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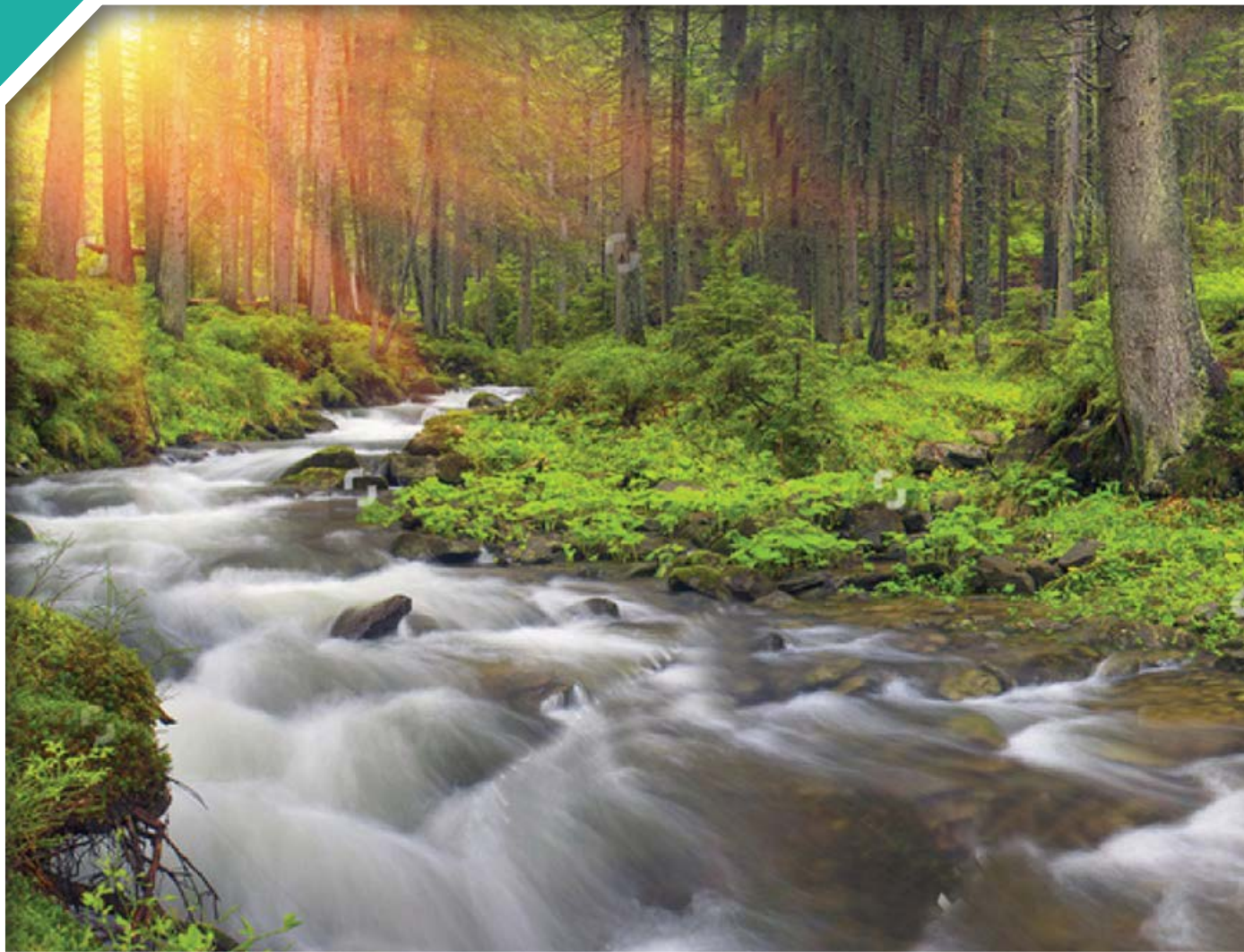# Using an Experimental Governance Lens to Examine Governance of the River Basin Management Plan for Ireland 2018–2021

Authors: Richard Boyle, Joanna O'Riordan, Fergal O'Leary and Laura Shannon

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Rialtas na hÉireann
Government of Ireland

ENVIRONMENTAL PROTECTION AGENCY
The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

Regulation: *We implement effective regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

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Advocacy: *We work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour.*

Our Responsibilities

Licensing
We regulate the following activities so that they do not endanger human health or harm the environment:
- waste facilities *(e.g. landfills, incinerators, waste transfer stations)*;
- large scale industrial activities (*e.g. pharmaceutical, cement manufacturing, power plants)*;
- intensive agriculture *(e.g. pigs, poultry)*;
- the contained use and controlled release of Genetically Modified Organisms *(GMOs)*;
- sources of ionising radiation *(e.g. x-ray and radiotherapy equipment, industrial sources)*;
- large petrol storage facilities;
- waste water discharges;
- dumping at sea activities.

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- Conducting an annual programme of audits and inspections of EPA licensed facilities.
- Overseeing local authorities' environmental protection responsibilities.
- Supervising the supply of drinking water by public water suppliers.
- Working with local authorities and other agencies to tackle environmental crime by co-ordinating a national enforcement network, targeting offenders and overseeing remediation.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Prosecuting those who flout environmental law and damage the environment.

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- Monitoring and reporting on the quality of rivers, lakes, transitional and coastal waters of Ireland and groundwaters; measuring water levels and river flows.
- National coordination and oversight of the Water Framework Directive.
- Monitoring and reporting on Bathing Water Quality.

Monitoring, Analysing and Reporting on the Environment
- Monitoring air quality and implementing the EU Clean Air for Europe (CAFÉ) Directive.
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- Preparing Ireland's greenhouse gas inventories and projections.
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- Monitoring developments abroad relating to nuclear installations and radiological safety.
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- Advising Government on matters relating to radiological safety and emergency response.
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Management and structure of the EPA
The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:
- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet regularly to discuss issues of concern and provide advice to the Board.

Using an Experimental Governance Lens to Examine Governance of the River Basin Management Plan for Ireland 2018–2021

(2020-W-MS-46)

EPA Research Report

Prepared for the Environmental Protection Agency

by

Institute of Public Administration

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ACKNOWLEDGEMENTS

DISCLAIMER

The EPA Research Programme addresses the need for research in Ireland to inform policymakers and other stakeholders on a range of questions in relation to environmental protection. These reports are intended as contributions to the necessary debate on the protection of the environment.

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Executive Summary

A report by the Environmental Protection Agency (EPA) published towards the end of 2020 indicated that "nearly half of the surface waters in Ireland are failing to meet the legally binding water quality objectives set by the EU Water Framework Directive because of pollution and other human disturbance" (EPA, 2020, p. 161).

The Water Framework Directive (WFD) is an EU directive that seeks to protect and improve water quality. The WFD objectives are implemented in Member States through River Basin Management Plans (RBMPs). This report examines lessons learned from the governance arrangements put in place for the RBMP 2018–2021 for Ireland through the lens of experimental governance. Experimental governance is a phrase coined by academics to describe a system of governance that is open to change based on the practical lessons learned through implementation.

In response to critiques of the governance system put in place for the first-cycle RBMP, published in 2009, Ireland created new structures and processes for water governance for the second-cycle RMBP, 2018–2021. These include a new three-tier structure: (1) a Water Policy Advisory Committee (WPAC) and the Water Forum (An Fóram Uisce) advising the government; (2) a layer of technical support provided by the National Coordination and Management Committee (NCMC), the EPA and the National Technical Implementation Group (NTIG); and (3) local authorities, supported by regional committees and a local government shared service, the Local Authority Waters Programme (LAWPRO), involved in implementation.

The study finds that the three-tier governance structure put in place to support the implementation of the RBMP is appropriate and should be continued. Rather than radical changes to the governance structure for the next RBMP, it is more a case of adapting and improving the operation of the existing arrangements. The three-tier structure represents a significant innovation and improvement over the governance arrangements in place for the first-cycle RBMP.

There is evidence of capacity-building, collaboration and local initiative leading to improved practices. The governance structures provide a basis for stakeholders to come together and review their frames of reference, take a new perspective on issues and develop a common narrative on some issues.

Some limitations and challenges relating to the governance structures were also found. Regarding the lessons learned to date to help improve governance arrangements for the third-cycle RBPM 2022–2027, a number of suggestions are made at the end of the report. Recommendations include the following:

- The various committees established across the three tiers of governance need to revisit their terms of reference to clarify their roles and shift the balance from sharing information and providing updates to having more discussions and debates on prioritisation, resourcing and policy coherence.
- The engagement of individual local authorities varies, and there is a need for more consistency and capacity-building here. There is a need for greater clarity and shared understanding with regard to the roles of LAWPRO and local authorities.
- Attention needs to be given to further building the capacity to work with groups such as farmers and local communities to change behaviour and attitudes, particularly building capacity beyond LAWPRO and Agricultural Sustainability Support and Advisory Programme (ASSAP) advisers to the Teagasc and private agricultural advisers.
- Attention needs to be given to learning the lessons from local initiatives and projects with a view to determining the potential for scaling up lessons learned and disseminating effective practices. This work needs to be supported by developing a better evidence base for local initiatives and building in assessment and measurement criteria from the start, alongside consideration of how best to ensure knowledge transfer. There is a particular need to look at mainstreaming the knowledge and experience gained by LAWPRO and ASSAP across local authorities and Teagasc.

- Some data gaps exist. In particular, there is a gap in the measurement of intermediate outcomes that should be filled. This would make the links between activities and outcomes more explicit, demonstrating short- and medium-term achievements and suggesting the need for mid-course corrections.

- There is a need for closer policy and practice linkages between the water quality, climate change and biodiversity agendas. At the policy level, this would involve the next cycle of the RBMP being more explicit about the linkages and the need for coherence across these themes.

1   Introduction and Background

This report examines lessons learned from the water governance arrangements put in place in Ireland for the River Basin Management Plan (RBMP) 2018–2021 (Government of Ireland, 2018) through the lens of experimental governance. A particular emphasis is put on informing policy and practice with regard to ensuring that appropriate and effective governance arrangements are made in Ireland for the third-cycle RBMP 2022–2027.

Maintaining and improving Ireland's water quality is under pressure. The Environmental Protection Agency (EPA) (2020a, p. 161) found that "nearly half of the surface waters in Ireland are failing to meet the legally binding water quality objectives set by the EU Water Framework Directive because of pollution and other human disturbance". There is a continuing decline in high status water bodies. However, the EPA also found that, although water quality is still a concern, there has been an overall improvement in river water quality in the priority areas highlighted in the RBMP.

The report is one of multiple early outputs of a research programme on experimental governance and water governance. Three further reports provide complementary information to this report. The first examines Ireland's performance against the water governance principles identified by the Organisation for Economic Co-operation and Development (OECD) (O'Riordan *et al*., 2021), the second studies two case studies of local water catchment groups in action (O Cinnéide *et al*., 2021), and the third investigates the operation of the Water Forum (An Fóram Uisce) (Boyle *et al*., 2021). These early outputs focus on learning lessons from current experience with regard to the operation of water governance structures and processes to inform the development of the third-cycle RBMP 2022–2027. Later outputs will focus more on drawing out wider learning from the study of water governance as an example of experimental governance that is of relevance to the development of policy and practice in other areas of public reform, for example climate action and public service reform.

1.1   Experimental Governance Defined

Countries and governments at all stages of development are facing difficult challenges, such as climate change, water management and homelessness; in academic literature these are referred to as wicked problems (Head and Alford, 2015). Very often, at the beginning of the process, no one knows precisely how to address these issues. The challenges are ones where the different units and levels of government have to co-ordinate with each other and with non-governmental actors in civil society and the private sector. They have to do this to figure out responses to problems that none of the units can address alone. Often, those involved have to collaborate to do something that they cannot precisely define in advance.

In response to uncertainty, governments and public bodies are increasingly inclined to set up collaborative governance arrangements to explore possibilities. In setting up such collaborative processes, the government is stating its commitment to tackling the problem and its willingness to commit resources to resolving the issue, but it is also admitting that it does not know precisely what to do. It sets out to learn what to do in collaboration with the people who can develop the best provisional idea of what to do. The government and those working on the problem commit to learning from the work as it progresses and to correcting and improving policy responses.

Sabel and Zeitlin (2012) coined the term "experimentalist governance" to describe one way in which such collaborative governance arrangements have evolved in the face of such wicked problems, fragmentation of political authority and the complexity and uncertainty of technological, market and social conditions. Experimental governance, drawing on this original work, can be described as having four elements:

- First, framework goals are established (e.g. good water status) and initial measures for gauging the achievement are agreed.

- Second, entities closer to the problem are given the freedom to pursue these goals as they see fit.
- Third, in return for this autonomy, the entities must regularly report on their performance, as measured by agreed indicators, and participate in a peer review in which their results are compared with those pursuing the same general goals.
- Fourth, learning from this, the framework goals, metrics and procedures are themselves periodically revised by those who initially established them, often augmented by new participants whose knowledge and co-operation are seen as indispensable (Sabel and Zeitlin, 2008, pp. 273–274; NESC, 2010, pp. 36–38).

In essence, this means that governance is open to change based on the practical lessons learned through implementation. It is particularly suited to wicked problems such as climate change and water management.

This study takes this experimental governance approach and examines its relevance and applicability to the quest for good water status and the associated governance arrangements put in place in Ireland, prompted by the Water Framework Directive (WFD) (2000/60/EC).

