



vibrant communities | catchment assessment | healthy waters



Local Authority
Waters Programme
Annual Report 2023



Cover: Photo of Derryclare Lough, Co. Galway
Above: Photo of Lough Talt, Co. Sligo

The Local Authority Waters Programme (LAWPRO)

LAWPRO is a local government national shared service, working on behalf of all 31 Local Authorities in Ireland, funded by the Department of Housing, Local Government and Heritage (DHLGH). Kilkenny and Tipperary County Councils jointly manage the programme.

Water Framework Directive (WFD) objectives are implemented through River Basin Management Plans (RBMP) and Programmes of Measures (POMs), which are reviewed and adopted every 6 years. The implementing regulations assigned responsibility to local authorities for regional coordination, public participation, and support to the EPA and Minister in the development and implementation of RBMPs and POMs. These responsibilities are in addition to longstanding water protection responsibilities delivered by local authorities.

LAWPRO operates as a national WFD office enabling these obligations to be delivered on behalf of all local authorities, while providing support in catchment assessment, community engagement and community development.

LAWPRO's Mission

To engage and support communities, and work with local authorities, public bodies and stakeholders to protect and care for the natural waters and catchments of Ireland.

LAWPRO's Vision

Ireland's water catchments, including our rivers, lakes, wetlands, estuaries, ground, and coastal waters, are healthy, vibrant, and biodiverse places cared for and protected by public bodies, water users, and local communities.

The Local Authority Waters Programme
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DIRECTOR OF SERVICES STATEMENT

I am delighted to introduce you to our Annual Report for 2023. This was a year of growth for the Local Authority Waters Programme (LAWPRO) as our core staff numbers increased and we had the addition of our new Farming for Water European Innovation Partnership (EIP) Project Team. While we reflect on changes over the years and prepare for the third cycle River Basin Management Plan (RBMP), we continue to strive to have water quality, community engagement and collaboration at the heart of everything we do.

LAWPRO's principal mission is to engage and support communities, provide scientific basis for implementation of measures, co-ordinate and collaborate with local authorities, public bodies and stakeholders to protect and care for the natural waters and catchments of Ireland.



KEY AREAS THIS YEAR

- LAWPRO received sanction for an additional 15 staff across the Water Framework Directive Team.
- LAWPRO was successful in our bid for the Farming for Water EIP and received sanction for 19 staff in July 2023.

While there is significant work and collaboration taking place as part of implementation of the RBMP, we are still unfortunately facing a significant challenge to turn around the decline in our water quality in Ireland.

The publication of the EPA 'Water Quality in 2023: An Indicators Reports' shows improvements in some rivers and lakes in Ireland. However these improvements are in contrast with visible declines elsewhere in the country. The recurring issue is nutrient pollution from phosphorus and nitrogen, deriving from agriculture and wastewater.

Our rivers and transitional waters are suffering from continued and persistent declines. Targeted action will continue to be key to confronting water quality issues. Through collaboration and targeted action improvements in water quality can be achieved.

Looking ahead we must take every opportunity to further develop our collaborative work and integrate our work programmes with the Climate Action Regional Offices and the new Climate Action Teams within Local Authorities. We will support the development of Local Authority Climate Action Plans. We also welcome enhanced resources for biodiversity officers and look forward to working closely with them.

In particular, we welcome and support the review of Local Authority function delivery in the natural waters area, and the responsibilities under each function for which appropriate resources need to be assigned. The development of a Natural Waters Business Case by the County and City Management Association (CCMA) will seek to strengthen resources across several functions including agricultural inspections, bathing waters, drinking waters, and catchment assessment amongst other areas, to enable the better attainment of water quality outcomes. This may also include additional functions and resourcing for LAWPRO.

Finally, I would like to thank the staff in LAWPRO for their continued dedication and enthusiasm for the work they do to help address water quality in Ireland.

Anthony Coleman

Anthony Coleman

Director of Services, LAWPRO and Tipperary County Council

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1 About LAWPRO



Owentocker River, Drumnacross,
Kilraine, Co. Donegal

The strategic role of the Local Authority National WFD Office is as follows:

To promote knowledge sharing and coordination in implementing RBMPs and POMs by local authorities, public authorities, sectoral interests and community groups.



To foster linkages with industry and agricultural sectors.



To coordinate/undertake statutorily required public consultation



in development of the RBMPs and POMs on behalf of the Minister and a public awareness campaign in water resources management.

To mobilise and support engagement of voluntary and community groups in protecting our natural waters.



To seek consistency of RBMP implementation across agencies.



To develop linkages



with local sectoral representative organisations such as Chamber(s) of Commerce, county level farm organisations committees, angling groups, tidy towns.

To assist the Minister and the EPA and work collaboratively with local authorities in the development of RBMPs and POMs.



Photo of Corstown Lake, Co Meath

The LAWPRO WFD staff complement in 2023 was 60 plus 15 newly sanctioned posts in May 2023. LAWPRO in partnership with Teagasc and Dairy Industry Ireland was successful in our bid for the Farming for Water EIP and received sanction for 19 additional staff in July 2023. Recruitment process, commenced for the newly sanctioned posts in 2023 but not all posts were filled during the year.

LAWPRO's specialist staff are based in multiple local authority offices across five regions – Border, Midlands and East, South East, South West and West. We coordinate national, regional and local efforts to achieve good or high-status water quality in our rivers, lakes, transitional and coastal waters, and groundwaters and their associated protected areas, as required by the WFD.

LAWPRO works to identify the issues affecting water quality in multiple water bodies across the country. Where issues are identified, we collaborate with the relevant local authority, public body, and water stakeholder to find a solution. Where an issue relates to agriculture, we work with the Agricultural Sustainability Support and Advisory Programme (ASSAP) so that targeted best practice agricultural advice may be provided to farmers. Community engagement is the cornerstone of the approach to combine local and expert knowledge for a better understanding of what's happening in a local catchment and waterbody. Good water quality benefits everybody, it is essential for nature to flourish and our economy to thrive.

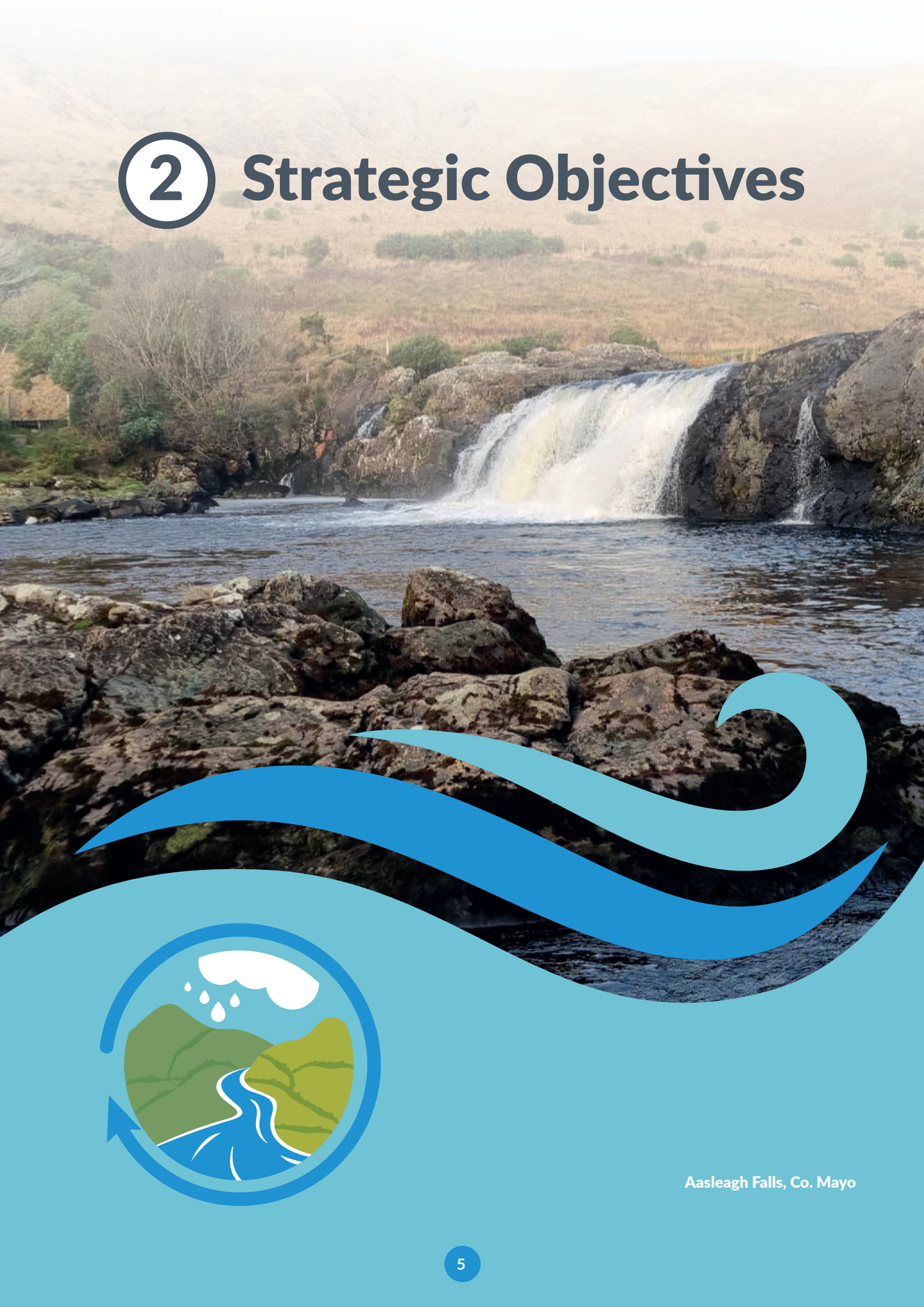
Further information about our Programme can be found online at:

[Local Authority Waters Programme - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie)



Glen River, Carrick, Co. Donegal

② Strategic Objectives



Aasleagh Falls, Co. Mayo

Water management in Ireland continues to evolve throughout the implementation of the River Basin Management Plan (RBMP). In 2023, work continued to build collaboration, closer cooperation and working relationships between local authorities, public bodies, stakeholders, and communities.

