

Newsletter



An Fóram Uisce – looking after Ireland's water resources

Issue 05 / Autumn 2021



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Draft River Basin Management Plan is launched

On the 27th September Ministers Darragh O'Brien and Malcolm Noonan opened the public consultation on the draft 3rd cycle River Basin Management Plan in Turvey Nature Reserve, Donabate, Co. Dublin.

Minister O'Brien and Minister Noonan met members of the Water Forum after the launch of the public consultation and outlined the key achievements in the second RBMP cycle, particularly the significant progress that has been made in our understanding

of catchments and the pressures impacting on water resources.

The Minister stated that the 3rd Cycle aims to achieve a higher level of ambition and that there is a need to align the Common Agricultural Policy



© Maxwell photos. Pictured left to right: Chair of The Water Forum, Professor Tom Collins; Senator Lorraine Clifford-Lee; Darragh O'Brien T.D., Minister for Housing Local Government & Heritage; Donal Purcell, The Water Forum; Malcolm Noonan T.D., Minister of State for Heritage and Electoral Reform; Gretta McCarron & Triona McGrath, The Water Forum and Cllr. Daniel Whooley, Deputy Mayor of Fingal.

and the Nitrates Action Programme with the River Basin Management Plan. He stated that there would be significant investment in Irish Water, €8.5 billion to 2027 in Drinking Water and Wastewater services. There will be a greater emphasis on enforcement, nutrient mitigation measures, drinking water protection and drainage controls in the plan. He stated that his department wanted greater public participation and engagement in the consultation process so that the final plan would deliver clear improvements in water quality.

Professor Tom Collins, The Water Forum Chair, noted the importance of addressing regulation and that there was a need to consider technological advances to seek innovative solutions. Continuing to pursue economic strategies that reward poor environmental behaviour, or which fail to disincentivise poor behaviours, are unlikely to result in transformational positive outcomes for water.

Introduction to the draft River Basin Management Plan

The aim of the River Basin Management Plan is to ensure that our natural waters are sustainably managed, that freshwater resources are protected so that there is no further deterioration; and where required, Ireland's rivers, lakes and coastal water bodies are restored to good ecological status.

Current status:

- 1,983 of Ireland's 4,842 water bodies are **Not at Risk** that is meeting good ecological status and these water bodies need protection measures to ensure there is no further deterioration.
- 1,603 are **At Risk** of not meeting their environmental objectives which means they need restoration measures.
- 1,256 water bodies are **In Review** which means that

- (a) there is inadequate evidence to determine status or
- (b) that measures have been put place for improvement but these have not been achieved yet.

Agriculture is the most common significant pressure, impacting on 1,000 water bodies, followed by hydromorphology (drainage and habitat change) and forestry is a significant pressure in 233 water bodies. Urban waste water is the significant pressure in 208 water bodies which marks a decrease by 83 water bodies since the beginning of the 2nd cycle.

Protection measures

A strong enforcement regime will be implemented in all areas but will be prioritised in At Risk waterbodies. Land use change and new developments will be appropriately assessed for their impacts on water quality. Statutory measures will be assessed for their effectiveness. Additionally, 46 catchment plans will be

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developed as sub-plans to the national Plan. These will be supported by County-level Implementation Plans which will assess measures. These plans will be supported by awareness and education initiatives through to norms and enforcement. Activation, development and support will be provided to local initiatives such as catchment trusts and partnerships.

Restoration measures

A wider selection of Areas for Action has been proposed in this Plan. 527 areas have been selected for focused attention in the third cycle. 427 of these require restoration measures; 85

require dedicated protection measures and 15 have ongoing catchment projects aimed at improving water quality. Each Area for Action has a dedicated lead organisation such as the Local Authority Waters Programme, Local Authorities, National Federation of Group Water Schemes, Inland Fisheries Ireland.

Agricultural pressures will be addressed through a more effective Nitrates Action Programme including tighter controls on nitrogen inputs, the establishment of a chemical fertiliser register and improved enforcement on compliance with Nitrates Regulations.