1.2 Ireland's Water Governance System

The WFD is a European Union (EU) directive that seeks to protect and improve water, including rivers, lakes, groundwater and coastal water. The WFD objectives are implemented in Member States through RBMPs, which are reviewed and updated every 6 years, and programmes of measures (POMs). Ireland's first-cycle RBMP was published in 2009, covering seven separate river basin districts (RBDs). The second-cycle RBMP, encompassing a single national RBD, was delayed somewhat because of the impact of the global financial crisis. It was published in 2018 and runs to the end of 2021. This plan encompasses 46 catchments, 583 subcatchments and 4832 water bodies. The plan aims to deliver water quality improvements in 726 water bodies located within 190 Priority Areas for Action (PAA); it further aims for 152 of these to have improved sufficiently to achieve good or high ecological status. The third-cycle

RBMP is due to be published by the end of 2021 and will run for 6 years, to 2027.

The RBMP 2018–2021 highlighted a number of limitations with the governance arrangements put in place for the first RBMP:

> Governance and delivery structures in place for the first cycle were not as effective as expected. Due in part to the number of RBDs, the delivery arrangements were overly complex. In particular, the level of oversight of programme delivery and ongoing review was weak […]. [O]ne could argue that the importance of local delivery for many measures was not well understood when the first-cycle Plans were being developed, or more importantly, when the implementation of the Plans was being considered. (Government of Ireland, 2018, p. 2)

In its assessment of the first-cycle RBMP, the European Commission observed that "there was no single body having ultimate responsibility" and that "fragmented institutional structures, poor intra and inter-institutional relationships and capacity" undermined the ability to both develop and implement plans (Government of Ireland, 2018, p. 117).

In response to the criticisms of the governance system, Ireland created new structures and processes for water governance for the second-cycle RMBP, 2018–2021 (Figure 1.1). These include a new three-tier structure comprising a Water Policy Advisory Committee (WPAC) supported by the Water Forum, advising the Minister for Housing, Local Government and Heritage; the National Coordination and Management Committee (NCMC) to co-ordinate implementation, with technical support from the National Technical Implementation Group (NTIG) and the EPA; and local authorities, supported by regional committees and a local government shared service, the Local Authority Waters Programme (LAWPRO), involved in implementation at the local level. As well as enhancing central steering, the new arrangements aim to involve new levels of engagement with local communities and enhanced collaboration across a range of public bodies.

These governance innovations have occurred in the context of the ongoing efforts across the EU to achieve
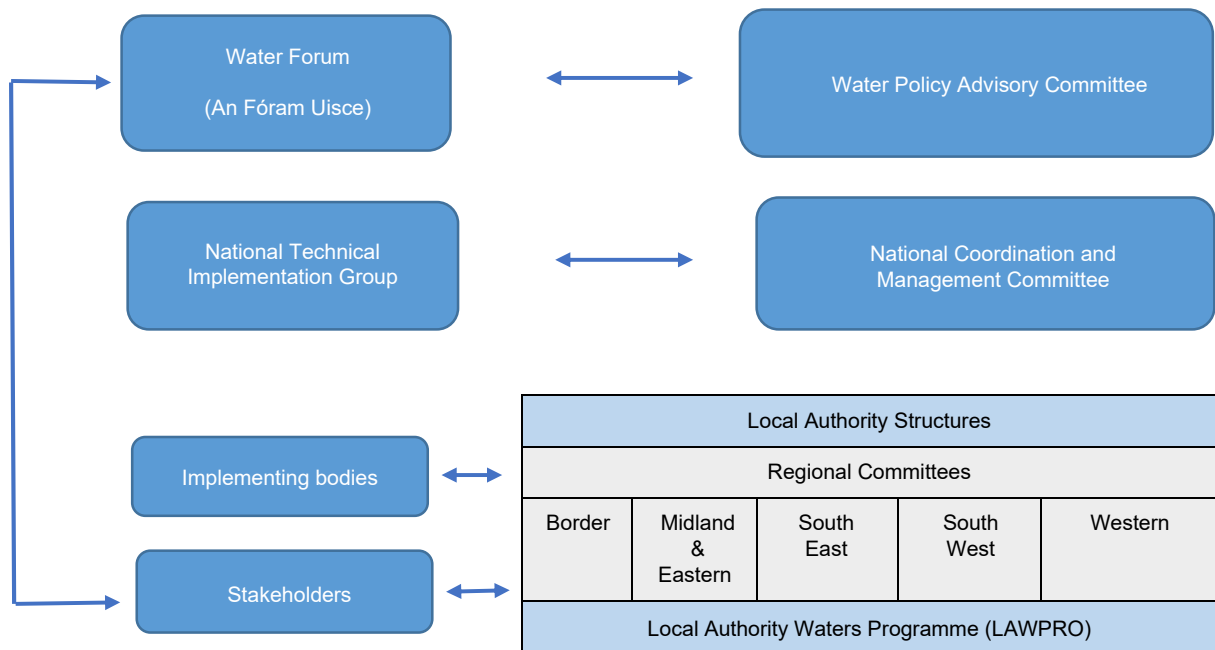
Figure 1.1. Water governance arrangements under the second-cycle RBMP.

the goals of the WFD and international engagement with the OECD's principles of water governance (Hering *et al*., 2010; OECD, 2015; Voulvoulis *et al*., 2017 Giakoumis and Voulvoulis, 2018).

1.3 Research Approach

Given the nature of water governance, and because the governance arrangements for the RBMP are new and evolving phenomena, a primarily qualitative approach was considered most appropriate for data gathering and analysis (Bluhm *et al*., 2011). Ospina *et al*. (2017, p. 596) note that qualitative data are "at their best, [...] words that emerge from observations[,] interviews […] or documents [that] are collected (or accessed) in a naturalistic way […] and are processed through several iterations of systematic analysis".

A number of complementary research methods shaped the gathering of the evidence presented in this report:

- Key informant interviews. Interviews with stakeholders were particularly important in collecting information on the issues addressed in the evaluation. Fifty-four people were interviewed. Interviewees were selected from each of the elements and the three tiers of the governance structure (the list of organisations interviewed is provided in Appendix 1).

- Case vignettes. Particular governance aspects were examined and highlighted in some detail to illustrate what contributed to their successes or failures. Short vignettes were subsequently produced on the Water Forum, LAWPRO and on two case studies of aspects of experimental governance and practice in two catchment settings, the River Moy Trust and Inishowen Rivers Trust.

- Documentary analysis. Careful review of relevant documentation (reports, background documentation, government policy papers, academic literature, etc.) provided supportive evidence of the contribution made by the governance arrangements. For example, submissions made to the Department of Housing, Local Government and Heritage (DHLGH) as part of the public consultation process for the third-cycle RBMP 2022–2027 were examined to identify where governance issues were raised and the nature of those issues.

By using this range of methods, triangulation of the data was possible (Salkind, 2010). Investigator triangulation, through members of the research team sharing their individual understandings and perspectives, also provided a further check on data quality and emerging findings (Flick, 2004). This approach helped to validate the emerging findings

and illustrate where consistent or divergent messages were emerging.

1.4   Report Structure

A review of the literature on experimental governance suggests that a number of enabling conditions can help create a supportive environment for experimental governance initiatives. These enabling conditions determine how provisional solutions are discussed and decided on (Head and Alford, 2015, p. 718). Where these conditions are absent, or weak, the chances of successful outcomes are reduced. Four enabling conditions are identified: (1) organisational structures, (2) human resources and capacity, (3) institutional capacity and (4) budgetary and financial systems. Each of these is examined in turn in Chapters 2–5. The remaining chapters address the four elements of experimental governance: (1) establishing framework goals, (2) giving discretion to entities closer to the problem to pursue these goals, (3) reporting on performance and (4) reviewing the framework goals. These are discussed in turn in Chapters 6–9. The concluding chapter (Chapter 10) examines the lessons learned for governance arrangements for the third-cycle RBMP.

2 Organisational Structures

In terms of governance, addressing complex cross-cutting issues often requires a collaboration between public, private and non-profit actors. There is a need for some flexibility with regard to how organisations are structured and interact; this will need to be done with some degree of matrix management (Head and Alford, 2015, p. 731).

In the case of water governance, it is particularly important to examine the roles of the different elements of the three tiers of governance and the relationships between them to see how the interactions between the elements play out in practice, and the degree to which organisations have the mandate and ability to act as what Wolfe (2018, p. 42) describes as a "Schumpeterian development agency [...] – an agency with the mandate and ability to undertake small scale experiments, correct errors and learn from its mistakes – in other words, to engage in a process of experimental governance". Similarly, it is important to examine the extent to which the governance structures put in place act in a top-down elite and advisory role or if they are genuinely empowering (Forde, 2020).

2.1 Water Policy Advisory Committee

The WPAC was established under the EU (Water Policy) Regulations 2014, as part of the structures for preparation and implementation of the WFD. The WPAC functions to advise the Minister for Housing, Local Government and Heritage on policy in relation to:

- the preparation of RBMPs;
- the environmental objectives of the WFD;
- the POMs required to achieve these objectives;
- other related matters concerning the protection and management of the aquatic environment and water resources.

The WPAC is made up of representatives from a range of government departments and agencies. It meets on a quarterly basis and is chaired by a senior civil servant from the DHLGH. It is intended as a whole-of-government, inter-agency and inter-sectoral approach to the management of the WFD.

A notable benefit of the WPAC is that it has brought senior managers from all the implementing bodies together to discuss shared concerns and differences with regard to water policy. One interviewee noted that the intention is that this commitment filters down into an organisational commitment and buy-in and that it ripples through organisations. The involvement of most of the main players on the committee was noted as a very positive development. However, one interviewee felt that the absence of representative(s) from the Department of Public Expenditure and Reform or the Department of Finance meant that there was no direct means of alignment with taxation or expenditure policies. Another interviewee felt that representation from the Department of Agriculture, Food and the Marine (DAFM) could be expanded to include those working on the Common Agricultural Policy (CAP) and agri-food issues.

In terms of overviewing policy, and commenting on policy coherence, so as to provide advice to the Minister for Housing, Local Government and Heritage on practice and future directions, this advice is fed through the DHLGH rather than coming directly from the WPAC. This is not to say that advice is not making its way through to the Minister, but rather that it does not come directly from the WPAC.

To date, there has also been more of an emphasis on sharing information and providing updates as opposed to substantive discussions on or engagement with policy coherence. Several interviewees noted that the WPAC is a forum for raising issues, and not for resolving issues, and were in agreement with this. Issues are dealt with bilaterally outside the WPAC itself, and the progress is then reported back to the WPAC. As one interviewee noted, "I think it's really more of a, I would call it a staging ground to get the information out there and exposed, in an open forum and it moves on from there then to be discussed". Although agreeing that contentious issues are probably best dealt with bilaterally rather than by the WPAC, several interviewees felt that there could be more robust debate on some of the policy challenges facing the development of a coherent approach to water policy. This issue recurs in different parts of

the governance structures and is not particular to the WPAC.

The WPAC also had to deal with significant personnel change in 2018 in government departments and agencies, particularly in the DHLGH and the EPA. Inevitably, this resulted in needing time to rebuild working relationships and ensure the smooth transfer of expertise. This is a common feature of public service reform efforts, as personnel changes are an inevitable part of the scene. This emphasises the need for a good handover and knowledge management practices to ensure continuity. One interviewee observed that continuity and consistency would be aided by a permanent secretariat focused on issues such as programme management, implementation and reporting and by developing relationships with other stakeholders such as the Water Forum. Although the NCMC has a project management role, it meets only periodically.

The other bodies that directly link with the WPAC in the governance structures generally have a good working relationship with the Water Forum and the NCMC, although the relationship with the Water Forum is in need of further strengthening. Several interviewees from the Water Forum felt that, although the organisation has a relatively good working relationship with the DHLGH, its relationship with other government departments is less effective. This raised the issue in interviewees' minds of the effectiveness of interdepartmental policy coherence, as they had the sense that the Water Forum has some influence within the DHLGH but not interdepartmentally.

2.2   The Water Forum

The Water Forum (An Fóram Uisce) was established by statute in June 2018, pursuant to the Water Services Act 2017. Upon its establishment, the pre-existing Public Water Forum and the National Rural Water Services Committee were dissolved and their functions transferred to the Water Forum.

The Water Forum was set up to facilitate stakeholder engagement in water quality issues, and as a statutory body it is representative of stakeholders with an interest in the quality of Ireland's water bodies. It currently has 26 members, including representatives from a wide range of organisations with direct connections to issues relating to water quality and

public water consumers. The Water Forum provides an opportunity for stakeholders to debate and analyse a range of issues with regard to water quality, including the implementation of the WFD and the RBMP for Ireland 2018–2021. The functions of the Water Forum include, but are not limited to, the following:

- advising the Minister for Housing, Local Government and Heritage on water conservation, rural water services and the interests of the customers of Irish Water;
- advising the WPAC in relation to the implementation of the EU WFD in Ireland;
- making recommendations to Irish Water in relation to the performance of its functions;
- advising and providing observations to the Commission for Regulation of Utilities;
- examining any other water-related matters as requested by the Minister for Housing, Planning and Local Government and advising the Minister accordingly.