LAWPRO's Mission and Vision as a programme, is firmly aligned with national, regional and local efforts to achieve positive outcomes for water for the benefit of all.

LAWPRO has several roles and responsibilities assigned to it as a programme, with specific actions to be delivered under the RBMP. The programme's role and responsibilities have increased since 2016, and this has informed the evolution of our strategic planning, and annual work programme planning. An overview of our core functions is provided in table 1 below. Our work programme is discussed further in section 4.

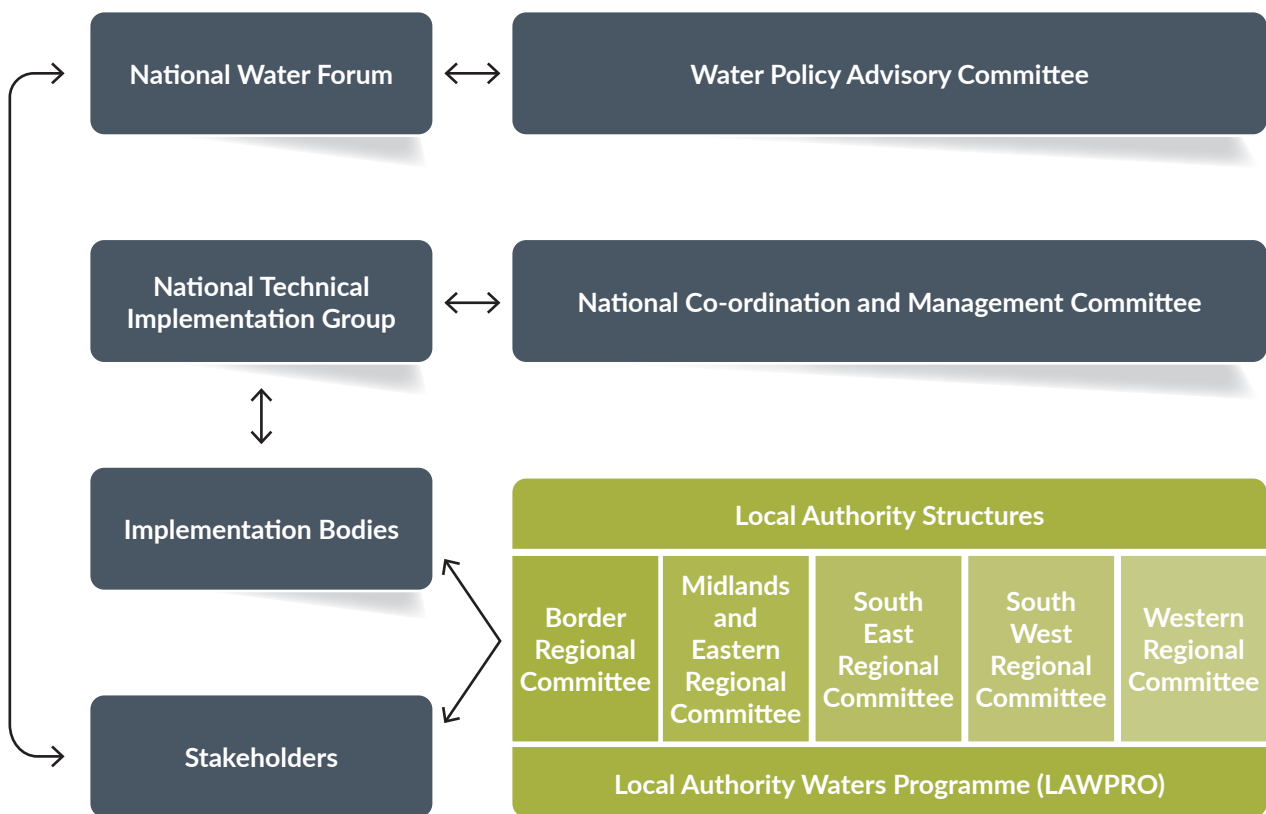


Figure 1: WFD implementation structures and their interactions

LAWPRO's work programme in 2023 concentrated on our six core areas of:

- Governance and Leadership
- Coordination
- Community Participation
- Catchment Science
- Innovation
- Communications and Engagement

Two new emerging areas were identified in 2023, the promotion of nature-based solutions and the Farming for Water EIP Project.



Doonierin shoreline of Drumcliffe Estuary, Co. Sligo

Objectives	Rationale	
<p>Governance and Leadership</p> <p>Drivers of effective governance for WFD implementation in Ireland</p>	<p>Support the DHLGH and EPA in meeting national obligations for better water quality and implementation of the WFD.</p> <p>Governance of the LAWPRO programme.</p>	
<p>Coordination</p> <p>Supporting governance structures for water quality management and promoting cooperation and knowledge exchange between actors</p>	<p>Local Authorities, State agencies, and public bodies working together for better water quality.</p> <p>Delivering multiple benefits for water, biodiversity, climate action, and local communities.</p>	
<p>Community Participation</p> <p>Supporting communities and stakeholders to participate in caring for local waterbodies</p>	<p>Bottom-up approach, involving communities and water users in conversations and actions to achieve water quality goals.</p> <p>Better understanding of local issues and concerns.</p>	
<p>Catchment Science</p> <p>Catchment Management and Science in Priority Areas for Action</p>	<p>Leading the way with innovative catchment science.</p> <p>Identification of issues affecting water quality.</p> <p>Guidance for LA staff, relevant agencies, and stakeholders to find solutions to problems identified.</p>	
<p>Innovation</p> <p>Continuous learning from experience, evolving, and changing our approach, as necessary</p>	<p>Evolving catchment science and community engagement and consultation. Allowing in-house expertise to develop.</p>	
<p>Communication and Engagement</p>	<p>Delivering engaging and accessible public information on water policy and science.</p> <p>Advocating for water quality/ RBMP objectives at local and regional levels, nationwide.</p> <p>Increasing water literacy to build capacity for actions within communities.</p> <p>Promoting LAWPRO's mission and vision.</p>	

Table 1 LAWPRO's Strategic Approach and Programme Objectives

Methods	Outcomes
<p>LAWPRO as a conduit for information flow within the River Basin Management Plan Governance Structure.</p> <p>Participation in relevant regional and national meetings and committees.</p> <p>Leading on the identification of implementation issues and development of guidance.</p> <p>Effective internal senior & operational management committees.</p>	<p>Linking bottom-up concerns to top-down governance.</p> <p>Giving communities a voice in high-level decision making.</p> <p>Ongoing management and development of the programme.</p>
<p>Regional Management and Operational Committees.</p> <p>Collaborations and knowledge sharing.</p> <p>Supporting local implementation of measures and actions for water quality.</p>	<p>Greater knowledge transfer.</p> <p>Shared vision and goals.</p> <p>Common purpose to achieve goals.</p> <p>Coordinated approach to implementation of RBMP.</p>
<p>Local engagements, meetings, and events.</p> <p>Consultations and two-way dialogue.</p> <p>Listening to local communities.</p> <p>Promoting the value of good water quality.</p> <p>Administration and oversight of the Community Water Development Fund.</p>	<p>Community-led water related initiatives and projects.</p> <p>Giving communities a voice in water quality matters.</p> <p>Community resilience and capacity to take local action.</p>
<p>Desk studies and Local Catchment Assessments.</p> <p>Community Information Meetings.</p> <p>Referrals and tracking of implementation.</p> <p>Identification of gaps in POMs through field assessment.</p> <p>Development of catchment science methodologies.</p>	<p>Detailed assessment in PAAs.</p> <p>Stakeholder and community engagement.</p> <p>Wider understanding of the issues and solutions at multiple scales.</p>
<p>Building on experiences to date.</p> <p>Networking to share knowledge.</p> <p>Harnessing new ideas and developments.</p>	<p>LAWPRO as leaders in catchment science and community engagement in the LA sector. Knowledge transfer across LA sector.</p>
<p>Clear and meaningful messaging grounded in scientific evidence.</p> <p>Local engagements and collaborative working with communities.</p> <p>Collaboration and cooperation with partner organisations and stakeholders.</p> <p>LAWPRO's mission and values delivered through management and staff.</p> <p>Optimising use of traditional and new media and facilitation techniques to reach and engage with target audiences.</p>	<p>Increased understanding of water quality issues, and challenges.</p> <p>Clear understanding of LAWPRO values, purpose, and goals.</p> <p>Continual growth in public participation and support for RBMP development and implementation.</p> <p>Effective collaboration in pursuit of RBMP objectives.</p> <p>A network of community groups actively participating in caring for local waterbodies.</p>

