a high-quality research, technical and scientific base in the water sector but this needs to be further strengthened if we are to meet the major environmental and socio-economic challenges ahead. Technology and innovation have a significant role to play in meeting the environmental challenges and can also deliver economic benefits through enhanced competitiveness and improved efficiency. Behavioural change is another key area that requires focus. Between 2007-2013, the EPA STRIVE Programme funded over 100 research projects with a budget over €10,000 related to water with a total commitment from the EPA of approximately €19.5m. The range of projects funded includes desk-studies, scholarships, fellowships and large-scale multi-annual and multi-partner awards.

The thematic areas under EPA Research's Water Pillar for 2014-2020 will be:

1. Safe Water;
2. Ecosystem Services and Sustainability;
3. Innovative Water Technologies;
4. Understanding, Managing and Conserving our Water Resources
5. Emerging and Cross-cutting Issues

Multi- and inter-disciplinary research is required on these themes, with expected social, economic, technology, environment and policy impacts. These thematic areas also reflect EPA Research's effort to align, where relevant, its programme with the international Strategic Research Agenda which was launched by the Water Joint Programming Initiative in May 2013.

4 – Success in meeting the challenges on water needs the involvement of all relevant stakeholders. What kind of tools does EPA uses to facilitate articulation between industry-society-academia?

National Linkages

In 2010 the EPA and Enterprise Ireland (EI) established in a national Water Research Coordination Group (WRCG), which is a research funders forum, where research priorities for inclusion in calls for research proposals and longer-term objectives are presented and discussed, with the aim of enhancing synergies and collaboration with other national funders, and avoiding duplication. As of 2014, the WRCG comprises of the EPA, EI, the DECLG, the Department of Agriculture, Food and the Marine, Teagasc, Science Foundation Ireland, Irish Research Council, the Geological Survey of Ireland, Marine Institute, Inland Fisheries Ireland, Office of Public Works, and Irish Water. Annual research calls are advertised widely and are open to all researchers and innovators.

International Linkages

A number of critical international linkages have also been established to promote Irish environmental research into the international arena including enhanced participation in the European Research Area (e.g. Framework Programme, Joint Programming Initiatives, Horizon2020, and European Innovation Platform on Water). By ensuring that Ireland is represented in significant European initiatives related to Water, the EPA will promote an increased efficiency, critical mass and impact of water research in Ireland.

ANNEX 3: INTERVIEWS - Laura Burke

The EPA is participating at national level with the Horizon 2020 National Support Network which is led by Enterprise Ireland, and has developed a Catalogue of Environmental Research Expertise in Ireland to support engagement with national and European research activities. <http://erc.epa.ie/h2020catalogue>. We communicate our research as clearly as possible to a wide range of audiences, while ensuring the basic science is not compromised. Options for communications range from large scientific reports and journal papers, to infographics and tweets. EPA Research also supports open data and open access and all projects funded by EPA Research will have to share their journal articles, data, analysis and all outputs wherever possible.

5 – It is generally agreed that the battle for science is the battle for the future of Europe and for the quality of life of European citizens. Envisioned as a critical factor of growth and competitiveness, much criticism has been raised about the allotment of funds to research in the current economic recession. How do you assess the role of JPIs in fostering an effective use of Europe's limited public research funds?

JPIs play a key role in the construction of the European Research Area (ERA). JPIs contribute to developing common solutions, sharing of good Practices resulting in more efficient research programmes, to supporting the implementation of joint actions (such as cross-border collaboration projects or infrastructure sharing), and to improving coordination with other national and European RDI programmes. JPIs increase networking and experience of researchers in applying for European funding – indirectly supporting the participation in Horizon 2020. Ultimately, this will increase effective use of Water RDI results and outputs.

6th November 2014