A number of notable strengths of the Water Forum were highlighted during the course of the interviews. All interviewees emphasised that the Water Forum represents a broad range of interests, with the main sectors and stakeholders interested in water quality coming together around the table. At a basic level, it was seen as an important forum for mutual learning, the sharing of information and keeping stakeholders up to date. Interviewees emphasised the willingness of members to listen to others and understand where they are coming from. Members feel more informed and also feel that their knowledge of water issues has increased and that it has strengthened relationships with others in the group.

The fact that the Water Forum is a statutory body was noted as a strength by several interviewees. This was seen as giving credibility and standing to stakeholder engagement and providing a means for departments and agencies to gain access to stakeholder views, both formally and informally. That the Water Forum is independent was also seen as important.

Several interviewees commented on limitations with regard to the make-up of the membership of the Water Forum; one interviewee referred to the preponderance of white, middle-aged men. With regard to stakeholder representation, some interviewees mentioned as an issue that there is only one education representative

covering the whole of education. Other groupings that should possibly have representation that were mentioned included young people, aquaculture or commercial fisheries, and artisanal food suppliers. However, the need for additional representation was balanced by a view that, as the Water Forum is already a large grouping, adding more members could challenge even further its effective operation.

Another point made with regard to membership was that a couple of interviewees felt that the Forum's membership could get "stale" if the same people are retained for too long. Balancing continuity of membership and building trust and good working relationships with the need to inject new blood periodically was seen as a challenge. Furthermore, as membership is voluntary and unpaid it can, given the number of meetings, sometimes be difficult for members who are not working full-time in the area to engage fully.

The bringing together of stakeholders enables information-sharing, a greater understanding of different positions and some agreement on common positions. However, some interviewees felt that some members are more vocal than others and that strong voices can dominate discussions.

2.3 National Coordination and Management Committee

The NCMC is intended to ensure that the POMs are managed over the period of implementation, to embed the partnership approach taken in developing the draft RBMP and to provide the interface between science, policy and programme delivery. It is also tasked with agreeing and overseeing the overall work programmes and it reports to the WPAC on the progress. Its brief is to address potential obstacles to implementation and, when required, to advise the WPAC on future policy needs, acting in a project management capacity in this regard. In addition, the NCMC is responsible for overseeing the preparation of future RBMPs and POMs on behalf of the WPAC. The NCMC is chaired by a senior civil servant from the DHLGH and comprises representatives of the DHLGH and the EPA together with the chairs of the regional committees.

The NCMC was the element of the governance structure that attracted the most critique among interviewees. Whereas all other elements of the

governance structure were seen in a positive light, with an emphasis on the need for further development and improvement rather than a need for change, the NCMC attracted more diverse views. The main criticism was that, as there is a strong degree of overlap between members of the NCMC and WPAC, there was a significant degree of overlap in terms of the agenda and functions, even though committees' terms of reference prescribe them distinctive tasks.

Countering this view, there was agreement that more recent meetings of the NCMC had begun to address issues of overlap and that there is now a clearer view on the role of the two committees. The NCMC will meet a couple of weeks before the WPAC so that if there are issues that need to be escalated they will be addressed. One interviewee noted that "having the key stakeholders in the one room providing that linkage, you know, about horizontal and vertical between the different levels, cases and tiers" was positive. It is also seen as a critical opportunity for the five local authority regional chairs to engage with the process. The NCMC was seen as a potential "safe space", where issues such as re-engaging some local authorities, bringing them on board and dealing with their concerns can be addressed (see section 2.7). However, somewhat similar to the WPAC, the NCMC was seen as, to date, operating mainly as a forum for information-sharing and providing updates from the DHLGH, rather than getting into discussion and debates on issues such as resourcing and how the implementation is progressing.

One interviewee felt that Irish Water should be represented on the NCMC and the WPAC, to help provide the technical assistance regarding understanding of modelling and to report on the implementation of their elements of the RBMP and the challenges arising.

2.4 National Technical Implementation Group

The NTIG oversees the technical implementation of the RBMP at the national level and provides a forum to ensure that actions among all relevant state actors are co-ordinated and address any operational barriers to the implementation that may arise. The group reviews progress and provides updates to the NCMC on the implementation and effectiveness of measures. The NTIG is also intended to be a forum for information exchange and to promote the consistency of regional

implementation. It has the machinery and resources of the Network for the Ireland's Environment Compliance and Enforcement (NIECE) available to it through the Catchment Management Network, which was established in 2014.

The EPA provides the chair, and members include local authorities, the Office of Public Works, Inland Fisheries Ireland, Teagasc, the DAFM, Irish Water, the DHLGH, Coillte, the National Parks and Wildlife Service and other implementing bodies, as appropriate.

The NTIG has a number of working groups with defined terms of reference that work to provide national guidance on particular technical issues, such as protecting high status waters, implementing natural water retention measures, and carrying out local catchment and hydromorphology assessments.

Views on the NTIG were generally very positive, and it is considered to be working well. By and large, it is seen as having the right people involved, with good attendance, energy and discussion, and awareness-raising. Although in the initial stages the group tended to focus more on updates and briefings – and some interviewees noted that this is still the case to some extent – several interviewees noted that people are now tabling more substantive issues for discussion and debate. One interviewee noted that "members […] have expertise and are willing to share it, and others [are] willing to take it on board, and it's a respectful forum". One suggestion to further develop more substantive discussion was the idea of having thematic meetings, where as part of the agenda there is a different theme at each meeting and half the meeting is dedicated to discussion on the theme, with the other half of the meeting spent on general updates and briefings.

One note of caution is that, although the NTIG has provided the opportunity for more substantive engagement and collaboration, the outcome of that collaboration depends on subsequent discussion and action agreed between actors. However, the contacts and informal relationships provided through the NTIG are seen as very important.

The use of working groups received very positive comments and is something to be developed further in the future. There are currently two such groups, one

dealing with natural water retention measures (flood mitigation) and the other with hydromorphology. The use of such subgroups to deal with these topics was seen as a way of progressing actions and identifying the associated policy developments needed by getting the right agencies together in a focused manner.

One interviewee felt that agriculture is not sufficiently represented at the NTIG or, more specifically, that the NTIG does not have a sufficient understanding of the cultural mindset of farmers, their need to farm and make a living and the implications for agriculture of some of the measures being proposed. For example, it may seem very straightforward to fence off a stream; however, if that stream is on farmed land, then the farmer may have to find an alternative source of water for animals to drink and, if there is no mains access to the land, this might necessitate digging a well, which in turns requires electricity and incurs a huge cost. A farmer who is only renting the land is highly unlikely to be willing to incur such a cost.

2.5 Local Authorities Water Programme

LAWPRO is a shared service operated on behalf of the local authorities and is managed by Kilkenny and Tipperary County Councils. LAWPRO has three core aims:

1. co-ordinate efforts by local authorities, public bodies and other stakeholders to achieve the environmental objectives of the WFD;

2. support local communities that wish to get involved in the care of their local waters and engage with river basin planning;

3. build a better understanding of the issues affecting water quality at a local level and recommend improvement measures.

The programme comprises two teams: the Communities team and the Catchments team. Both teams operate out of 13 different local authority centres nationwide. The Communities team consults with and supports communities and stakeholders in the delivery of local water quality projects and initiatives. The team also works with rivers trusts and catchment partnerships. The Catchments team consists of scientists with a wide range of technical expertise.

They implement measures aimed at improving water quality within the 190 PAA. This involves river assessments and stream walks to understand the issues affecting water quality and working with local communities, landowners, business owners and public bodies to develop solutions. LAWPRO also supports the Agricultural Sustainability Support and Advisory Programme (ASSAP), working with farmers in the PAA.

As with the NTIG, LAWPRO is seen as a very positive development by interviewees. It is seen as innovative and good at driving things on the ground or, as one interviewee put it, a "good lubricant and connector". In general, it is seen as managing its relationships very well and to be "bedding down" well as an important element of the governance arrangements.

A detailed independent review of LAWPRO (O Cinnéide and Bullock, 2020) was carried out in early 2020, so the ground covered in that review is not repeated here. In summary, while suggesting areas for improvement, the review found:

> The investment made to date by the Irish authorities in the Local Authority Waters Programme has borne fruit in terms of public engagement, coordination, Catchment Management and learning; this investment has been very effective and needs to be continued and strengthened into the 3rd cycle, post 2022. (O Cinnéide and Bullock, 2020, p. 38)

Generally across the local government system, one of the key things that LAWPRO is seen as having delivered for local authorities is expertise, especially for local authorities such as an urban authority or a smaller local authority which might not have certain expertise. It is also seen as having an important co-ordination role, co-ordinating responses and approaches in local authorities, and promoting the sharing of knowledge across the system. LAWPRO is fulfilling its role as a shared service on behalf of local authorities. Most interviewees commented positively on the competence and expertise of the staff employed by LAWPRO on the sides of both the catchments and the communities. As discussed in section 2.7 on local authorities, however, some aspects of the relationship with some local authorities still need further work.

2.6   Regional Committees

Five regional committees have the responsibility for the co-ordinated delivery of measures at regional and local levels, and ensuring a consistency of approach across the regions (and, in the case of the Border committee, also with Northern Ireland). The five regional committees are chaired by local authority chief executives, with participation and technical advice from the EPA. Each committee is made up of local authority and EPA staff. Each committee produces a regional integrated catchment management programme for the period of the RBMP. These programmes set out the areas prioritised for action at the water body, subcatchment and/or catchment levels as appropriate. The programmes also set out the measures to be implemented in each relevant area, the responsible bodies to action these measures, the resources assigned, expected timelines for implementation, and how communities and other stakeholders will be included and engaged with.

The five regional committees have each established an operations committee to co-ordinate RBMP implementation. Each operations committee is chaired by a local authority director of service, and members include personnel from all of the implementing bodies that are represented at the NTIG and operational staff from the local authorities. The purpose of these committees is to oversee implementation of actions in the 190 PAA identified in the second-cycle RBMP.

The regional committees are seen to be working well and as very positive and engaging. The regional management committees tend to focus more on providing updates and sharing information, whereas the regional operational committees bring the main stakeholders together locally and facilitate planning for local actions, so that there is general agreement on the priorities that need to be addressed for the water body to be improved. One participant, who is also involved in the other governance tiers, noted of the regional committees that "I find it works well. There's a bit more time to share stuff and maybe as well we're all human, you can relate to things that are more local even if it's a regional thing". Although the committees have good discretion, their remit and authority are limited. They cannot compel any of the stakeholders to act, and instead rely on persuasion and co-operation.

The regional operational committees, after an initial bedding-in period, are becoming more involved in the direction of day-to-day business. As expressed by one interviewee:

> I suppose everyone was getting to know each other and there were presentations from everybody's areas and everybody was identifying the issues and everything else that were relevant to them. And that went on quite a bit and it's only in, I suppose, the relatively recent last few meetings where there was actually real data coming back from the LAWPRO, the catchment side […] and hopefully that will evolve and continue to enable the operational committee to become more focused as operation committees steering the work on the ground.

Little information about the work of the committees can be found in the public domain. As one interviewee put it, this means that they "have to accept the views of others that they're working". For example, the minutes of meetings are not made available and the regional integrated catchment management programmes are not published. Transparency of the operation of regional committees is an issue that is in need of addressing. Similarly, the linkages between the regional committees and the other tiers of governance, and the flows of information between them, are somewhat opaque.

2.7   Local Authorities

Individual local authorities are central to on-the-ground implementation of the RBMP and tracking of the progress and effectiveness of implemented measures. Local authorities also have a vital role in supporting national policy development and implementation through their participation in the WPAC and the NCMC.

The level of interest, engagement and resources available to local authorities varies significantly. As one interviewee stated about some local authorities, "there is a tendency for local authorities to operate in silos and not really be aware of the level of governance and support that might be there for them". Although some local authorities wish to operate on their own and use their own resources built up over a number of years,

some interviewees expressed a view that others tend to step back and they feel that it is LAWPRO's job to take action. However, whereas LAWPRO focuses on a limited number of priority areas, local authorities cover the whole of their counties and/or cities, not just the PAA. So where local authorities are not fully engaged in carrying out the basic measures across the country, there is a risk of deterioration in areas outside the PAA, counterbalancing improvements made in the PAA. There is a need for greater clarity and shared understanding with regard to the roles of LAWPRO and local authorities.

Apart from the challenge of individual local authorities working in isolation, within local authorities there is a need to ensure co-ordination across the different parts of the organisation. There is a need to incorporate a water quality focus into the general work of local authorities, such as in the development of integrated land use strategies, and to get more sections within local authorities to think more about the RBMP. Examples given in the interviews were that planning needs to consider the implications of the plan more, as do road operations, where engineers undertake drainage works that can affect water bodies.

Where local authorities are fully engaged, there are also challenges presented by the wide range of functions performed by local authorities and the need to balance scarce resources and priorities between activities. One interviewee succinctly put the issue of competing priorities for resources when they said that "it's never somebody's river; it's somebody's road. The river doesn't get personalised". Another interviewee noted:

> I think local authorities, we are multifaceted. What's very interesting when I sit down in some of these meetings is you're dealing with many other organisations that are so singularly focused […] and we are sitting in there and we have got a massive broad spectrum and sometimes maybe too much is expected of local authorities.

A similar issue was raised by another interviewee regarding the number of central government departments they have to deal with:

> I would say now, if you ask me, local government probably reports to ten different

> departments[.] I think it's becoming a more complex environment, we just need an awareness of that in terms of the next round of water management plans.