③ LAWPRO Structure and Resources

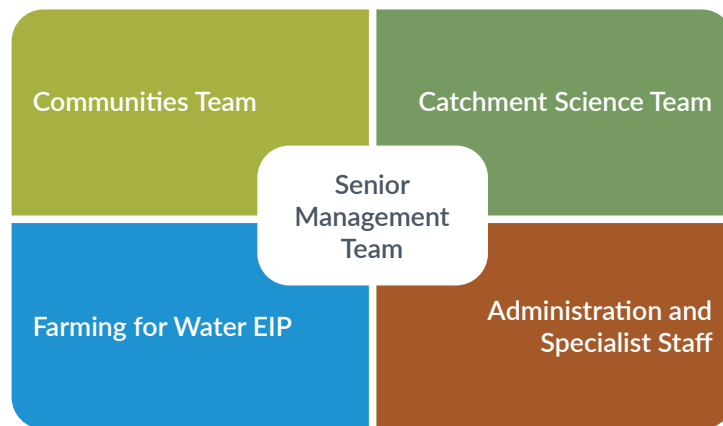


Photo of Connemara

LAWPRO has grown from 18 staff in 2016, with the establishment of the Local Authority Waters & Communities Office (LAWCO), to a current resource of 60 plus staff. Additional sanctions in 2023 after the merger of LAWCO and the Local Authorities Water Support and Advisory Team (LAWSAT) in 2019 has accounted for this growth.

The senior management team comprises of a Director of Service, five Regional Coordinators and a Catchments Team Manager. This team is responsible for strategic direction and overall programme delivery.

Programme administration is a central function in support of the Senior Management Team and effective Programme delivery, and is serviced from our Head Office in Ballingarrane, Clonmel, Co. Tipperary.



Preparatory work was undertaken in 2023 to set up a LAWPRO Oversight Committee. The committee will provide strategic and policy direction and prioritise resources to support delivery of LAWPRO's strategy and work programme.

a. Senior Management

LAWPRO's Senior Management Team consists of a Director of Service, four Regional Coordinators and the Farming for Water EIP Project Lead.

Name	Role
Anthony Coleman	Director of Service
Jimmy McVeigh	Regional Co-ordinator- Border Region
Margaret Keegan	Regional Co-ordinator – Midlands and Eastern Region & Head Office Operations Manager
Bernadette White	Regional Co-ordinator – Border and West Regions
Fran Igoe	Regional Co-ordinator – South East Region and interim co-ordinator South West Region
Mairead Whitty	Farming for Water EIP Project Lead
Vacancy	Regional Co-ordinator – South West Region

Table 2: Senior Management Team

The Regional Co-ordinators have specific sectoral expertise and coordinate and facilitate multi-agency collaboration at regional and national level. The Head Office Operations Manager oversees and directs the work of the LAWPRO head office team, which provides financial operations support, communications and marketing services, community funding services, HR, Health & Safety, and information technology support. The Catchments Team Manager oversees the work of the Catchment Assessment Team to ensure that work programmes in the Priority Areas for Action (PAA) are delivered across the Country.

b. Head Office

LAWPRO Head Office operations provide the corporate services necessary to enable efficient and effective support to the wider programme so that the strategic objectives, and annual work programme can be achieved.

The programme is 100% funded by DHLGH through a Memorandum of Funding Agreement. This agreement allows for recoupment on certified expenditure. LAWPRO's budget in 2023 was €9,157,875.

The specialist staff based in Ballingarrane, Clonmel, Co. Tipperary have responsibilities in the following areas:

Finance – The programme costs are recouped monthly. All purchasing is monitored to ensure compliance with public procurement practices. These functions are managed by an office administration team, comprising of an administrative officer, senior staff officer, an assistant staff officer and three clerical officers.

Information Technology – The IT Administrative Officer provides continuous technical support for all the staff of LAWPRO and An Fóram Uisce. In 2023, technical support was also provided to the CCMA Review of Local Authority Natural Water Functions and Resources Project Team. We also provided advice and support to the Waters of Life Integrated Project, led by the DHLGH. The IT Administrative Officer resigned in Oct 2023, and as an interim solution LAWPRO engaged the services of the company ERGO in November 2023 to provide IT support services.

Communications and Marketing – Communications are central to LAWPRO achieving its goals and objectives. Key to this is ensuring relevant and meaningful information on science, policy, and engagement activities reaches our target audiences in the public, private, and community & voluntary sectors. In this way, we can continually raise awareness of the role of LAWPRO and the collaborative efforts with public bodies, stakeholders, and local communities towards achieving the objectives of the WFD and RBMP. LAWPRO's greatest communication asset is its nationwide network of staff, who are committed advocates for better water quality and delivering messaging, grounded in science and policy, through national, regional, and local structures and fora. At the end of 2023 LAWPRO recruited a new Communications and Engagement Lead.

Community Funding – LAWPRO helps communities access funding to deliver local water projects and initiatives. Furthermore, communities build capacity and become more involved in the care of local water bodies. A specialist Funding Lead and our team of Community Water Officers offer advice to local authorities, public bodies, and community groups on available funding streams.

The Community Water Development Fund (CWDF) was first introduced in 2018, funded by the DHLGH and administered by LAWPRO, and represents a commitment to strengthen the Local Government role in public engagement and participation in water management. The CWDF aims to grant aid projects that will bring about an increased level of knowledge and awareness of water bodies and their water quality, increased engagement with our local waters, and projects that support the protection of water bodies, an increased understanding of how they function or restoration

requirements. It aims to build community capacity in water related challenges and help to support the work of a wide variety of groups across the country who have an interest in water.

Environmental Health and Safety Management System – 2023 saw the continued development of the Environmental Health and Safety (EHS) system. The addition of new staff to LAWPRO and the establishment of the Farming for Water EIP team with a new office in Tipperary town, took time and planning in the last quarter of the year and contributed to increased responsibilities. Sanction was received in 2023 for a full time Executive Scientist to replace the part-time Assistant Scientist role.

The EHS system passed its surveillance audit to maintain its ISO 45001 and ISO 14001 certification. The system was also subjected to an internal audit process with non-conformances followed up and closed out. Checks in the form of safety inspections were carried out throughout the year, these were to ensure that current policies and protocols were being implemented.

A longer than expected recruitment process has meant that some training scheduled for 2023 had to be moved to 2024. However, training such as Managing Mental Health in the Workplace for Managers was delivered to the management team. The use of an e-learning platform was also examined, and potential options are being considered for its development and roll out.

Reminders were also issued to staff in relation to biosecurity and cray fish plague awareness.

Work on the expansion of the scope of the EHS system to include the Waters of Life staff also commenced in 2023, this work will continue into 2024.

c. Catchments Team

LAWPRO has a team of five Catchment Managers at Senior Executive Scientist grade, and 30 Catchment Scientists at Assistant Scientist grade. The Catchments Team scientists cover a range of disciplines, including environmental science, agricultural science, aquatic ecology, hydrogeology, and hydrology.

Table 3: *Catchment Managers*

Name	Role
Gary O'Connell	Border Region
Eoin McAleer	Midlands and East Region
Ruth Hennessy	South East Region
Niamh Rogan	South West Region
Cormac Mc Conigley	West Region

The Catchments Team carries out scientific assessments or Local Catchment Assessments, in Priority Areas for Action (PAAs) across the country. The PAAs were selected because the waterbodies in these areas were 'At Risk' of not meeting their water quality objectives under the WFD. This targeted approach aims to restore water quality in these 'At Risk' waterbodies, thereby helping to meet national objectives for compliance with the WFD.

Local Catchment Assessments use chemical, biological and environmental information gathered by the Catchments Team or others to figure out what is causing impacts on waterbodies. This very often identifies highly complex issues affecting water quality across a range of sectors. LAWPRO then issues referrals on the problems identified and evidence collated, to the relevant implementing bodies, such as the Local Authority, EPA, Forest Service and Agricultural Sustainability Support and Advisory Programme (ASSAP), where related to agriculture.

The catchment assessment team also explore strategic approaches to ensure that decisions relating to the implementation of measures are scientifically based and taken as quickly as possible.

More information on our catchment assessment work can be found at [Catchment Information - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie).

Progress updates, case study presentations, updates on referrals, progress reports from implementing bodies and ASSAP, collaborative projects with others, are provided to the five Regional Operational Committees and discussed at the associated Regional Water & Environment Management Committees. This promotes collaboration between the respective Local Authorities, WFD implementing public bodies and other stakeholders.

Where potential solutions are not readily available to allow measures to be put in place by the implementation body or landowner, the WFD three-tiered governance structures are utilised. This structure progresses technical or scientific issues to the National Technical Implementation Group (NTIG) for further consideration. From there, matters can be escalated to the Water Policy Advisory Committee (WPAC) to help inform revisions to national policy and legislation where identified, based on science and evidence.