Urban Waste Water will be addressed through greater investment in waste

water infrastructure, with Irish Water expected to invest approximately €1.022 billion in 83 wastewater treatment plants and 10 collection networks over the period 2020-2024. Irish Water aims to deliver 10 waste water treatment plant projects whose discharges have been identified as being significant pressures on receiving water bodies. Early-stage studies for a further 20 waste water treatment plant projects will be completed through funding from the European Union's Recovery and Resilience Facility.

There is a 6 month public consultation on the draft plan until March 31, 2022. Further information is available at: www.gov.ie

Retirement of Professor Tom Collins

The Forum would like to take this opportunity to wish our Chair, Professor Tom Collins, best wishes on his retirement from the Forum.

Tom's expertise and knowledge has been an invaluable resource to the Forum as it has developed as a stakeholder body to contribute meaningfully to water management in Ireland. In addition to chairing meetings and contributing to discussions, Tom was also an ambassador for the Forum and our spokesperson on water issues in the national media. As a moderator at webinars, he excelled at posing thought provoking questions and leading innovative thinking.

Tom spent 10 years as Chair of the National Rural Water Monitoring Committee that oversaw an investment of €2 billion in Group Water Scheme infrastructure.

Tom was heavily involved in the establishment of the National Centre for Freshwater Studies (now the Centre for Freshwater and Environmental Studies) at Dundalk Institute of Technology. As a member of the Wild Irish Salmon working group, he contributed to the banning of drift net fishing for salmon in Irish coastal waters. In 2015 Tom was appointed Chair of the Public Water Forum, and then remained as Chair of An Fóram Uisce – the Water Forum in 2018. While the members and staff of the Forum will miss Tom's presence, they are honoured to have worked with him over the years and hope to continue to build and improve the Forum's role and impact in water management in Ireland. We look forward to a proper farewell when COVID allows.

The Minister will appoint a new chair to the Forum in the coming months.



“Tom's expertise and knowledge has been an invaluable resource to the Forum as it has developed as a stakeholder body to contribute meaningfully to water management in Ireland.”

Policy submissions

Members of the Catchment Management Standing Committee drafted the Forum's submission to the Department of Housing, Local Government and Heritage on Stage 2 Nitrates Action Plan.

The Nitrates Action Programme (NAP) first introduced in 2006 is designed to prevent pollution of surface waters and groundwater from agricultural practice. A draft for the fifth iteration of the NAP is currently in development. This latest draft proposes a range of new initiatives and additional measures the agricultural sector needs to undertake to protect water resources.

The principal elements of the NAP include:

- limits on farm stocking rates
- legal maxima for nitrogen and phosphorus application rates
- prohibited spreading periods preventing the application of organic and chemical fertilisers

during more environmentally vulnerable times of the year

- minimum storage requirements for livestock manures
- requirements regarding maintenance of green cover in tillage lands and
- set-back distances from waters.

One of the key recommendations made by the Forum, is that it is **essential to have policy coherence in the management of Ireland's environment.**

A policy coherence group needs to be established to ensure alignment between National and European policies which impact both agriculture and the environment, such as the River Basin Management Plan, the Nitrates Action Programme, the Common Agricultural Policy and the Food Vision 2030.

The Forum recommends that the NAP adopts an **integrated land use management approach**, using nutrient

management plans aligned with the EPA's pollution impact potential maps and catchment assessments to form the basis of a joined up collaborative and cooperative approach to environmental management. Engaging with farmers early in the development of landscape-scale or catchment-based actions so that farmers are facilitated to co-design solutions and have input to the NAP requisite of 'right measure in the right place'. A catchment level approach could potentially encourage peer learning and the sharing of knowledge with the wider farming community.

While the Forum members recognise a requirement to increase inspections and enforcements nationally to ensure full compliance with Good Agricultural Practice and NAP regulations this will demand significant resources. **Awareness, training and supports** should therefore be resourced to





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increase understanding around the need for compliance with GAP regulations for the protection of water. The aim being that farmers will voluntarily increase levels of compliance rather than through enforcement. If farmers are involved in the co-design of locally targeted mitigation measures, there is likely to be an increase in ownership and willingness to comply with these measures.