The other aspect of the broad focus of local authorities that emerged in the interviews was a perceived need, from the sector itself, to take a more co-ordinated approach to the various ways in which they interact with local communities. As noted by one interviewee:

> Now we're going to one evening with an environmental awareness officer talking to them about picking litter and biodiversity, an awareness officer going out the following week talking to them about I don't know, invasive species and minding graveyards and cutting ivy off buildings and stuff. And now we

> have a water officer out talking to them about water. And we have a climate change officer out talking to them about energy. We're taking all these policies and they're funnelling into us and then they're funnelling back out the way[.] I suppose we just need to be careful that we're not overloading them, and it's how do we manage that piece on the ground that we're linking them up and putting the right resources in place and then coordinating across local authorities where it's appropriate.

Also to be considered is the role of the County and City Management Association (CCMA) in relation to LAWPRO and local authorities. One interviewee was of the opinion that how the relationship between the CCMA and LAWPRO works is an issue that needs further consideration.

3   Human Resources and Capacity

Morgan (2018, p. 9) notes that one of the key propositions of the experimental governance model is "the commitment to and capacity for learning-by-monitoring in public sector bodies". In terms of factors that may support or inhibit such knowledge-based learning, the skills and competences of participants play an important role, as does the leadership approach taken within the governance network arrangements. Adaptive leadership and learning are seen as important when addressing non-routine wicked problems (Kettl, 2009). As Head and Alford (2015, p. 717) note, "Tackling key challenges through nonstandard processes of adaptive management and networked governance becomes more important as problems exhibit higher levels of uncertainty and stakeholder contestation, for example, where key actors take divergent approaches to problem definitions and possible solutions".

As well as examining adaptive leadership approaches taken, it is important to assess the extent to which distributed leadership is practised in the governance structures. Distributed leadership builds the capacity for change and improvement across levels and organisations. As a leadership model, it moves away from a simple view of leadership from the top to more collaborative and shared leadership (Bolden, 2011). Building collaboration across organisations and managing boundary spanning are important leadership skills in this context (Williams, 2012).

3.1   Capacity-building across the Tiers

At the tier 1 level, members of the WPAC are all experienced senior public servants who are used to dealing with co-ordination challenges, both horizontally and vertically and across different government levels. The Water Forum has been supported in its work through the provision of capacity in the appointment of the research officer and communications and education officer to supplement the senior executive officer post. The development of closer links by the Water Forum with third-level institutions and research centres is seen as a further helpful way of supplementing capacity gaps, as is their participation in the water research co-ordination group run by the EPA.

At the tier 2 level, interviewees spoke highly of both the technical and managerial capacity of EPA staff. In terms of providing relevant expertise and fostering co-operation and co-ordination across the different stakeholder groups, the EPA was seen as providing relevant expertise and a capacity for collaborative and adaptive leadership. In terms of technical capacity, the Catchment Science and Management Unit (CSMU) works with LAWPRO, local authorities, other public authorities, government agencies and local communities to establish effective integrated catchment management in Ireland. The work involves integrating existing knowledge from a range of disciplines, including hydrology, hydrogeology, ecology and hydrochemistry, with data on the pressures that are affecting water bodies. Sabel *et al*. (forthcoming) note that the scientists recruited to the CSMU were primarily from the physical, not biological, sciences. Within the EPA, the CSMU is part of the water programme in the EPA's Office of Evidence and Assessment, which combines the CSMU, the Ecological Monitoring and Assessment Unit and the Hydrometrics and Groundwater Unit. These three units work together and collaborate with other water-related units in other offices.

Within the NTIG, there was a view that the main technical capacity requirements were addressed by the range of stakeholders involved, with the exception of some limitations referenced below.

In terms of on-the-ground adaptive and distributed leadership, capacity at the tier 3 level is crucial to the successful implementation of the RBMP. It is here that the impact of the actions will be felt, or not, in practice. Staff working at LAWPRO and ASSAP (approximately 90 people in total) received particular praise for their roles in this to date. In terms of the co-ordination and local leadership role, as one interviewee noted, LAWPRO does not have "vertical authority to inform, to instruct, to demand, to insist – it can't do that, it doesn't have the power so it has to build what I would call horizontal structures of power or of governance, which is collaboration, and it has done that pretty well

through the local authority structure". The fact that LAWPRO managers are selected because they have many years of experience of working with the local government system, and understand it and know how it works, has been a significant factor in achieving support for their work and in promoting collaborative responses to problems identified at the local level. Within the local authority system more widely, some interviewees noted that, in some authorities, knowledge and expertise around water issues are not strong enough.

On the technical side, working with the catchment scientists in the EPA, the Waters Catchment Assessment Team (WCAT) and LAWPRO play a central role in providing technical expertise at the local level. The team is composed of five managers and 31 scientists with a wide range of expertise, grouped in five regional offices. The evaluation of LAWPRO found that the Catchments team had raised the profile of water quality, with a key strength being that "it is evidence-based and therefore cannot be disputed" (O Cinnéide and Bullock, 2020, p. 24). Furthermore, LAWPRO and ASSAP staff received training from the EPA to help to ensure that all advisers were of the required standard and could provide a uniform message to farmers and others.

As well as the technical skills required, the "soft" skills of LAWPRO staff and ASSAP advisers was noted as a vital capacity issue and a benefit. ASSAP, for example, hired experienced advisers, many with a farming background, and put together a strong team. ASSAP recognised the importance of gaining farmer trust and understanding. As one interviewee noted in relation to the work with farmers:

> If they [farmers] can understand why, they will be more interested in the measures. You might recommend on average six items and they rank them in order of how impactful they are and focus on those; farmers are more likely to do two to three things for you. You give alternatives for solving the problem and negotiate and find something he will do. It's a complex negotiation and relationship; soft people skills need to be very good, as it works differently with different farmers.

That skillset of actually working with the public to change behaviour and attitudes is a vital one that needs further development and spreading across the system. LAWPRO and ASSAP have a relatively small number of staff for the 190 PAAs their work covers. For example, while there may be 40 farmers in a catchment, LAWPRO will identify and focus attention on those who are having an impact on water quality, which may be only a small number. It is a targeted approach. The community engagement front is in a similar situation, as one interviewee noted in relation to their region, "we might have three community water officers who are the people who will engage with the communities. Now that, to me, is mission impossible".

A particular capacity issue noted is that the dairy industry ASSAP advisers visit dairy farmers that supply the dairies co-operative, and the Teagasc ASSAP advisers visit the other farmers. This can lead to variable workloads and deployment of resources. A more structured approach to addressing this anomaly would seem sensible.

More generally, there is a challenge of building capacity beyond LAWPRO and ASSAP advisers to the other Teagasc and private advisers. The impact of capacity-building will be limited if it is constrained to a small number of staff who are involved with a small number of farmers. Continuous professional development has an important role to play here. The Teagasc Signpost Series of webinars came in for praise from a number of interviewees in this regard. The series is organised through the Teagasc ConnectEd service, with the support of the National Rural Network, Dairy Sustainability Ireland and Food Drink Ireland Skillsnet.

In terms of retaining capacity, LAWPRO has faced a significant staff retention issue, particularly in relation to retaining staff employed on temporary contracts, uncertain of their long-term futures. Not having a full team presents major problems, with a focus on firefighting rather than taking a more strategic approach. One quote from an interviewee summarised the general view:

> I think we need to be committing for the long haul and that, to me, is around giving a bit of certainty to the staff who are involved in this. Like the last thing you'd need here is a set of people on contracts getting nervous and all exiting.

This was seen as an issue that should be prioritised, given that it is both urgent and important. There is a danger of losing a very good core of expertise and effective people who have helped build up LAWPRO.

A small number of skills-related capacity gaps or deficiencies were also highlighted during the course of the interviews. In terms of technical capacity deficits, although there is technical capability for catchment modelling, with Irish Water technical people talking to EPA technical people, this dialogue could be developed further. In terms of people with groundwater expertise, some interviewees identified a need for hydrogeologists in organisations such as the National Parks and Wildlife Service and LAWPRO, as such experts can provide an understanding of the system and measures that need to be taken or conditions that need to be maintained to keep a healthy ecosystem.

With regard to wider skills, the ability to have people skilled in the dissemination of accessible data that the public can readily understand was highlighted by several interviewees. Although good data collection systems are being developed, equal attention needs to be given to designing effective ways to disseminate information more widely to stakeholders and the public. In a similar vein, more knowledge and capacity in the use of behavioural science was highlighted by some interviewees, to assist in the promotion of changing behaviours on the ground.

The issue of building capacity among volunteers in catchment areas is also important. It is a big ask for volunteers to set up a local water protection organisation, as this involves, for example, adopting a constitution and obtaining insurance. Supports are needed to help get local groups involved in the RBMP process. This point is emphasised in O Cinnéide *et al*. (2021), who note that "the Catchment groups and River Trusts, which are a key element of public participation in the future delivery of the WFD, will continue to need support from State agencies such as LAWPRO to build their human resources, skills and capacities".

A more general point that applies across the different governance tiers, and one that was emphasised in interviews with a wide range of stakeholders, was the key role of the chair of the various committees in influencing active collaboration and engagement. For example, most interviewees emphasised the positive role of the chair as one of the reasons for the successes of the Water Forum to date. Having an independent chair not linked to any particular interest group was seen as an important element in the process. The fact that the chair operates in a respectful and inclusive manner, allowing for diverging views to be articulated, was emphasised as a significant factor in the generation of trust among members. Similarly, the chairs of the WPAC, the NCMC, the NTIG and the regional committees were identified as central players who have significant influence in determining progress in relation to the RBMP.

4 Institutional Capacity

Institutions are the "rules of the game", determining what people may, must or must not do under particular circumstances with particular costs for non-compliance (North, 1990; Ostrom, 2005). Here, the focus is on how institutions operate at different governance levels to help shape the scope for local action and learning: how "expectations concerning the achievement of local social learning and knowledge management processes should be informed by an understanding of the institutional influences on the attitudes, behaviour and practices of local […] actors" (Wolfe, 2018, p. 11, citing Gertler and Wolfe, 2004).

In particular, institutional capacity is significantly influenced by what Zukauskaite *et al*. (2017) call institutional thickness or thinness; it is described as the degree of the presence or absence of (1) formal institutions, including laws, rules and regulations, and (2) informal institutions, including norms, culture and trust, which are important for collective learning at the regional level and the effective exchange of knowledge between partners. Wolfe (2018, p. 39) notes that "institutionally thin regions may lack the underlying culture of trust and co-operation that provide the fertile ground on which effective forms of collaborative and networked governance can grow". Consequently, it will be important to examine the influence of institutional capacity on the operation of experimental governance in the water governance sphere.

4.1 Building Institutional Capacity to Support Implementation of the RBMP

Examples of both formal and informal institutions are present in the RBMP. An issue of some debate among interviewees was determining the appropriate balance between them. One issue on which there was a fair degree of consensus was that formal institutions, such as rules and regulations, and their enforcement, are insufficient on their own. The increasing number of regulatory initiatives in areas such as nitrates, agricultural practice and waste water have, on their own, not had the desired impact. As one local authority representative stated about a shift from enforcement alone to a more collaborative approach:

> You're working with people who may be causing unintended consequences for the quality of the water and sometimes working with them might achieve the same outcome but with less resources at the end of the day. It's kind of part of the culture I'll say in a lot of parts of the country to have that approach.

There are no specific enforcement structures for the RBMP per se, with responsibility resting with individual departments/agencies under their legislation. In reality, this, alongside differences in the relative ease with which regulations can be enforced in different sectors, leads to variations in practice. The EPA has a strong enforcement role in those situations, such as when waste water plants require a licence. It is also relatively straightforward to practise enforcement here. However, in relation to issues such as agriculture, drainage or forestry, the enforcement of regulations is more problematic. The local authorities and the DAFM have programmes of inspections that they carry out, but the number of these that lead to enforcement is small. This can create disparity in terms of the level of enforcement between Irish Water, where enforcement of licences is relatively straightforward, and agriculture, where enforcement is more challenging.

ASSAP and LAWPRO represent good examples of a greater focus on the use of informal institutions, such as the building of a culture supporting required behaviours, based on trust and co-operation. ASSAP, for example, is based on a collaborative approach and voluntary participation and is non-regulatory. One interviewee familiar with ASSAP noted that, in the beginning, the atmosphere in its dealings with farmers and representatives of the farming industry, was fraught: "you could cut the tension with a knife". There are now regular collaborative meetings with the Irish Farmers' Association (IFA). For example, one interviewee recalled an IFA dairy committee meeting at which the chair stood up and said "if we do not get

on board with this and start driving the bus, we will all be very sorry". That was seen as a turning point in the relationship. However, it was groundwork already carried out by ASSAP and LAWPRO that had helped convince the chair that farmers were being listened to. Once the IFA supported the approach, this made a significant difference in terms of going out to talk to farmers.

In a similar vein, the National Dairy Sustainability Forum is a good example of a structured approach to building trust and co-operation. As noted in the chapter on agriculture in the EPA's state of the environment report (EPA, 2016), trust and co-operation are essential to making everything else happen.