The Catchment Assessment Team, however, is one cog in the bigger wheel of ongoing efforts to protect and restore good water quality in Ireland, through its contribution of detailed water body characterisation (scientific evidence to inform measures implementation). The success of this collaborative approach is dependent on the continued efforts of Local Authorities and various other national and regional agencies, and sectoral stakeholders.



d. Communities Team

A core aim of LAWPRO is to engage communities in caring for local water bodies through active participation and stewardship of local streams, rivers, lakes, and coastal areas. To achieve this, we work with a broad range of community groups, including Tidy Towns, Heritage Groups, Catchment Associations, Rivers Trusts, and new groups wishing to participate in actions for water quality.

LAWPRO enables local communities to take action for water quality by supporting capacity building in existing community groups and assisting new groups to grow.

LAWPRO has a team of 15 Community Water Officers (two new posts in 2023) and three Senior Community Waters Officers (new posts in 2023), who operate at a local level across the country. Community Water Officers focus on community engagement to raise awareness of water quality issues and activities, both at water body and wider catchment scales in all areas.

Community Water Officers maintain regular and ongoing engagement with local communities, providing information and education on water quality issues, policy and science. This approach promotes trust and fosters participation and active involvement in water matters at a local level.

The Communities Team is also involved in designing and delivering bespoke training courses and citizen science initiatives, which fosters linkages between public bodies, funding providers and local communities.



Examining a kick sample at a Heritage Week event

Our Communities Team leads on the delivery of several key elements of LAWPRO's work programme, including:

- The Community Water Development Fund, which supports community groups to enhance the quality of local streams, rivers, lakes and coastal areas, or raise awareness/water literacy about local waters.
- We partner with the Heritage Council for National Heritage Week with an emphasis on Water Heritage Day to promote an appreciation of water features as part of our natural heritage. We encourage and provide financial support to local community groups to run events during heritage week, linked to the annual theme for the week and linked to water. We also sponsor a Water Heritage Day Award.
- We encourage communities and stakeholders to integrate nature-based solutions into the urban and rural environment to improve surface water management from water quality, flood risk, biodiversity and climate perspectives.
- Citizen science enables communities to participate in the collection of water quality samples and assist in monitoring. This can complement formal agency monitoring programmes and provide additional data to tell the story of water in local communities. Data collected by citizen scientists can be accessed at: [Citizen Science - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie)

e. Community Participation and Catchment Science



CWO Cathal Flood engaging with some members of the public

The infographics opposite provide an overview of metrics across various elements of LAWPRO's work in 2023. While these do not cover the full extent of the programme, they present an overview of achievements and core activities at a glance. Additional detail is provided for selected highlights in section 4 below.



2023 Communities Team Activities



Figure 3 2023 Communities Team Activities

2023 Catchment Assessment Team Activities

Governance, Coordination & Strategic Partnerships

Regional Management Committees x 5
 Regional Operational Committees x 5
 Local Authority Liaison Groups
 National Technical Implementation Groups
 Blue Dot Steering Group
 National Agricultural Inspection Programme Working Group
 Agricultural Water Quality Working Group



Innovation & Evolution of Methodologies via LAWPRO Working Groups



Ecology
 Lakes
 Sediment &
 Hydromorphology
 Blue Dot
 Agriculture
 Chemistry
 Data & GIS

Local Catchment Assessment*



Santry River Restoration Project (LAWPRO/Dublin City Council/Fingal County Council)
 Brosna PFOA Project (LAWPRO/Westmeath County Council)
 Red Dot Local Catchment Assessment (LAWPRO/Offaly County Council)
 Local Catchment Assessment Demonstration Catchment Reports (5) (Waters of LIFE IP)

Capacity Building & Knowledge Sharing

Delivery of Catchment Science & Management training to multiple stakeholders
 Developed Quality Assurance systems and bespoke macroinvertebrate training for LAWPRO Catchment Team
 Developed macroalgal and macrophyte training to LAWPRO Catchment and Community Teams
 Establishment of Peer to Peer Knowledge sharing structure
 Revision of desk study structure and guidance
 Revision of Urban Wastewater Assessment methodology



Advisory and Collaborations

EPA Research Project Steering Committees 
 European Innovation Partnership Steering Committees 
 LIFE Project Steering Committees
 Drinking Water Directive Groups
 Catchment Focus Groups for Pesticides
 Ongoing cross-border liaison with NIEA and Loughs Agency
 Catchment Conversation Workshops
 Assistance in the design of the "River Slaney Project"

Referrals*



ASSAP Referrals - 600
 Referrals to Others* - 81
 *Environmental Protection Agency, Local Authorities, Forest Service, Coillte, Irish Water, etc.

Strategic Nitrates Assessment

Load apportionment models created for all major estuaries requiring nitrate load reductions.
 Assessed: 12 PAAs, 81 waterbodies, 350 sites.





f. Catchment Science & Management Training 2023

Building on the success of 2022, throughout 2023 LAWPRO, in conjunction with the Local Authority Services National Training Group (LASNTG), continued the delivery of a training course in Catchment Science & Management (CSM). The course covers the practical steps involved in catchment science, including principles and practical applications underpinning Integrated Catchment Management.

The course is delivered via three related modules. Module 1 is delivered online and sets the scene and context for catchment science and the associated pressures. Module 2 focuses on the further characterisation and includes a field element, whilst Module 3 then progresses to recommending 'the right measure in the right place' and seeing examples of such in the field.

As per previous years, high demand resulted in the need for multiple intakes to deliver the course to as many interested parties as possible. LAWPRO, with assistance from external course contributors and experts in the field were able to deliver the training to another 60 participants in 2023.

The in-person delivery of modules 2 and 3 were respectively based in Roscrea Regional Training Centre (May 2023) and the Deel Spatially Targeted Buffers European Innovation Partnership (EIP) in Co. Cork (September 2023). Positive feedback on the course was again common amongst the participants and the demand remains to continue delivering the course on an annual basis.

Furthermore, in December 2022 LAWPRO was approached by the Department of Housing, Local Government and Heritage (DHLGH) to provide catchment science training to the eight newly established Agri-Climate Rural Environment Scheme (ACRES) Cooperation Project (CP) teams.

ACRES Co-operation is available to farmers in defined high priority geographical areas. Notably these areas contain in excess of 70% of the Blue Dot (High Status Objective) waterbodies. ACRES CP teams can deliver actions/measures on the ground via results-based payments as well as bespoke farm and landscape actions and support advisors and farmers through specialist training. This course was intended to equip the teams to select and deliver the right action in the right place to protect/restore water quality.

LAWPRO was keen to support this process as an opportunity to ensure that the importance of water quality is maintained as a high priority alongside climate and biodiversity actions. A bespoke two-day training course was developed and delivered to two groupings totalling 60 CP Team staff (Charleville, Cork 7-8/02/2023 and Carrick on Shannon, Leitrim 14-15/02/2023).

This course included a lot of the overarching CSM principles, whilst focusing on the agricultural aspects most relevant to the ACRES CP and was very well received. Its success was evidenced not just by the positive feedback returned, but also the further request that a representative from each CP area (8 in total) would go on to complete the full CSM course. These advisors in turn would then act as the catchment scientist for that area and better equip them to train agricultural advisors.

④ Innovations, Initiatives & Highlights



Photo of Altan lake in the
Derryveagh Mountains, Co. Donegal

a. Community Water Development Fund

Open Call – Grants Scheme

LAWPRO administers a Community Water Development Fund on behalf of the Department of Housing, Local Government and Heritage since 2018.

The 2023 Open Call was announced and launched at our ‘Communities Caring for Water Conference’ held in Collins Barracks, Dublin on 26 November 2022. The fund helps local communities deliver projects and initiatives that enhance the local water environment, delivering multiple benefits for biodiversity and climate action.

Communities and local champions play a vital role in the protection and enhancement of local waterbodies and the environment. The Community Water Development Fund supports this effort and in 2023 we received 156 applications seeking almost €1m in grant aid. 49% of grants applications fell into the small-scale project category (€1,000 - €5,000).

Following an evaluation process, grants offered under the Open Call amounted to €523,521 and 142 successful applicant groups from across the country. The average grant award under this scheme was €3,686.

Table 4: Community Water Development Fund Open Call summary details 2023

No. applications received	No. grants awarded	Amount sought	Amount Granted
156	142	€926,701	€523,521

Applications received by group type in 2023 shows that Tidy Towns & Residents Associations, Community Development and Environmental Groups are the most active applicants (**Figure 2** below). Every project funded will help to promote a fundamental objective of LAWPRO – to support local communities to get involved in the care of their local waters.



Minister Malcom Noonan, TD at the launch of the Community Water Development Fund 2024 on behalf of the Local Authority Waters Programme (LAWPRO). The Minister is pictured with Margaret Keegan, Regional Coordinator, LAWPRO along with LAWPRO staff, local Stoneybatter residents and representatives from Bi Urban social enterprise.