Many of the actions identified to protect water such as installing buffer strips, reduced stocking rates, increased storage capacity, protecting wetlands and fencing all have a cost attached that essentially reduce farmers income. The Water Forum supports the principle of public money for public good but protecting and restoring the increasing needs of nature is not cheap. With important policies such as the Common Agricultural Policy, Climate and Biodiversity Action Plans and the Nitrates Action Programme and the draft River Basin Management Plan all at development stage, there is a unique opportunity to streamline actions and funding for the most effective environmental outcomes.

The Forum would like to see greater social discourse on how the measures

required by these policies will be funded. Everyone knows that comprehensive action now is the intelligent economic option as the cost of making good when the environmental harm is done will not just be an economic one but has

implications for the health and well-being of society.

An Fóram Uisce Submission to the draft Nitrates Action Programme

Education and Awareness

The United Nations 2030 Agenda encourages countries to integrate the Sustainable Development Goals (SDGs) into planning and policy, on both a national and international level. Ireland's second SDG National Implementation plan 2021-2023 is now being developed, overseen by

the Department of the Environment, Climate and Communications. In preparation for this new plan the Forum reviewed how its work aligned with the targets identified in the SDGs in the current implementation plan.

The report is available [here](#).



Research

An Early Career Research project was presented to the Water Services Committee on *Legacy Sediment Contamination – Understanding sediment contamination legacy issues in lake and river sediments and the implications for catchment management and drinking water source protection*.

Irene O'Callaghan & Timothy Sullivan, University College Cork.

The porous nature of sediments, as well as the accumulation of decomposing organic matter, promotes the entrapment of pollutants, allowing them to reside within the sediment for an extended time. Sedimentation occurs due to gravity forcing particles to the bottom of the riverbed. The speed of sedimentation depends on a number of factors, including particle size and density. The formation of a sediment contamination pool relies on processes that increase the rate of sedimentation of the contaminant, such as pollutant-dependent properties (i.e. if they favour or inhibit aggregation), water physiochemistry-dependent (such as pH, temperature, light) and hydrology, where a slower flow allows more sedimentation (hence it occurs more readily in a lake than a fast flowing river). Sources of contamination to the sediment include agricultural sources, historical mining activity, industrial activity, urbanisation and infrastructure, and shipping.

Legacy sediment contamination occurs when legacy sediment pollutants are resuspended back to the overlying water due to hydrological processes such as a storm event, anthropogenic disturbances such as dredging, or through continuous diffusion at the water-sediment interface, which can persist long after the original pollution source is removed. Climate change is expected to promote the release of legacy sediment contamination pools due to increased frequency and severity of flood events which help to resuspend and redistribute contaminants; drought events which increase the relative



contribution of diffuse pollution; while freshwater acidification and increased temperatures both act to enhance the release process of contaminants from sediment.

The study finds that while a comprehensive picture of the presence of legacy sediment contamination does not exist, localized studies have confirmed its existence in affected areas such as from historic mining activities. A case study is presented of a historic mine site in Silvermines, Co. Tipperary where riverbed sediments contain lead concentrations 6 orders of magnitude higher than Environmental Quality Standards advisory limits.

Legacy sediment contamination can come from a multitude of sources. Increased urbanization poses a significant threat, both through remobilization of contaminated sediments and contribution to future legacy contamination pools from road runoff, pharmaceuticals, and wastewater pollution.

Nutrient, herbicides and pesticides are potential sources that can be mitigated by buffer zones and good agricultural

practice. Other potential sources have yet to be fully explored such as veterinary products and military land use.

The research highlighted the impact of new infrastructure, particularly the physical modification of rivers, pose a huge risk in the form of resuspension of contaminated sediments and recommends an assessment of the potential for impacts associated with legacy contamination to be included as part of any ecological impact assessment carried out.

One of the report's recommendations is that legacy sediment contamination needs to be dealt with at a catchment level as is a catchment-level issue. Sediment contamination thresholds need to be established and monitoring should be included in routine catchment management programmes to determine the extent of legacy sediment contamination in Ireland.

Report: **Understanding sediment contamination legacy issues in lake and river sediments and the implications for catchment management and drinking water source protection**.