That LAWPRO has no enforcement powers itself is generally seen as a good model, as it leaves the responsibility with the local authorities, which have the necessary experience and expertise. It allows LAWPRO to focus on educating and informing, and, by including communities in the process, farmers do not feel that they are being singled out. This does, however, raise the issue of the ability and willingness of local authorities and others to respond to what LAWPRO finds, and, as mentioned earlier, some have more capacity and capability to do this than others. It can also lead to a perception among some local authority staff that LAWPRO get to do the "nice" elements of engagement, leaving the more challenging enforcement side to local authorities.

To strengthen the informal institutions, some interviewees stressed that social norms need to change, for example it was suggested that farmers should call out other farmers for bad practices. However, it was recognised that this also goes for society in general, and that it should become the norm: "people that won't comply should be seen as holding the industry back – it shouldn't be acceptable". Similarly, there needs to be a connection between the overproduction of food and cultural/societal expectations and attitudes. Some interviewees expressed the view that people generally are not

joining the dots between their own practices and water quality issues.

Education, for example agricultural courses, was also seen as having a role to play. There was general consensus that there is a need to better link agricultural production with its impact on the environment and water, and a recognition that improving water quality cannot rely on regulation alone.

It is also important to note that, although LAWPRO and ASSAP take a more informal institutional approach to the PAA, there is, as yet, only limited evidence to suggest that such an approach will be effective in terms of improvements to water quality or adoption and maintenance of the required actions and behaviour changes. This is because there is no sanction or downside for farmers who fail to implement the required measures. Ultimately, a balance between soft and hard approaches to co-operation (the use of both carrot and stick) is needed. In the case of agriculture, there is widespread acceptance that changing culture is the way to go, and that farmers should be given more messages that support them in thinking "what can I do?" rather than hitting them with a list of things that they cannot do during their first interaction with an agency. However, as one interviewee emphasised, "there does need to be a bar". The issue is where that bar should be, and this is something that needs further discussion and engagement among the stakeholders and within the governance arrangements for the RBMP.

One positive aspect is that the governance arrangements are proving a positive route to identify and address regulation gaps. For example, LAWPRO has identified gaps and areas in which policy change is required, to put in place controls, including in relation to the disposal of sheep dip waste, which, LAWPRO and ASSAP representatives pointed out, is not covered by regulation. This has been raised through the governance tiers so that it can be addressed appropriately.

5 Budgetary and Financial Systems

The degree of autonomy and discretion granted to local units, not least budgetary discretion, is important in facilitating an experimental governance approach. Issues to be examined here include the extent to which financial reallocations are possible at local project management level in response to changing circumstances, if "pooling" of budgets is possible and whether or not financial accountability requirements of individual organisations militate against or support collaborative and innovative work.

5.1 The Governance of Resources in the RBMP

As with most major initiatives that require significant investment, the total level of resources available for the implementation of RBMP actions was raised as an issue. Resource constraints affect the pace at which and level to which various actions can be advanced. Several interviewees noted the challenges experienced by Irish Water, as budgetary decisions led to it having to push its programme out, leading to delays in the investment in some treatment plants.

Many interviewees also stressed that funding arrangements associated with the next CAP will fundamentally affect the interest and ability of farmers to engage effectively with water improvement initiatives. Changes to the CAP that encourage greater emphasis on environmental sustainability are expected, and encouraging policy moves in this direction is an important role for the WPAC and other committees. The European Commission Farm to Fork Strategy and the European Green Deal also set targets that will influence resource allocation decisions, as will those set by the chemicals strategy, as these will affect pesticide use.

Within this overall context, the governance arrangements were generally seen as facilitating the ability to make best use of the resources available. The regional committees have the discretion to identify and prioritise actions within agreed parameters, and this is seen as an appropriate level of autonomy.

One budgetary initiative of note is the piloting of payment for results in the agriculture sphere. A number of pilot initiatives are looking at results-based payments for achieving agreed outputs and outcomes. Historically, farmers have received public money to deliver increases in food production, which, at times, has been at the expense of the environment, and for agreed actions, but with limited knowledge as to whether or not these actions result in positive environmental outcomes. Pilot projects, such as the BurrenLIFE project, aim to achieve environmental outcomes by paying for results, for example number of wild flowers on a farmer's land or number of new water troughs installed, using public money. The projects are subject to a rigorous audit process to determine the extent to which the quantifiable and outcome-based results have been achieved.

Outcome-focused, results-based payment is not a new idea (Boyle and Butler, 2003), but it has significant potential. It offers benefits to both the government and the recipients of the funding. The government's need for accountability is ensured by focusing on what is actually happening as a result of the provision of public funds. For the recipient, moving away from payment for actions gives them more discretion as to how to achieve the desired outcomes.

However, payment for results is not a panacea. Potential problems include the possibility of gaming the system and the fact that sometimes the outcomes may be impossible to assess for a number of years. The level of resources available is subject to general budgetary pressures facing governments. One interviewee noted that the long-term security of environmental payments can be a concern to farmers, as environmental schemes are usually time specific and there is often a delay between the ending of one scheme and the start of the next. The cost of this is borne by the farmer, and this may influence their views on participation. However, it is undoubtedly the case

that payment for results is something that is worth further developing and which should be adopted in the RBMP and included in the overall resourcing of the plan. The aim must be to be aware of and minimise any associated problems.

Another innovative funding initiative of note is the funding of ASSAP. The programme is a collaborative one between the public and private sectors, with funding and support received from the DAFM, the DHLGH and Dairy Sustainability Ireland. The programme offers a free support and advisory service provided by 20 Teagasc advisers and 10 advisers, and is funded by the dairy-processing co-operatives.

With regard to encouraging community involvement, a further relevant funding initiative is the Community Water Development Fund, managed by LAWPRO, which was introduced in 2018. This fund is open to all community and voluntary groups that want to get involved in the protection and restoration of waters in their local area. The fund is also open to rivers/lake trusts and catchment partnerships, which are groups that tend to adopt a wider catchment-based approach. The total fund is capped at €225,000 for 2020. It is too early as yet to assess the impact of this funding, but an indicator of the degree of interest in the scheme is the fact that in 2019 the available funding of €180,000 was significantly oversubscribed, with applications exceeding

€750,000 in total project costs. Furthermore, as O Cinnéide *et al*. (2021) state:

> It is noteworthy that the average grant per applicant in […] 2020, is €1,587. The feedback from the Catchment and Trust groups is that while this may be seen as appropriate for a small project by a voluntary group (event, tree planting, survey), it is well below the level of funding which would be needed to support the work program of an active Catchment group or Rivers trust.

O Cinnéide *et al*. (2021) go on to state:

> In summary, the current model of financial support for catchment groups is inadequate, with seed funding from LAWPRO, virtually no support for personnel costs and a high reliance on project funding. If maintained in its current scale and form, it may be seen as a serious risk to the continued activity and growth of many Trusts or catchment groups. The review of structures and policy frameworks for Catchment groups in the next River Basin Cycle needs to be accompanied by a commitment to provide a blend of core funding and project support, to ensure a transition to a more sustainable and participative WFD landscape[.]

6 Setting of Framework Goals

In this element of experimental governance, open-ended framework goals and metrics for assessing their achievement are established jointly by participants in the governance process. The role of the WFD and the RBMP is of importance here, in terms of describing the framework goals set for water governance in Ireland.

It is important to examine the process by which the framework goals and metrics are set. It is also important to examine the relative roles of central and local government, state agencies and civil society, particularly the extent to which it is possible for the different stakeholders to reach an initial agreement on common framework goals. It can be difficult to strike the ideal balance between establishing goals that are shared and maintaining enduring network relations (Klaster *et al*., 2017). It is also necessary to consider how participants can be encouraged to co-operate in framework rule-making and respect its outcomes (Zeitlin, 2016).

6.1 Setting Framework Goals for the RBMP

The overarching framework goals for the RBMP are set at the supranational level, with the EU setting the goals in the context of the WFD. The WFD sets out a very broad goal of securing good status for all waters. The intention is that actors involved with governance at the national and subnational levels then enjoy a considerable degree of autonomy in achieving those goals. Nationally, as Sabel and Zeitlin (2012, p. 3) note, under an experimental governance approach, "broad framework goals and metrics for gauging their achievement are provisionally established by some combination of 'central' and 'local' units, in consultation with relevant civil society stakeholders".

The Water Forum has an important role here, as all the main stakeholders with an interest in water are represented, including civil society organisations. As a forum, as one interviewee noted, it is the "closest we've got at the moment to joined-up thinking". As such, it is well placed to address the challenges associated with establishing common, shared and agreed goals across the different interest groups.

The degree of consensus reached in a wide range of areas was remarked on positively by most interviewees. Given the disparate and conflicting views on many water quality issues among the stakeholder groups involved, this was seen as a significant achievement. Several interviewees commented that, over the couple of years of its existence, the members of the Water Forum, facilitated by the chair, had built an environment of trust and willingness to collaborate and to work hard to reach mutual agreement where possible. However, while the emphasis on consensus-building was generally seen as a positive, some interviewees noted that it could also be a limitation. It could mean that the more contentious issues were not addressed as thoroughly as they might be, with more of a focus on information-sharing than on problem-solving. Furthermore, as mentioned previously, it is recognised by some on both the WPAC and the Water Forum that the forum is not utilised enough.

More generally, the challenges posed by different stakeholder groups with disparate policy objectives, combined with the absence of primary legislation to implement the WFD, were seen as hindering progress towards policy coherence, more widely with regard to setting the initial framework goals. Several interviewees cited the example of the development of the Food Harvest 2020 strategy, developed in 2010 in response to the economic crisis at the time. This strategy had as its objective a significant increase in the national dairy herd and milk production. As a consequence, although many actions included in the RBMP were delivered as planned, water quality still deteriorated as a result of the policy decisions taken to significantly increase production in the agri-food sector in order to promote economic recovery.

This issue of the need for policy adjustment and coherence with regard to framework goals is examined further in Chapter 9 in the context of the need for periodic review of the framework goals.

7   Discretion to Local Levels of Governance Regarding Implementation

The aim of giving discretion to the local level regarding implementation is to facilitate the development of joint solutions at the community level to common problems through trial and error. There is a recognition that standardised solutions are not applicable, and that experimentation is needed to identify initiatives that work in local contexts. In the context of an experimentalist administration, Sabel and Zeitlin (2012, p. 10) note the following:

> Workers often have discretion to depart from rules where they believe it would be counterproductive to follow them. This discretion, however, is limited by the requirement that she do so transparently in a manner that triggers review and, if her judgment is sustained, prompt re-writing of the rule to reflect the new understanding.

It is important to understand the degree to which discretion operates in practice at the lower levels, as, although the rhetoric of allowing local units to experiment and innovate may be strong, it is possible that "traditional hierarchies continue to loom large in the prosaic practices of organisations" (Morgan, 2018, p. 10). The questions of how much real authority has been devolved to the local level and to what extent hierarchical structures are ameliorated or complemented by networked forms of governance in practice remain.

It is also important to assess the extent to which discretion at lower levels is used by participants to collaborate effectively to develop innovative solutions. There is a question as to the extent to which "open innovation networks" are described by the literature as facilitating collaborative practices (Leminen *et al*., 2012). Such open innovation networks assume that different stakeholders – such as state agencies, local authorities, private companies, civil society groups and third-level research units – get together to collaborate and innovate jointly (Jarvenpaa and Wernick, 2012).

7.1   Discretion in Practice across the Governance Tiers

There is certainly some evidence of collaboration and local initiative at tiers 2 and 3 of the governance structures. In tier 2, there is a good blend of technical skills among the people in the EPA and the other agencies who are working together, such as the catchment scientists in the EPA and LAWPRO. This is leading to new initiatives in areas such as monitoring; an example is the increasing understanding of hydromorphology, as is examined in more detail in Chapter 8, when discussing monitoring and reporting.

Crucially, in tier 3, which is where implementation occurs and hence where the level of collaboration, discretion and innovation will have the most impact on the ground, there is evidence of collaboration and co-ordination. However, getting stakeholders to work together is seen as a quite slow and, at times, difficult and painstaking process. As noted previously, as LAWPRO has no powers to instruct, demand or insist, it has to rely on horizontal structures of collaboration. Interviewees accept that LAWPRO has done that pretty well by working with local authorities. The regional committees, similarly, have played an important part in encouraging both collaboration and a recognition of the need for local circumstances to be taken into account when determining the appropriate actions for local catchment areas.

Similarly, in tier 3, there is evidence that standardised solutions will not work and that collaboration is needed to foster experimentation at the local level. The following quote from Sabel *et al*. (forthcoming) highlights this point particularly well, drawing from the experience of the Agricultural Catchments Programme (ACP):

> The report on phase two of the ACP explicitly rejects a "one size fits all approach to how land and nutrient inputs are managed"[.] It would be only a slight exaggeration to say that the implementation is the plan, and it is co-produced by the advisor and

farmer, collaborating in precisely identifying the problems of particular farms, devising remedies, and jointly monitoring the results.

Results in the Timoleague catchment in West Cork, underscored in the phase two report, suggest the potential effectiveness of this contextualizing approach. Timoleague was the only catchment in the program dominated by intensive dairying. It was also the only one in which farmers demonstrated mastery of nutrient flows – by raising phosphorus levels in fields where they were too low and lowering them in fields where they were too high – while achieving, again uniquely, subtle but discernible improvements in the quality of water flows[.] However, it is not possible to judge how much the provision of intensive tailored advisory services contributed to Timoleague's distinctive success in nutrient management; the ACP program design did not control for the demographic characteristics of the participating farmers.