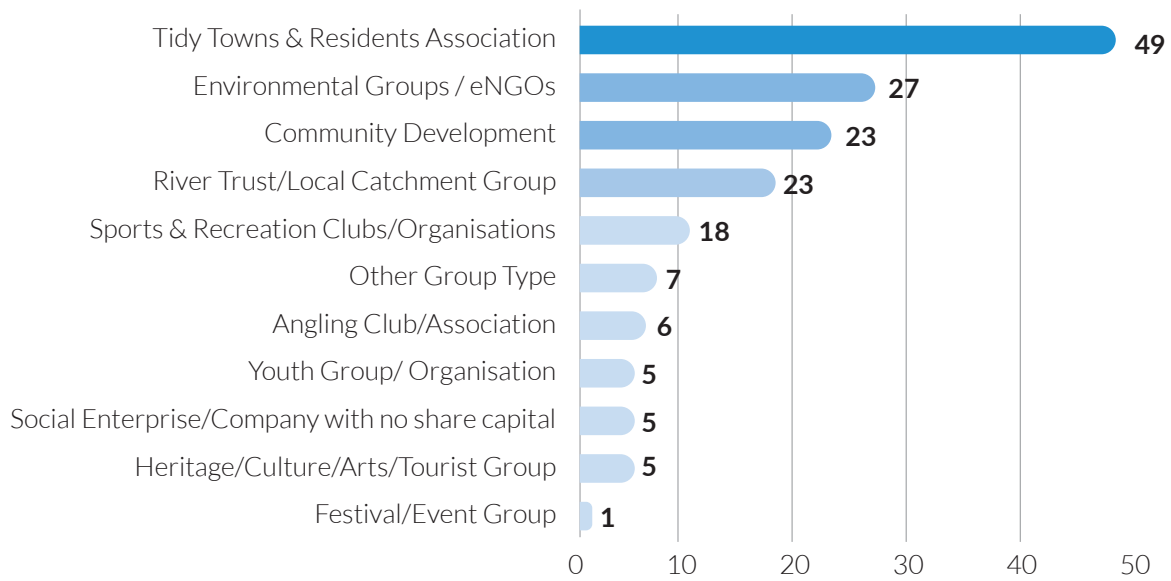


Figure 2: Community Water Development Fund – Grants Awarded by Group Type 2023

Types of projects approved for funding included:

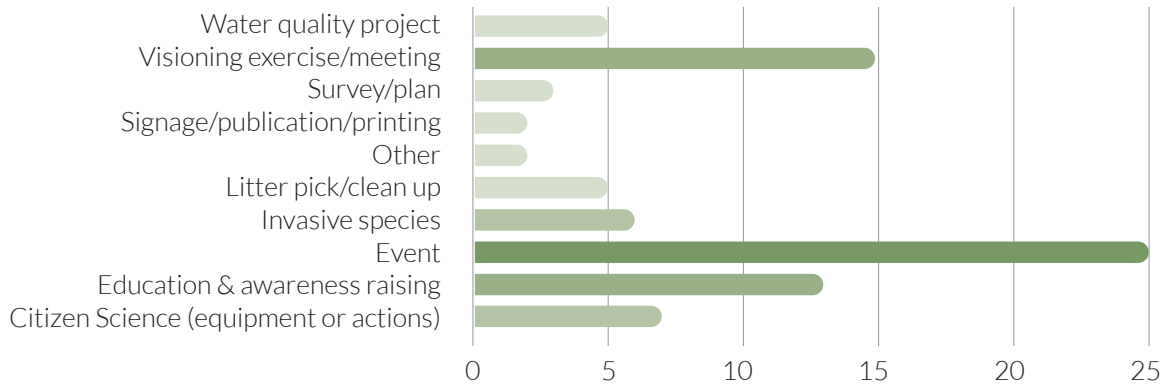
- Water quality actions such as river and habitat enhancement work, e.g., planting of native species and hedgerow, pollinator friendly planting, river-bank stabilisation, fencing and riparian buffer zones, etc.
- Match funding for large projects with a biodiversity/water quality element.
- Preparation of local plans, such as feasibility studies, habitat management plans, ecological surveys, and biodiversity action plans.
- Water literacy awareness raising initiatives such as riverbank tidy ups, biodiversity information boards, citizen science workshops, outdoor classrooms, rainwater harvesting and enhancement of wetlands.

For further information and details of grants awarded can be viewed online [Funding - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie).

b. Local Awareness Initiatives

Since 2016, LAWPRO’s Community Water Officers have been on the ground working with communities across Ireland. This has resulted in a valuable network of engaged community groups actively caring for the quality of their local rivers, lakes and coastal waters.

In a bid to encourage and financially support groups outside of the Open Call timeframes, a Local Awareness Initiatives fund with an overall budget of €40,000 was available in 2023 via an application process overseen by the Community Water Officers. This financial assistance was used to assist small awareness initiatives and events e.g. walks and talks, community meetings venue hire, citizen science training, workshops, development and dissemination of water awareness material and publications.

No. of Local Awareness payments (83) in 2023**Figure 3:** Local Awareness Initiatives (by type) funded by LAWPRO in 2023**c. Capacity Building**

Since 2016, LAWPRO has collaborated with The Rivers Trust, the umbrella body for voluntary led organisations, with support to Rivers Trusts and Catchment Associations in the following ways:

Supporting emerging Rivers Trusts/Catchment Associations

LAWPRO supports emerging and existing Rivers Trusts/Catchment Associations by inviting them to apply for the recoupment of ongoing operational costs such as insurance and audit fees. In 2023, grants were awarded to 34 groups with a total amount awarded of €59,931.

iCatch Hub Network

In 2023, LAWPRO contributed €10,000 to The Rivers Trust to fund the continuation of a network called iCatch Hub Network. The network was initially set up by The Maigne Rivers Trust and Inishowen Rivers Trust with funding from The Wheel (€17,938) and LAWPRO (€4,801) in 2020. From its inception, The Rivers Trust was very involved in the design and delivery of the network and was suitably placed to continue to build on what was established when the initial project finished.

The network consists of established Rivers Trusts/Catchments Associations who meet monthly to share experiences, receive training and information sessions on relevant topics facilitated by The Rivers Trusts.

Catchment Community Fora

During 2023 LAWPRO initiated work on the research into the establishment of Catchment Community Fora. Meetings have progressed with several stakeholders including EPA, An Fóram Uisce, The Rivers Trust, Local Authorities and implementing bodies. LAWPRO also published a discussion document on Local Catchment Management Planning & Catchment Community Fora. This document was circulated via the Consult web platform for public comment and these comments helped inform the LAWPRO research and development work in these areas of water management and governance.

LAWPRO also progressed with identifying potential facilitation partners to co-design a consultation process on the establishment of Catchment Community Fora in Ireland.

Resilience Project Review

Evaluation of the Resilience Project to inform future community engagement supports and funding is now complete. LAWPRO are meeting with stakeholders to disseminate the outcomes. This will help inform further activation, development and support of local level initiatives, an action in the draft River Basin Management Plan.

d. National Heritage Week & Water Heritage Day

During Heritage Week and on Water Heritage Day over 90 community events were supported by LAWPRO Community Water Officers in 2023. Water Heritage Day is held in partnership with the Heritage Council. As an island nation, our history and our heritage have been shaped by the sea and the great Irish rivers, lakes and wetlands. Water Heritage Day celebrates water throughout Ireland, its history and heritage and our connections with it. Storm Betty impacted some events therefore alterations had to be made to a number of events.

This is a collaborative effort with many stakeholders each year including Local Authority Heritage Officers, River Trusts, Tidy Towns Groups, Clean Coasts, Group Water Schemes, Community Co-ops, Heritage Centres, Historical Societies and Environmental interest groups. The theme for Heritage Week 2023 was 'Living Heritage'.

Most of the events in 2023 were enjoyed outdoors but there were opportunities for people to join indoors too. In Kerry there was a gathering for the premiere of a video on how the river has shaped the community of Asdee in the north of the county.

Waterside events catered for many interests and all age groups including family fun days, citizen science workshops, catchment excursions and river walks. Every county was proud to showcase their unique waterbodies – Monaghan celebrated its dragonflies, Tipperary invited people to enjoy pond dipping at Cabragh Wetlands, Longford took a boat out to St Diarmuid's monastery on Lough Ree, Clare got to know its otters at Ennistymon and Donegal celebrated build and natural heritage at Ards Friary.



Heritage Week event

Water Heritage Day is also an opportunity to engage with the arts and celebrate our strong cultural connection to water. We listened to music of the plants in Bruff, storytelling in Cork, poetry on the Barrow at Graiguenamanagh; and travelled to Whiddy Island in Bantry Bay as part of the Ellen Hutchins Festival. Newbridge held a photographic exhibition with images of built, natural heritage and maps of the river. There was something for everyone to enjoy!

Cuan Beo, who strive to reconnect the land and sea communities in Galway may have benefitted from the heavy showers as people flocked to their tent for shelter at the annual Cruinnin na mBad festival. The event attracted a large and varied audience over the two days. Approximately 3,000 people visited the tent over the two days.

Within the tent, several members from Cuan Beo, LAWPRO, Galway County Council, EarthKeepers, Kinvara Tidy Towns and St Coman's Church Yard restoration committee were in attendance. In addition, Cuan Beo set up a cookery demonstration in association with Bord lascaigh Mharaigh where local seafood produce was prepared and shared with keen audiences. Cuan Beo also displayed the oyster flat boat which was constructed in 2018 by a local fisherman and member as part of the local native oyster heritage initiative.



In Kilkenny, a Water Heritage Day event was run by the Nore River Catchment Trust in partnership with Inland fisheries Ireland. The event looked at the intricate life cycle of the European Eel and examined barriers to fish migration on the Nore and nationally

The focus in Glanworth, Co. Cork of the 2023 celebrations was the River Funcheon; from an archaeological and natural heritage perspective. Two events were organised; a presentation on the excavation of Glanworth Castle and a River Safari on the banks of the River Funcheon at Glanworth Mill. All events were a collaboration between a number of community groups. Locals and visitors from outside the area attended in great numbers.

Inland Fisheries Ireland were on hand and provided examples of the fish found in the River Funcheon such as young trout, salmon, eels and stone loach. The children were able to see these fish up close through the use of special holding pools on the banks of the river. Also present were local members of the Glanworth Trout Anglers' Fishing Club who taught the children the basics of fly fishing.

The Water Heritage Day Award, sponsored by LAWPRO, was awarded to Inishowen Rivers Trust/ Lough Agency for its event: the Culdaff River Heritage Workshop in Donegal. The workshop involved local historians exploring the relationships people have with their local river and each other. There was a talk and workshops about the various aspects of human interactions with the river down through the ages, from early Christian sites to fishing today.

For more water Heritage Day highlights from 2023 see [Water Heritage Day - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie)



Heritage Week Event in collaboration with Inland Fisheries Ireland (IFI)

e. International Water Days

World Wetlands Day, 2nd February 2023

International water days form an important part of the LAWPRO calendar as we work with communities to celebrate water and encourage better water stewardship. The aim of World Wetlands Day is to celebrate wetlands across the globe and promote their protection and restoration. The theme for 2023 was “It’s Time for Wetland Restoration”.

National event- Stories from the Waterside

In 2023 LAWPRO held a national event to celebrate World Wetlands Day. This was an online event, focusing on the importance of features within local waterbodies (rivers, streams, lakes, turloughs, fens, bogs beaches etc) with a range of authors from our “Stories from the Waterside” community at this fireside story telling online event.

We had fantastic turnout and engagement on the night. People tuned worldwide from countries including Russia, Japan, the USA and the UK. Stories featured included “Above the Blackwater”, “Finn mac Cumhaill and the Wetlands” and many more. We had a lovely discussion which included attendees sending their colloquial names for fish that they collected as kids in jam jars etc (minnow and stickleback). Colloquial names included brickeens, killocks, pinkeens, bardógs to name just a few. All stories are available at www.storiesfromthewaterside.ie.

Other events across the country

Locally events were organised across the country including a “Blue Dot schools visit” in Ballinagree, Co. Cork; Friends of Castle Lake Catchment, Co. Cavan; Traction Rivers event, Co. Cork; Newtownforbes World Wetlands Day event, Co. Longford; Shannon Town Community Wetlands Project celebration, Co. Clare; and Celebrate World Wetlands in East Clare, Lough Graney, Co. Clare.

f. Tidy Towns Special Awards

Every year, LAWPRO coordinates a Waters and Communities Special Awards competition along with co-sponsors, Inland Fisheries Ireland and Waterways Ireland. This special award is run in conjunction with the national SuperValu Tidy Towns Awards, an annual competition organised by the Department of Rural and Community Development.

Milltownpass Tidy Towns, County Westmeath, were announced overall winner of the Waters and Communities Special Award 2023 at the SuperValu Tidy Towns awards ceremony held in Croke Park on October 6th.

Their impressive “Water Biodiversity Action Plan” for local rivers and streams garnered them praise and admiration for their efforts in protecting local watercourses. Driven by an acute awareness of local water resources, Milltownpass Tidy Towns embarked on an endeavour of discovery and action. Their dedicated team underwent training on biodiversity issues surrounding water.

One of the key tenets of their action plan, completed last year, was raising community awareness through Citizen Science kick sampling workshops and tidy ups along riverbanks. Furthermore, on Water Heritage Day 2022 - attended by over 200 people - their Milltown River Family Fun Day provided an engaging platform to present findings and receive feedback from residents in attendance.

Community engagement was essential to Milltownpass Tidy Towns success, with collaborations spanning local schools, landowners and various community groups. This project, with its numerous benefits, aligns closely with the United Nations Sustainable Development Goals with key outcomes

including the identification of pollution sources, potential improvement measures and agreements with landowners on effective solutions.

Milltownpass Tidy Towns Committee's longstanding dedication to protecting waterways and raising awareness sets an impressive example. Their commitment to creating long-lasting relationships between our rivers and the local community ensures they will have a brighter, more sustainable, future.

Winners of the Waters and Communities Special Award 2023

Community Group	County	Region	Prize Money
Milltownpass Tidy Towns	Westmeath	Midlands & East Winner and Overall Winner	€2,000
Bettystown Tidy Towns	Meath	Midlands & East Highly Commended	€500
Leighlinbridge Improvement Group	Carlow	South East Winner	€1,000
Ahare River and Biodiversity Development Group	Wexford	South East Highly Commended	€500
Askeaton Ballysteen Natural Heritage	Limerick	South West & Mid-West Winner	€1,000
Ballineen and Enniskeane Tidy Towns Association	Cork	South West & Mid-West Highly Commended	€500
Ballyhaunis Tidy Towns	Mayo	North West & West Winner	€1,000
Greenhills Biodiversity Group and Residents Association)	Mayo	North West & West Highly Commended	€500
Overall prize money			€7,000

g. GAA Green Clubs Programme

The GAA Green Clubs Programme ([Green Clubs Programme \(gaa.ie\)](https://www.gaa.ie/green-clubs-programme)) is a partnership that has its origins in the Sustainable Development Goals Champions Programme launched by the Department of Communication, Climate Action, and Environment in September 2019. Phase 1 of the Green Clubs Programme was completed in 2022, with the participation of over 30 clubs from across Ireland. These Green Clubs established Green Teams, carried out club audits and engaged in exciting sustainability partnerships and projects. LAWPRO provides guidance and expertise on the water and biodiversity themes of the initiative.



In 2023 the LAWPRO Green Clubs Water Action Fund small-grant programme was opened to GAA, LGFA and Camogie Clubs participating in Phase 2 of the Green Clubs Programme. Phase 2 of the GAA Green Clubs Programme ran from March 2023 to November 2024, at the end of which period clubs reported on at least two actions across the themes of water, biodiversity, energy, waste and travel and transport in order to be awarded official Green Club status. Club progress and actions are logged by club Green Teams on a dedicated programme portal.

Clubs were invited to submit project ideas that corresponded to LAWPRO objectives of protecting and enhancing water quality, caring for local waters (rivers, coasts, lakes, groundwater) and/or the objectives of the [EU Water Framework Directive](#). Potential participants were encouraged to submit proposals under one or more of the following headings: water quality, water conservation, habitat restoration, education & awareness, youth water projects, amenity enhancement (water-focussed), water and waste. Among the supports to clubs considering applying for the fund was a Water & Biodiversity webinar held on 21 March 2023, with expert inputs from LAWPRO as well as the National Biodiversity Centre, NI Water and RSPB NI, which contained ideas for club and community-based water and biodiversity projects and initiatives.



Images: Midleton GAA (Cork): Swan family in the Dungourney river adjacent to the Midleton GAA pitch and rootery under construction.

30 Green Club projects from 16 counties across all four provinces were approved, each awarded €1000, with project proposals ranging from river and wildlife workshops through water butts, water taps and water conservation to biodiversity initiatives. The funding was released to clubs in three tranches, and they were hugely grateful for the opportunities to act and engage. Their experiences and learnings will be incorporated into club case studies as part of the Green Club toolkit review at the end of Phase 2 of the programme, in Q3-4 of 2024. Here is a selection of some of the participating clubs project actions from around the regions:

Club Name	County	Project Focus	Project Details
Midleton GAA	Cork	Water Quality; Education & Awareness; Habitat Restoration; Amenity Enhancement (water-focused)	One of the Midleton GAA Green Club members regularly monitors the Dungourney river adjacent to the club grounds for water quality and the club has an established and ever-developing water & biodiversity programme. With this funding the club erected biodiversity signs around the grounds, created a 'rotery' of old tree roots on the grounds to form a habitat for insects and other wildlife adjacent to the river which is known to support both water mammals and water birds and installed bird boxes for birdlife including owls. The club has benefitted in its ongoing river-based biodiversity projects from the input and advice of LAWPRO's Catherine Seale.
Rockwell Rovers	Tipperary	Water conservation; Education & Awareness	A water conservation audit of the club house and facilities was followed by the identification and repair of leaky taps, toilets and urinals, and the identification of opportunities for rainwater harvesting in future, and the development of signage on responsible and sustainable water use and on 'think before you flush'.
St Fechin's	Louth	Education & Awareness	Biodiversity & Smartphone Photography workshops and signage for club members, focussed on the biodiversity and wildlife of the river Boyne



St Fechins (Louth): Biodiversity and wildlife smartphone photography workshop

Club Name	County	Project Focus	Project Details
Carndonagh GAA	Donegal	Education & Awareness	The Carndonagh club funded an H2O heroes initiative in the club, to educate members about the importance of water conservation and how they can contribute to environmental sustainability with educational talks and workshops on water conservation, the impact of climate change on water resources, and practical tips for reducing water usage and informational signage and resources.