In a similar vein, one interviewee noted the benefits that collaborative arrangements more generally have brought in terms of promoting flexibility in adapting to changing circumstances:

> So say in terms of the pressures that were identified at the beginning, like say nutrients and maybe sediment as well, things like hydromorphology are coming up so there has to be that flexibility as the investigations go on and they find issues that maybe were not on the radar beforehand or issues that were on the radar are actually a bigger issue on the ground than they might have previously been thought of. So yeah, I think it's built in pretty well but again, it kind of builds, it goes back to consistency of being present at all the meetings and committees and everything else and the relationships that we built up that is quite… you know, people are respectful of each other and there's no issue with picking up the phone to somebody and saying there's a problem here. You're immediately not on the defensive, you're looking at, well, what do we need to do to fix it, you know. And that's really important I think.

Although there is evidence of local discretion and collaboration, resourcing challenges limit local discretion and highlight tensions with central management, for example when it comes to selecting priority areas. Some local authorities feel that local discretion in this area is limited, while recognising that the issue can come down to the size of the problem and the resources that are available. In response to a question aimed at identifying the specific areas that should be tackled for the next RBMP, one interviewee noted the following:

> The list is as long as your arm but there's no way there [are] enough resources to deliver all of those projects. So I suppose there is a bit of a top-down approach in relation to, well, these are the six we're taking from the south of the country out of the sixty that are there. Obviously while the local authority has an input into that, maybe there's a feeling out there that other authorities like the EPA have more of a say and maybe that leads to a little bit of friction.

At times there can also be communications challenges across tiers that can contribute to disparate views regarding hierarchical decision-making. For example, a couple of interviewees noted that the regional committees and the WPAC tend to be quite removed from each other, with limited communications between them.

7.2   Scaling Up of Lessons Learned

Giving discretion to the lower levels works only if the lessons learned from successful initiatives are also spread more widely and, where appropriate, scaled up regionally and nationally. Notwithstanding the fact that local solutions are uniquely influenced by local conditions, the process of arriving at the solutions and lessons from the initiatives taken and roles played by various participants can be scaled, and needs to be if success is not to be limited to isolated examples. This requires action at different levels of the governance structures.

A multilevel perspective developed by Geels (2002), which concerns how major technological changes come about, provides a framework for summarising and understanding how scaling up may be approached. Geels envisaged three levels: landscape,

regime and niche. The macro-level of landscape is the most stable and slow-changing level, and relates to issues such as culture, politics and policy, which shape the regime level. The meso-level of regimes relates to systems of settled behaviours and practices that provide a certain degree of stability, but which can be perturbed through new ideas and practices that arise at both landscape and niche levels. The micro-level of niches is the setting for the generation and development of innovations. Some of these innovations may lead to a reconfiguration of the regime level, which may, in turn, influence the landscape level.

In Figure 7.1, the policy environment is the equivalent of the landscape level, and it concerns the settled government policies that provide direction for public services. The WPAC, the NCNC, the Water Forum and the NTIG have a role to play here in shaping the policy environment. Mainstream programmes are the equivalent of the regime level, being the means by which public policy is translated into practice. These, again, are shaped in part by players involved in tiers 1 and 2 of the RBMP governance structure. LAWPRO and ASSAP projects, and initiatives such as rivers trusts, are the equivalent of the niche

level, being the level at which innovative practices and ideas are developed with a view to becoming embedded in mainstream programmes and influencing the policy environment. In line with the thinking behind the multilevel perspective, it is expected that some projects at the niche level will be successfully embedded in and influence mainstream programmes; some projects may be sustainable but not become embedded in the mainstream and some projects will be unsuccessful and cease to exist after a period of time.

One challenge here is that the evidence available to indicate success is limited, as discussed further in Chapter 8. In many cases, it takes some time until the results of a project, in terms of the final outcomes, are known. Progress on measuring intermediate outcomes would be helpful here.

A further challenge with regard to scaling up relates to knowledge transfer. For example, ASSAP advisers, had visited approximately 1500 farmers up to mid-2020, but Teagasc has about 40,000 clients and the total farmer population of Ireland is approximately 140,000. To be successful, the lessons learned from ASSAP have to be disseminated to all Teagasc
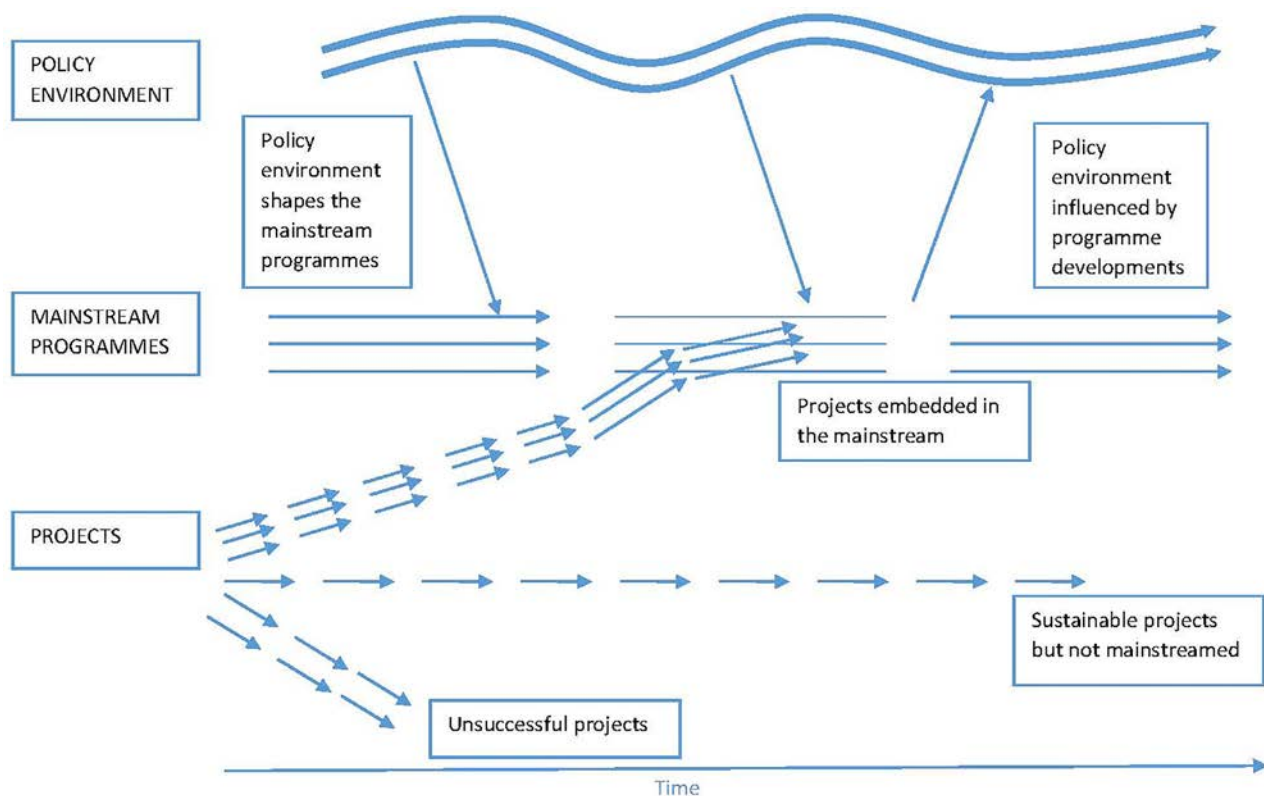

Figure 7.1. A multilevel perspective. Adapted from Geels (2002).

advisers and private advisers. Work on this knowledge transfer has begun, through online seminars, discussions, continuing professional development programmes and the like, but, as one interviewee put it, "there is huge knowledge deficit to bridge". There is a need for ASSAP advisers, in the future, to work in collaboration with mainstream Teagasc and private advisers, who are working with farmers not supported by ASSAP, with ASSAP advisers providing the support and "go-to" expertise. In this light, it is very positive that, at a senior level, Teagasc recognises the importance of mainstreaming the lessons learned from ASSAP.

On the community engagement side, a small, but growing, number of active catchment groups across the country are piloting new approaches, but there is limited support to help them scale up. In terms of helping local communities and farmers to access funding and scale up pilots, a key challenge is how to animate communities and farmers in an area to come together to initiate a project of agreed measures and thereby apply for funding from a scheme. Experience to date suggests that this needs a driver/champion, for example a LAWPRO adviser.

What is clear is that work is needed at both policy environment and project levels to promote scaling up of lessons learned from innovative discretionary practices. One of these alone is unlikely to be enough. If the concentration is solely on the policy environment level, the evidence base to inform policy change is not strong and it is unlikely that settled practices will be disturbed. If the focus is on the project level only, it is harder for successful projects to break into the mainstream without a supportive policy environment. It is the attention to both levels, working in tandem, that is supported by the RBMP governance structures and which offers potential for scaling up to occur. This work needs to be supported by a better evidence base for the projects, building in assessment and measurement criteria from the start.

8 Regular Reporting and Assessment

In this element of experimental governance, the focus is on the extent to which evidence is being developed and used to help inform decision-making at both local and national levels. Issues such as the degree to which interim indicators are created to inform mid-term corrections and the acquiring and sharing of policy-relevant data and knowledge come to the fore. The roles of the NTIG and regional committees are of note here, as are the local generation and use of evidence. For example, at the local level, Schorr (2003) notes that "communities […] act most effectively when they can combine local wisdom and their understanding of local circumstances with accumulated knowledge, drawn from research, theory, and practice, about what has worked elsewhere, what is working now, and what appears promising". The degree to which evidence informs practice at and across the different governance tiers is of particular interest.

The provision of a sound knowledge base is, however, as Head and Alford (2015, p. 718) note, "only one part of the challenge of dealing with ambiguity, uncertainty, and value disagreements. There are not only cognitive-analytical challenges but also communicative, political, and institutional challenges to building a more shared understanding." How evidence and knowledge is shared and disseminated is central to the degree of success in the recursive review of implementation experiences in different local contexts (Sabel and Zeitlin, 2012).

Reporting and assessment is intended to inform policy and practice learning across the different governance tiers. As Wolfe (2018, p. 8) notes: "The networked dimension of policy learning adds a considerable degree of complexity to the learning process, as it must extend across the boundaries of several different organizations—including both public and private ones—at more than one level of political jurisdiction". The challenges of doing this, and how they are addressed, form an important avenue of exploration for the research. For example, it is not uncommon to develop monitoring systems simply as

an administrative exercise, and to fail in practice to use them as a tool for planning and decision-making.

8.1 Data Development and Data Gaps

Formally, the EPA has a statutory role, pursuant to 2014 legislation, to report to the European Commission, including on status, measures and progress. In practice, there has arisen among the main stakeholders an expectation that the EPA should report more generally on the implementation of the RBMP. However, a number of interviewees raised issues concerning the operation and practicality of this. There are two elements to the monitoring of the plan: examining changes in water quality and examining progress with actions. The former clearly rests with the EPA, but, in practice, responsibility for the latter is dispersed. Furthermore, the ability of the EPA to comment on the performance of other bodies, as one of a number of agencies themselves, is constrained. One interviewee noted, "I would say it's not the EPA's job to report on the plan, it's a government plan". This might involve a more formal role for the NTIG and the NCMC in this regard, with the EPA and other participants in the governance structure supplying the evidence.

With regard to the final outcome of the status of water quality, the EPA clearly provides a wealth of high-quality evidence. The Q-value [from the EPA Quality Rating (Q-value) System], for example, is the backbone of the river monitoring system. The Q-value system has been used to monitor the ecological quality of streams and rivers in Ireland since 1971. It provides an integrated, ecological assessment. More broadly, about 140 different datasets go into the assessment of what significant pressures exist in each of the approximately 5000 water bodies. The quantity and quality of technical data are high and continually evolving. A particular challenge is the time it takes to determine if progress is being made, which can be up to a number of years, and the consequent difficulty in knowing in real time how effective actions are. With

regard to monitoring the impact of actions, Daly (2020) notes the following:

> Even when all the required mitigation measures/actions are in place, there will still be a biological response time delay. Where the water quality is satisfactory upstream, then the likely response will be rapid – probably < 1 year. Where the situation has been unsatisfactory for a number of years it may take 2–4 years for the required biological status to be achieved.

Daly (2020) does, however, go on to note that, in the meantime, progress can be shown by monitoring chemical concentrations.

With regard to monitoring the effect of the actions, LAWPRO has a significant role to play at the local level. It has designed a system to track activity, such as the number of people/groups it engages with and the number of people/groups that organise a clean-up, which provides some metrics around the monitoring of engagement. Several interviewees noted that a limitation of the RBMP is that many measures are activity based rather than outcome based, with the links between them not well made. They further noted that the next plan will need to be smarter and better with regard to tracking progress.

A number of interviewees, particularly those from the Water Forum, felt that feedback from LAWPRO and ASSAP tends to be quite anecdotal and largely positive, and that there is a need to go beyond this. In terms of getting a more balanced picture, several members of the Water Forum noted that they get information from their own stakeholder groups, feeding in what they are seeing on the ground, and that they see this as helpful contextual information. However, these Water Forum members also suffer from the limitation that the information they receive is largely anecdotal in nature.

The limitations of activity-focused monitoring are further illustrated by ASSAP, which has shown good initial engagement with farmers, with plans put in place for them, but with little evidence to date of what actions farmers have actually taken. However, this example also shows the challenges associated with providing more outcome-oriented data. In 2020, the Covid-19 restrictions curtailed the ability to visit farms to check

on progress. When visits are once more permissible it will be possible in some cases to determine whether or not an action has been taken (e.g. if a water course has been fenced off), but practice changes, such as avoiding spreading slurry at certain times of a year, are less readily monitored, and are reliant on the farmer's word on the matter, at least until confirmatory data, for example from water quality monitoring, become available.

The gap between activity data and final outcomes data is a notable one and one that needs to be filled. There is a need for further thought and development of intermediate outcome indicators (Boyle, 2005) to make the links between activities and outcomes more explicit. Interim indicators serve a role in demonstrating short- and medium-term achievements and they suggest the need for mid-course corrections (Schorr, 2003, p. 15). As one interviewee noted, this is especially important when trying to engage with communities that demand updates. It serves a motivational role, by keeping people interested. There could be a stronger role for the NCMC and the NTIG in determining how to fill the data gaps and disseminate the information.

Other data gaps referenced by interviewees were slow dissemination of data and the difficulty in obtaining data from stakeholders. Irish Water and the DAFM were mentioned by several interviewees in this respect. The limited data on waste water treatment plants in terms of which ones are polluting and which ones are being upgraded and progress on upgrades were noted as a particular issue. In general, there is a need for enhanced sharing of information. The flow of information, for example from regional committees to the NCMC and the NTIG, could be better.

Promisingly, there is evidence of new data emerging locally that provide more detailed evidence to inform policy and practice. Examples here include the following:

- The level of nitrogen reduction that is needed to achieve environmental targets has just started to be addressed.
- A new understanding of hydromorphological impacts: LAWPRO, ASSAP and the EPA have found that sediment is a bigger problem than they would have expected.

In a similar vein, the information that will be provided by the Economic and Social Research Institute in its study of behavioural and attitudinal change with respect to Ireland's water resources will provide important evidence of the effect of engagement with communities and farmers by LAWPRO and ASSAP.

8.2   Data-sharing

Obtaining the data is one issue, but how the data is shared across agencies and with the wider community will ultimately determine the degree to which it is useful. As Gertler and Wolfe (2004, pp. 49–50) note:

> This form of shared or networked learning assumes that neither the public sector nor individual private enterprises are the source of all knowledge; rather, the process of innovation and institutional adaptation is an interactive one in which the means for establishing supportive social relations and of communicating insights and knowledge in all its various forms are crucial to the outcomes. The goal, then, is to establish effective systems for social knowledge management at the local and regional scale.

This supports Schorr's (2003) contention that "communities will be able to act most effectively when they can combine local wisdom and their understanding of local circumstances with accumulated knowledge, drawn from research, theory, and practice, about what has worked elsewhere, what is working now, and what appears promising" (p. 10).

There is evidence of more sharing of data across agencies; for example, a memorandum of agreement was signed between the DAFM and the EPA on the

sharing of information on agriculture. Furthermore, new data that emerge, for example showing that sediment is a much bigger issue than initially identified in the characterisation process, is being fed through the governance levels so that it can inform thinking and policy development. Interviewees noted that the NTIG, the NCMC and the WPAC are open and willing to engage with the evidence presented.

Good initial work has been done in this area with the development of the website catchments.ie, a collaboration between the DHLGH, the EPA and LAWPRO. This is an excellent source of data, information and updates on developments. The data presented is extensive and detailed. However, some interviewees did observe that the data available on catchments.ie is presented in a way that is not very accessible for the public and voluntary bodies. Further development, with more use of case studies and further thought on the accessible presentation of open data, is needed. As noted by O Cinnéide and Bullock (2020, p. 15):

> While the outreach work of the 13 CWOs [community water officers] is commendable and much appreciated by the public with whom they engage, the boundaries around public engagement are still limiting in the work of LAWPRO and its sister agencies – i.e. there is little input or visibility for the wider public into the main work program of the Catchment Teams. While the public and NGO groups are aware of the LAWPRO/ASSAP investment, there is a concern about limited transparency with respect to the wider aims of the WFD programme, e.g. criteria for selection of the PAA, progress on PAA measures, actions by farmers.

9 Periodic Review of the Framework Goals

In this final element of the experimental governance paradigm, "the goals, metrics, and decision-making procedures themselves are periodically revised by a widening circle of actors in response to the problems and possibilities revealed by the review process, and the cycle repeats" (Sabel and Zeitlin, 2012).

One way of examining how this review process works is through the lens of frame reflection. Schön and Rein (1994) argue that there is a need for reflection within policy practice, particularly when dealing with intractable challenges. In particular, they promote the concept of frame reflection. Their thesis is that real-life situations are often complex, vague, ambiguous and indeterminate. To make sense of such situations, people and organisations select certain features that help them create a story that explains the situation. The authors refer to this selection process as the process of "naming and framing".

Frame reflection involves stakeholder engagement to review and revise their frames of reference and, through this process, review the framework goals by "constructing a shared narrative that recognises multiple voices, teases out the implications of these value preferences, and seeks to resolve conflicts. This activity is partly analytical and partly discursive" (Head and Alford, 2015, p. 723). Examining the review of framework goals involves looking at not only the extent to which the goals and metrics themselves change and evolve, but also the extent to which stakeholders frames of reference are influenced through the process.

9.1 The Process of Reviewing Goals

There is good evidence from the governance structures that, when stakeholders come together and review their frames of reference, they take a new perspective on issues and develop a common narrative on some issues. At the same time, there is evidence of the difficulties in developing shared goals when there are conflicting policy objectives and of resistance to change.

Members of the NTIG, for example, mentioned that bringing together a range of participants from a variety of agencies provides the opportunity to road test measures and obtain different perspectives. This is beginning to pay off. The growing prominence of the issue of sediment as a significant factor in water quality, referred to in the previous chapter, is an example of how a frame of reference has evolved as realisation of the scale of the issue has grown.

The NTIG has developed a formal structure (a one-page template) that allows committee members to raise issues that are important to them and for these to be discussed and a common position agreed if possible. For example, Bord Iascaigh Mhara tabled an issue on the shellfish problem. The template identifies the courses of action that the NTIG is going to take, who needs to be involved and how reporting on progress should take place. Progress is then reported to the WPAC. The process has been found to be a good way to facilitate the NTIG to raise issues and work out a common understanding, and to move from being a channel solely for updates to one encouraging more substantive engagement with issues.

The working groups of the NTIG, composed of subsets of members, were also mentioned by interviewees as helpful in aiding people to review their actions and goals in a shared manner. For example, the natural water retention measures working group is, in the words of one interviewee, "very deliberately trying to bring the different sectors together, to promote green/natural measures for tackling water quality, but equally other issues like biodiversity and flood risk as well".

Similarly, in the Water Forum, the degree of consensus arrived at in a wide range of areas was remarked on positively by most interviewees, as noted in Chapter 6. Given the disparate and conflicting views on many water quality issues among the stakeholder groups involved, this was seen as a significant achievement. However, it was recognised that focusing on consensus could mean that the more contentious issues are not tackled rigorously.

The influence of the Water Forum on policy was an issue highlighted as a source of concern by most

members interviewed. Some said that they do not know if submissions from the Water Forum are having any influence. One interviewee expressed the view that the outputs of the Water Forum are going into a black hole, with no way of tracking progress. Most interviewees reported that government departments provide very little feedback other than acknowledging that a submission has been received. Examples of good practice that it was suggested could be implemented included, in the case of organisations asking for policy inputs from stakeholders, showing submissions on the organisation's website and mentioning in reports the submissions and decisions made in relation to them. Interviewees felt that it is important that state bodies publish the results of consultation and show that submissions have been considered. It was accepted that the outcome of submissions would not necessarily be agreement, but it was deemed important that organisations demonstrate that submissions from stakeholders have been considered.

More generally, the points raised previously indicate that the relationship between the Water Forum and the WPAC with regard to working together to help shape framework goals needs further attention. Interviewees in both groups agreed that the WPAC could forge better linkages with and make strategically better use of the Water Forum, for example to road test ideas, not necessarily to solve issues but to hear the views and voices of stakeholders.

At the local level, LAWPRO has been innovative in its way of working so as to generate consideration of goals within and across catchment areas. Its approach has involved teasing out issues, getting the views of stakeholders and being partly analytical and partly discursive in its engagement and deliberations.

Regarding the framework goals to be achieved, and the adaptation and development of those goals in the light of experience and changing circumstances, one significant issue to emerge from the interviews was the need for closer policy and practice linkages between the water quality, climate change and biodiversity agendas. At the policy level, this would require the next RBMP to be more explicit about the linkages and the need for coherence across these themes.

At the practice level, and particularly with regard to LAWPRO and local government, one interviewee summarised the issues when saying:

> I think there is a crossover between LAWPRO, the climate change regional offices and even, to an extent, the waste management structures. And all of those at some point cross over and have impacted on water quality and we need to do a bit more sharing across those regional pieces and more collaboration and I think there could be an argument at some point, particularly around the climate piece and the water quality piece, that the functions could be more closely aligned.

In a similar vein, the independent review of LAWPRO found:

> Building on the feedback during this review[,] there is merit in LAWPRO moving to strengthen/deepen its activities on biodiversity and climate change. LAWPRO is well-positioned, as an outreach arm of the local authorities, to build on the Water message and to take on roles in supporting such local initiatives. There are shared benefits, particularly around ecosystem services and nature-based solutions. However, this would need to be an incremental approach, as progress in enhancing water quality and community buy-in for Water remains the core LAWPRO mission. (O Cinnéide and Bullock, 2020, pp. 42–43)

The issue of alignment, and the best means of encouraging and facilitating this, is important and needs to be addressed in the next RBMP.

A similar alignment issue was raised by a couple of interviewees in relation to the different public awareness and engagement campaigns being undertaken by local authorities. This would, for example, avoid the possibility of having a session on climate one night and on water quality the next, with the risk of overloading the public.

Across all government tiers, with regard to reviewing the goals, and as noted previously, interviewees noted a tendency in committees for participants to focus on updating and briefings rather than on addressing challenging issues. As one member of a regional committee noted, making a serious point in a somewhat jocular tone, "Have we had a row? No. Do we need a row? Yes".

The frames of reference of the various stakeholders are also influenced by political developments at national and international levels. Nationally, the new coalition government formed in June 2020 was mentioned by interviewees as an influence shaping future goals. The programme for government contains proposals in favour of a Green New Deal, with an emphasis on sustainable planning and land use management, which will have significant implications for agriculture and forestry, among other sectors. Internationally, the new CAP and the European Green Deal coming into place will clearly have an impact on policies and practice.

One unplanned effect of a new government is the impact it can have on the distribution of functions between government departments and agencies, and the consequent impact on collaboration and co-ordination. The government that formed in June 2020 embarked on an extensive rearrangement of policy portfolios with associated departmental changes. Often, with the functions moving, the people and reporting relationships change with them. This can cause some disruption, at least temporarily.

10 Conclusions and Recommendations

Just as the research for this report was being completed, the EPA published its assessment of Ireland's environment for 2020 (EPA, 2020a) and its *Water Quality in 2019 – An Indicators Report* (EPA, 2020b); with regard to water, the overall assessment is rated as poor:

- Just over half of Irish surface waters are in a satisfactory condition.
- Nutrient concentrations in waters are too high and the trends are going in the wrong direction.
- Nitrate concentrations are now increasing in nearly half of our river and groundwater sites.
- Phosphate levels are increasing in a quarter of river sites.
- Concentrations of nitrate are highest in the south and south-east of the country, where the main source of nitrate is agriculture.

The EPA regards the outlook as mixed, and there remain significant challenges to achieving full compliance and meeting policy objectives. However, the EPA also found that, although water quality is a concern, there has been an overall improvement in river water quality in the priority areas highlighted in the RBMP. This provides a sobering, yet hopeful, context within which any assessment of governance arrangements for the RBMP must be set. This also highlights the scale of the challenges to be faced in the third-cycle RBMP 2022–2027.

The water governance arrangements put in place for the RBMP for Ireland 2018–2021 have been examined here through the lens of experimental governance. As the governance arrangements have been in place for only a relatively short period, in many ways they are still "bedding down" and in the process of development.

The three-tier governance structure has been well received across the different stakeholders and participants. The structure represents a significant innovation and improvement over the governance arrangements in place for the first-cycle RBMP. Capacity and capability-building have been positive features of the approach to implementing the RBMP. Initiatives such as the establishment of the Water Forum, the NTIG, LAWPRO and the Community

Water Fund are all examples of capacity-building. So too is the emphasis placed by the EPA on the further development of integrated catchment management.

Across the interviews carried out for this study, the emphasis from interviewees was on improving elements of the governance arrangements rather than suggesting the need for significant changes to be made. Areas in which adaptation or improvement is thought to be needed have been highlighted throughout the report, under the relevant sections.

10.1 Recommendations

With regard to the lessons learned to date to help ensure appropriate and effective governance arrangements for the third-cycle RBMP for Ireland 2022–2027, a number of recommendations are summarised here. To set the context for these recommendations, there are a number of macro-level trends and recurring challenges. These include:

- the ongoing decline in Irish water quality, as cited in EPA monitoring data (EPA, 2020b), which increases the urgency of designing and delivering effective measures;
- the policy challenges of integrating water policy and other policy arenas, especially agricultural policy, in the context of the reformed CAP framework;
- a greater need for transparency and input from community groups and non-state actors in the delivery at the local catchment level, to build on the innovative steps taken in the RBMP.