Club Name	County	Project Focus	Project Details
Buffers Alley	Wexford	Habitat enhancement; water quality	The restoration an unused/wasteland area adjacent to the club playing pitches, including the planting of native trees and plants in this area to enhance biodiversity and improve the water quality of runoff from the pitches. Following an assessment and audit of the area in collaboration with a local landscaping and horticultural expert to determine current foliage and species, the installation of insect hotels and bird boxes and bird feeders within this new biodiversity area.
Mayo Gaels	Mayo	Water quality; Education & Awareness; Amenity Enhancement (water-focussed)	The creation of a master plan for the creation of a Managed Wetland in an area that takes the rain run-off from the GAA grounds and will be developed into a community resource.
St Gabriel's Ladies Football Club	Galway	Education & Awareness; Youth Water Projects; Habitat Restoration; Amenity Enhancement (water-focussed)	The creation a biodiversity / stream walking trail around the perimeter of the club site at Aughrim, Co. Galway. A stream (Ballinure) of good quality running adjacent to the site enhances biodiversity and provides additional habitats for wildlife and points of interest along the proposed biodiversity trail. The LAWPRO funding was for pollinator-friendly-planting (tree, flowers, plants), bee habitat and benches along the walkway.

h. Blue Dot Catchments Programme – Blue Dot Engagements

Following the success of the Q5 engagement fund which was piloted in 2022 the fund was expanded in 2023 to include all Blue Dots and rebranded the Blue Dot Fund. The initiative was still modelled on the LAWPRO Local Awareness Initiative funding which Community Water Officers utilise on the ground while working with communities in all counties.

Similarly, this fund is used to financially support groups outside of the Open Call timeframes. A second stream of funding was also made available, the Blue Dot County Pilots fund which aimed to demonstrate what could be achieved with more significant resources, both staff time and financial are focussed on a single geographic region. Galway and Mayo were chosen as the pilot counties and significant engagement efforts were and continue to be delivered in these counties both of which are strongholds for Blue Dot waterbodies.

The objective of the initiative comes from the Blue Dot Catchments Programme (see here: [Blue Dot Programme - Local Authority Water Programme \(lawaters.ie\)](#). Objective number 5: *Establish pilot projects for community engagement and actions*. The communication goals are to:

- Generate awareness amongst key audiences regarding the quality of our Blue Dot waters.
- Turn awareness into engagement and action, in the form of stewardship of our Blue Dot waters.
- Celebrate the positive achievement of the Blue Dots and the need to protect these waters into the future.

We aimed to:

- Leverage multiple linked community interests such as tourism, fisheries, bathing water
- Leverage Heritage Week and Water Heritage Day events
- Deepen engagements with communities LAWPRO is already active in and build capacity
- Build on CWDF funded initiatives granted in the recent call & expand scope of work
- Get communities ready for 23/24 CWDF Call
- Encourage engagements with implementing bodies such as NPWS, IFI, LAs etc
- Develop or deepen relationships between communities and their local authority

The funding was directed towards a broad range of Blue Dot waterbodies across the country.

Examples of engagements, events and projects delivered in 2023 included:

- Several expert guided walks and talks in Blue Dot Catchments
- School engagements in Cork
- IRD Duhallow tree planting in critical source areas.
- Abhainn Dá Loilíoch (Owendalulleagh) River festival celebrating rivers and woodlands in this Blue Dot catchment.
- Invasives infestation assessment and control plan for Inchiquinn Lake (Kerry)
- Fish passage rehabilitation feasibility study for the Straid River, Donegal. Collaboration with Donegal County Council, OPW, IFI and LAWPRO.
- Support for the production of a series of educational videos on Blue Dots and mitigation measures designed to protect them.
- Initiatives under the County Pilot Fund in Mayo and Galway included:
- Schools' visits and education campaign in Galway and Mayo
- Support for the Blue Dots of Connemara Booklet and video launch.
- Support for the production of the Blue Dots of Mayo Booklet and video to be launched in 2024.

i. Waters of LIFE

The Waters of Life is an EU LIFE integrated project (IP) which aims to support the implementation of measures to protect/restore Ireland's High Status Objective Waters and thus to support the work of the Blue Dot Catchments Programme and implementation of the RBMP in general. LAWPRO are a project partner, together with the EPA, Teagasc, Coillte, Department of Agriculture Food and the Marine (DAFM Agriculture), Forest Service (DAFM Forestry), OPW, with the Department of Housing, Local Government and Heritage as the Project Coordinator.

The project will act as a catchment-scale demonstration project to test and validate the effectiveness of implementing locally tailored 'best practice' measures across a range of land uses typically seen in the catchments of high-status waters. The purpose of this work will be to:

- Build technical understanding and capacity in relation to the design and implementation of measures across a variety of key land-uses to deliver effective solutions at a catchment-wide scale for the protection of high-status waters;
- Promote community and landowner ownership of the actions proposed and ensuring local community involvement in developing the land-use management actions to be implemented;
- Making recommendations that will inform the development of future agri-environment and forestry policies and provide for the long-term sustainable management of high-status areas;
- Enhancing public appreciation of the ecology, ecosystems and natural capital value of high-status waters and their catchments;
- Developing and building synergies between measures implemented to address water quality considerations and related biodiversity objectives within the catchments of high-status waters, and:
- Monitoring and demonstrating the effectiveness of the measures implemented.

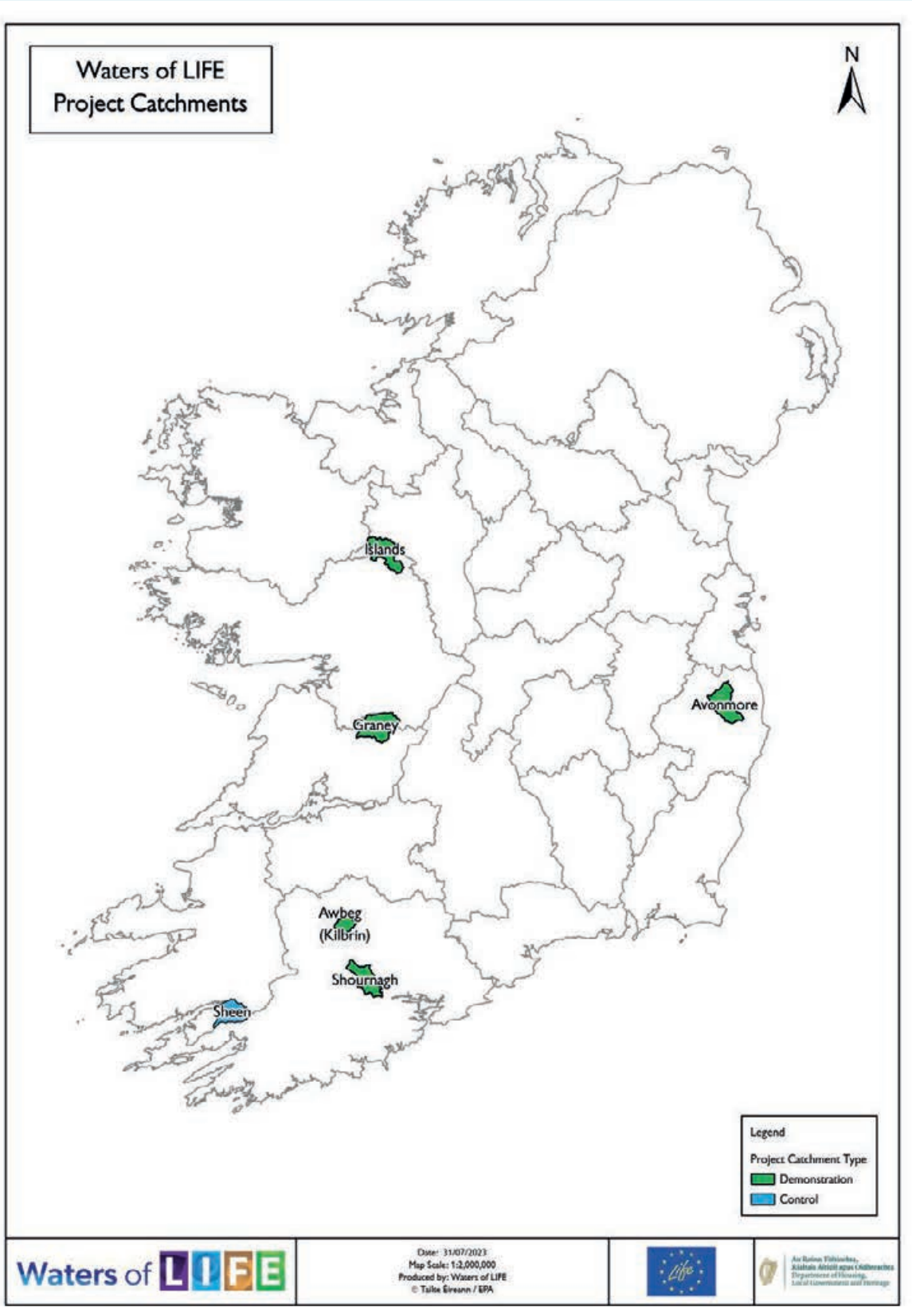
Six demonstration catchments, at sub-catchment scale, were chosen for inclusion as part of the project's primary focus areas. These were selected because;

- A significant proportion of the sub-catchment was relevant to protecting or restoring High Status
- They represented the various pressures affecting Blue Dot waterbodies including hydromorphology, forestry, agriculture, wastewater among others with one (the Sheen) acting as a control.
- All but the control catchment are at risk of failing to meet the high-status objective that has been set for them under the River Basin Management Plan for Ireland 2022-2027.