Recommendations, based on the findings from the research, are grouped under the chapter headings used in the report.

10.1.1 Organisational structures

- In general, the three-tier governance structure put in place to support the implementation of the RBMP for Ireland 2018–2021 is working well, is appropriate and should be continued. Rather than radical changes to the governance structure

for the next cycle of the RBMP, it is more a case of adapting and improving the operation of the existing arrangements.

- The various committees established across the three tiers of governance need to revisit their terms of reference to clarify their roles and to shift the balance from sharing information and providing updates to having more discussions and debates on prioritisation, resourcing and policy coherence. One possibility here is the use of more thematic meetings, with part of the meeting dedicated to that theme for discussion and the other part to general updates and briefings. There is also scope for improving linkages between the committees and across the tiers.
- A full-time project management secretariat to support the governance arrangements should be considered.
- The linkages between the WPAC and the Water Forum should be further developed.
- The membership of the Water Forum should be reviewed and consideration should be given to additional representation of selected stakeholders, particularly in the education sphere.
- The precise role and functions of the NCMC vis-à-vis the WPAC need further review and clarification.
- Consideration should be given to having a representative from Irish Water on the NCMC.
- More public transparency of the operation of regional committees is needed. Similarly, the linkages between the regional committees and the other tiers of governance, and the flows of information between them, is somewhat opaque and could be improved.
- The engagement of individual local authorities varies and there is a need for more consistency and capacity-building here. There is also a need for local authorities to take a more co-ordinated approach to the various ways in which they interact with local communities.
- There is a need for greater clarity and shared understanding with regard to the roles of LAWPRO and local authorities.

10.1.2 Human resources and capacity

- Capacity and capability-building have been a positive feature of the approach to implementing the RBMP, particularly with regard to catchment science and the recruitment and development of LAWPRO and ASSAP staff. The blend of technical skills and soft skills (such as influencing) is important in facilitating co-operation and collaboration across levels and among different stakeholder groups. There is a need for a range of skills to be further developed, including expertise in knowledge transfer and behavioural change.
- Staff retention issues at LAWPRO on account of employment contracts and uncertainty about staff's future need to be addressed.
- Attention needs to be given across the system to further building the capacity to work with groups such as farmers and local communities to change behaviour and attitudes, particularly building capacity beyond LAWPRO and ASSAP advisers to the other Teagasc and private agricultural advisers. Continuous professional development has an important role to play here.
- Further attention needs to be given to building capacity in the design of effective ways to disseminate information and evidence more widely to stakeholders and the public, to make the best use of the extensive range of data collected.

10.1.3 Institutional capacity

- The institutional capacity built up in the context of the RBMP facilitates the identification and addressing of regulation gaps. There has been a growing recognition and development of practice with regard to the use of informal institutions, such as the building of a culture supporting required behaviours, based on trust and co-operation. This approach should be further developed.
- The balance between formal and informal institutional capacity needs constant scrutiny. Both are necessary, and the strengthening of informal norms and supportive cultures should not be at the expense of the need for using formal institutions to address the minority that do not respond to informal norms. Where and when formal enforcement should "kick in" is an issue that needs further discussion and engagement among the stakeholders and within the governance arrangements for the RBMP.
- The carrot and the stick are both needed, and so too are educational and information initiatives. Education and peer-to-peer learning, to inform cultural and societal expectations and attitudes, has an important role to play.

10.1.4   *Budgetary and financial systems*

- The outcome of CAP deliberations on future funding in the agriculture sector will have a major impact on the next RBMP, and the RBMP governance structures need to help ensure a focus on environmental sustainability here, in terms of both policy development and subsequent implementation.
- Payment for results funding is a feature worth further developing and adopting across the RBMP as an element in the overall resourcing of the plan.
- The success of involving private funding with regard to the creation and development of the ASSAP should be assessed with a view to determining if this model of public–private funding has potential for wider applicability.
- The Community Water Development Fund should be assessed with a view to determining its impact and the benefits and costs associated with further development of the fund.

10.1.5   *Setting of framework goals*

- The Water Forum has played an important role in helping generate consensus regarding desired goals for the RBMP across a wider range of stakeholders. Its linkages through to the policy process, and with the WPAC in particular, need to be developed to facilitate further progress here.
- Disparate policy objectives of differing stakeholder groups, combined with the absence of primary legislation to implement the WFD, have hindered progress towards policy coherence with regard to achieving the initial framework goals set out in the WFD. The broad policy framework within which the RBMP goals are set needs to be examined so that contradictory goals can be identified and solutions found where possible.

10.1.6   *Discretion to local levels of governance regarding implementation*

- There is evidence of collaboration and local initiative at tiers 2 and 3 of the governance structures, leading to improved practices. The need for local, tailored solutions suggests that centrally designed initiatives need to take this into account and not overly constrain the flexibility of response at a local level.

- Attention needs to be given by the WPAC, the NCMC and the NTIG to learning the lessons from local initiatives and projects with a view to determining the potential for the scaling up of lessons learned and the spread of effective practices. This work needs to be supported by developing a better evidence base for local initiatives and building in assessment and measurement criteria from the start, alongside a consideration of how best to ensure knowledge transfer.
- There is a particular need to look to mainstreaming the knowledge and experience gained by LAWPRO and ASSAP across local authorities and Teagasc.

10.1.7   *Regular reporting and assessment*

- The emphasis on catchment science in both the EPA and LAWPRO is contributing to new data emerging that are providing more detailed evidence to inform policy and implementation. This emphasis on catchment science should be further developed.
- Relying on the EPA as the body with responsibility for monitoring implementation of the RBMP should be reviewed. As a whole-of-government plan, the RBMP requires monitoring at the central government level, with the WPAC and the NCMC having stronger roles in this regard. The EPA and NTIG are the main providers of evidence.
- Monitoring of final outcomes, in terms of water quality status, and of activity levels is well developed and should continue to be further developed.
- Some data gaps exist. In particular, there is a gap in the measurement of intermediate outcomes that should be filled. This would make the links between activities and outcomes more explicit, demonstrating short- and medium-term achievements and suggesting the need for mid-course corrections. There should be a stronger role for the NCMC and the NTIG in determining how to fill the data gaps and disseminate the information.
- There is a specific need for timely and readily available data on water quality and progress with initiatives to improve water quality. Such data should be accessible by community groups and the public.

10.1.8 *Periodic review of the framework goals*

- The governance structures are providing a basis for stakeholders to come together and review their frames of reference, taking a new perspective on issues and developing a common narrative on some issues. This should be continued.
- The template developed by the NTIG for issues to be raised provides a structured means of engagement with issues that may lead to a review of goals and actions and that could be considered for adaption and adoption elsewhere.
- Subgroups of different elements of the governance structure, such as working groups and subcommittees that operate in the NTIG and the Water Forum, provide a helpful means of engaging the relevant stakeholders to agree positions on issues before bringing them to the full group and through the different tiers as necessary. The use of such subgroups should be encouraged and further developed.
- The WPAC should forge better linkages with and make better use strategically of the Water Forum as a source of stakeholder intelligence.
- There is a need for closer policy and practice linkages between the water quality, climate change and biodiversity agendas. At the policy level, this would involve the next cycle of the RBMP being more explicit about the linkages and the need for coherence across these themes.

10.2 Next Steps in the Research

The research findings presented here summarise the work associated with the first year of a 2-year research programme. The main focus at this stage of the research, as set out in this report, combined with the findings from Boyle *et al*. (2021), O Cinnéide *et al*. (2021) and O'Riordan *et al*. (2021), has been on learning lessons from current experience with regard to the operation of water governance structures and processes, to inform the development of the third-cycle RBMP 2022–2027.

The next phase of the research will focus on drawing out wider learning from the study of water governance, which is of relevance to the development of policy and practice in other areas of public reform, for example climate action and public service reform. The emphasis will be on examining the relevance and usefulness of the experimental governance model as a means of helping address the challenges presented by wicked issues of public policy.

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Abbreviations

ACP	Agricultural Catchments Programme
ASSAP	Agricultural Sustainability Support and Advisory Programme
CAP	Common Agricultural Policy
CMMA	County and City Management Association
CSMU	Catchment Science and Management Unit
DAFM	Department of Agriculture, Food and the Marine
DHLGH	Department of Housing, Local Government and Heritage
EPA	Environmental Protection Agency
EU	European Union
LAWPRO	Local Authority Waters Programme
NCMC	National Coordination and Management Committee
NTIG	National Technical Implementation Group
OECD	Organisation for Economic Co-operation and Development
PAA	Priority Areas for Action
POM	Programme of measures
RBMP	River Basin Management Plan
WFD	Water Framework Directive
WPAC	Water Policy Advisory Committee

Appendix 1   List of Interviewed Organisations

Cork County Council
Cork Environmental Forum
DAFM
Department of the Environment, Climate and Communications (DECC)
DHLGH
Dublin City Council
Dundalk Institute of Technology
EPA
Galway City Council
Geological Survey Ireland (GSI)
Health Service Executive (HSE)
Inishowen Rivers Trust
Inland Fisheries Ireland
Irish Creamery Milk Suppliers Association (ICMSA)
Irish Farmers' Association (IFA)
Irish Rural Link
Irish Underwater Council
Irish Water
Kerry County Council
Kilkenny County Council
LAWPRO
Longford County Council
National Federation of Group Water Schemes (NFGWS)
Office of Public Works (OPW)
River Moy Trust
Sustainable Water Network (SWAN)
Teagasc
Waterford City and County Council
Zero Waste Alliance

AN GHNÍOMHAIREACHT UM CHAOMHNÚ COMHSHAOIL

Tá an Ghníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaol a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialú: *Déanaimid córais éifeachtacha rialaithe agus comhlíonta comhshaoil a chur i bhfeidhm chun torthaí maithe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.*

Eolas: *Soláthraímid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírithe agus tráthúil chun bonn eolais a chur faoin gcinnteoireacht ar gach leibhéal.*

Tacaíocht: *Bímid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaol atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaol inbhuanaithe.*

Ár bhFreagrachtaí

Ceadúnú

Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaol:

- saoráidí dramhaíola *(m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistrithe dramhaíola)*;
- gníomhaíochtaí tionsclaíocha ar scála mór *(m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta)*;
- an diantalmhaíocht *(m.sh. muca, éanlaith)*;
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe *(OGM)*;
- foinsí radaíochta ianúcháin *(m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíocha)*;
- áiseanna móra stórála peitril;
- scardadh dramhuisce;
- gníomhaíochtaí dumpála ar farraige.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdaráis áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhíriú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídíonn an ciseal ózóin.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaol.

Bainistíocht Uisce

- Monatóireacht agus tuairisciú a dhéanamh ar cháilíocht aibhneacha, lochanna, uiscí idirchriosacha agus cósta na hÉireann, agus screamhuiscí; leibhéil uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairisciú a dhéanamh ar Cháilíocht an Uisce Snámha.

Monatóireacht, Anailís agus Tuairisciú ar an gComhshaol

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairisciú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil *(m.sh. tuairisciú tréimhsiúil ar staid Chomhshaol na hÉireann agus Tuarascálacha ar Tháscairí)*.

Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gáis cheaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhair breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn.

Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainaithint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, an uisce agus na hinbhuanaitheachta.

Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaol in Éirinn *(m.sh. mórphleananna forbartha)*.

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíocht.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d'earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaol ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnteoireacht i ndáil leis an gcomhshaol *(m.sh. Timpeall an Tí, léarscáileanna radóin)*.
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chosc agus a bhainistiú.

Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht chomhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlaigh a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an ghníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inmharthanacht Comhshaoil
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Fianaise is Measúnú
- Oifig um Chosaint Radaíochta agus Monatóireachta Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltaí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair imní agus le comhairle a chur ar an mBord.

epaResearch

This report examines lessons learned from the water governance arrangements put in place for the River Basin Management Plan (RBMP) 2018–2021 for Ireland through the lens of experimental governance. Experimental governance is a phrase coined by academics to describe a system of governance that is open to change based on the practical lessons learned through implementation. It is particularly suited to help address so-called wicked problems, which comprise challenges such as climate change and water management. A particular emphasis is put on informing policy and practice with regard to ensuring that appropriate and effective governance arrangements are made in Ireland for the third-cycle RBMP 2022–2027.

The governance system examined is based on a three-tier structure: (1) a Water Policy Advisory Committee and the Water Forum (An Fóram Uisce) advising the Minister for Housing, Local Government and Heritage; (2) a layer of technical support provided by the National Coordination and Management Committee, the Environmental Protection Agency and the National Technical Implementation Group; and (3) local authorities, supported by regional committees and a local government shared service, the Local Authority Waters Programme (LAWPRO), involved in implementation.

The study finds that the three-tier governance structure put in place to support the implementation of the RBMP is appropriate and should be continued. Rather than radical changes to the governance structure for the next RBMP, it is more a case of adapting and improving the operation of the existing arrangements. The three-tier structure represents a significant innovation and improvement over the governance arrangements in place for the first-cycle RBMP. Recommendations for further improvements are made in the report.

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