LAWPRO has responsibility for multiple actions which will be delivered by the project over its lifetime. LAWPRO staff are also members of the Project Steering Group. Some of the actions delivered in 2023 included:

- Further characterisation of the demonstration catchments including identification of significant pressures and suggested next steps.
- Preparation of Local Catchment Assessment reports detailing results of further characterisation.
- Support the development of Results Based Payments Scheme.
- Support demonstration catchment public and landowner meetings.
- Deliver community engagements in Blue Dot catchments to raise awareness and activation of water quality events or projects.

LAWPRO is prepared to assist in the delivery of enhanced community engagement activities and project delivery in Blue Dot catchments.



j. Nature Based Solutions

The challenges posed by climate change and the need to adapt our cities and towns to be more resilient to increasingly frequent and intensive rainfall events have also brought sustainable water management in the urban context to the fore. Nature-based solutions support climate adaptation and mitigation (resilience, micro-climate cooling, carbon sequestration etc.).

In response to the above, the DHLGH, working with LAWPRO and the CCMA established a project to actively promote the implementation of nature-based surface water management solutions. An interim guidance [Nature-based Solutions - Local Authority Water Programme \(lawaters.ie\)](https://lawaters.ie) was produced in consultation with the relevant sectors and public bodies and a national implementation strategy is being worked through with a view to publication in 2024. This will have an initial focus on cities and towns focusing on projects that intervene in the urban fabric, using an urban design and plan led approach.

The focus of LAWPRO in 2023 has been the continuation of identifying and targeting significant public funding initiatives earmarked by the government for local authority-led projects, as these offer the perfect opportunity to integrate nature-based solutions at scale and develop best practice in terms of design and project delivery which is also cost effective. To that purpose, LAWPRO continues to work with the DHLGH and the relevant funding leads e.g., Urban Regeneration and Development Fund, Rural Regeneration Development Fund, Town and Village Renewal Scheme, CLÁR, Active Travel within the relevant Government departments and agencies including Department of Housing Local Government and Heritage, Department of Rural and Community Development and the National Transport Authority. The aim is to promote the incorporation of nature-based surface water management principles and identify barriers to their implementation.



Training:

In 2023 LAWPRO collaborated with Engineers Ireland and the DHLGH to deliver a series of industry focused webinars in May 2023. These aimed to focus on the different stages of project development using real life examples drawn from the project delivery experiences, challenges and opportunities from the professionals working at the coalface.

- **Webinar 1: Projects from Concept to Planning stage**
- **Webinar 2: Projects at Detailed design stage**
- **Webinar 3: Projects at Construction stage – including from a contractor's point of view**
- **Webinar 4: Maintenance, lessons learnt**

Emerging from the above webinar series, LAWPRO has been working with the DHLGH and Engineers Ireland to organise a **Workshop for Professional Bodies** focusing on multidisciplinary working and needs. This workshop, to be held in 2024, will seek to draft an agreed position paper on the promotion of nature-based solutions.

Greenways: The development of greenways continues to be raised by the public regarding some projects near watercourses, in particular those where greenways are replacing riparian zones and creating a hydromorphological pressure. LAWPRO continued to provide advice and work with relevant authorities to highlight best practice.

Case studies: As nature-based solutions is an emerging field in Ireland, it is important that best practice advice is based on real life practical examples. To develop a better understanding of what supports are required to integrate nature-based solutions into projects, LAWPRO is working closely with the DHLGH, the professional bodies and Local Authorities to identify case studies applicable for areas of urban regeneration and active travel. Feedback from the webinars revealed that there was a need for good examples highlighting Nature-based solutions best practice, that can serve as demonstration sites across the country. LAWPRO is in the process of identifying exemplars that can serve as demonstration projects. Funding was provided to Carlow County Council to assist in the building of demonstration raingardens in Carlow town.

Planning and rainwater management: The planning process has been an important area of focus for LAWPRO to promote best practice in nature-based solutions. The National Planning Framework is a planning framework to guide development and investment over the coming years in Ireland and recognises the need for sustainable water management solutions (National Policy Objective 57) in line with the River Basin Management Plan. LAWPRO continues to provide advice to LAs on the incorporation of nature-based solutions objectives to protect water quality in their County Development Plans in line with the National Planning Framework (National Policy Objective 57). This included presenting to the Office of the Planning Regulator on progress, practical considerations for Local Authorities based on the experiences of our colleagues, from a planning perspective and identifying policy gaps in this area.

Rainwater management planning: LAWPRO provided match funding along with DHLGH to Cork Co Council to assist them to develop a national rainwater management plan template for the country based on the Carrigtwohill Local Area Plan. This work is supported by a working group was set up in partnership with the DHLGH with the following Local Authorities - Kildare, Cork, Offaly, Wexford and Fingal and it is anticipated that the national rainwater management plan template will be published in 2024.

Support for Engineers and other professions: In 2023 LAWPRO continued to work collaboratively with the Department of Transport and the DHLGH to draft an advice note to incorporate nature-based surface water management into the Design Manual for Urban Roads and Streets (DMURS) including providing examples. This Advice Note 5: Road and Street Drainage using Nature-Based Solutions is now available online [DoT Support Office - Advice Note 5 - Urban Drainage.pdf - All Documents \(sharepoint.com\)](#)

The National Transport Authority also published their “Greening and Nature-based SuDS for Active Travel Schemes which draws from much of the above work” [NTA-Advice-Note-Greening-NBS-SuDS-for-AT-Schemes_R01.pdf \(nationaltransport.ie\)](#).

Youth and education: In 2023 LAWPRO collaborated with the Globe Programme and An Taisce by providing funding and presentations to participating schools in the “How Spongy is Your School?”.

Presentations were also given on the nature-based solutions work and wider concepts to third level colleges including courses in Master of Engineering and Master of Life Science in University College Dublin.

Climate Action Planning: Nature-based solutions form a key part in the fight against climate change and the development of greater resilience to climate disruption. LAWPRO worked with the CAROs, assisting them in the incorporation of nature-based solutions into their strategies and guidance for Local Authorities and their Climate Action Teams.

LAWPRO is recruiting new staff to support the implementation of nature-based solutions.

LAWPRO is a partner of the Interreg North West Europe project, focusing on the creation of resilient river systems through mainstreaming and upscaling of nature-based solutions. Irish partners include Dundalk IT, the National Federation of Group Water Schemes and the OPW. In 2023, LAWPRO participated in the various workshop in the Netherlands and will hold the inaugural meeting of the project with the other Irish partners, in Dundalk in May 2024. It is intended to organise a national conference focusing on nature-based solutions from source to sea to coincide with this event.

k. Citizen Science

Citizen science actively involves citizens in scientific studies that generates new knowledge and understanding. Engagements on the River Basin Management Plan by LAWPRO shows that citizen science also helps to connect people their water bodies by involving the public in water monitoring, increasing local knowledge and the potential for data collection.

LAWPRO has been working with research institutions, practitioners, agencies, trainers and community groups interested in citizen science to develop a consensus on the most suitable approach for citizen science in Ireland. In 2023 further work was carried out the development of a mechanise to roll out the Citizen Science Stream Index (CSSI, in 2021), an aquatic macroinvertebrate scheme suitable for beginners. Workshops and training days continued in support of locally led catchment projects e.g., IRD Duhallow Farming for the Blue Dot EIP (European Innovation Partnership).

The LAWPRO Citizen Science Recording Database continues to be updated where data can be entered and mapped to a dedicated LAWPRO webpage - [Citizen Science - Local Authority Water Programme \(lawwaters.ie\)](https://lawwaters.ie). It is intended that this data will be available on a more permanent footing in partnership with the National Biodiversity Data Centre (NBDC). LAWPRO provided match funding to Dundalk IT to finalise the development of the Aquainvert App, a mobile based App to record CSSI and other citizen science generated data.

LAWPRO work with the Dublin City University WaterBlitz and provides information and support to groups involved. The WaterBlitz is a co-created citizen science research project between DCU Water Institute and in partnership with Earthwatch Europe. The aim of this long-term project is to investigate how public engagement can facilitate water restoration.

Aging of water: LAWPRO participated in the first GRADS & SMARTS Workshop: On people and isotopes: surface and groundwater quality management in Ireland on the aging of water. Dr Carlos Rocha presented to the LAWPRO team on this EPA and GSI funded project examining the timelines for movement of water across the various Irish catchment types. LAWPRO subsequently organised liaison with community groups in Roscarberry and the River Suir to mobilise citizen science sampling.

eDNA citizen science: LAWPRO worked with Waterford City & County Council to access additional funding to complement the eDNA River Suir catchment project led by community group Suircan, to generate more data on the River Clodiagh tributary. These data sets are currently being processed.



Figure 4: Distribution map showing citizen science water quality data (CSSI) collected by volunteers in Ireland. This data can be viewed at [Citizen Science - Local Authority Water Programme \(lawwaters.ie\)](https://lawwaters.ie)

I. Santry River - Innovative Collaborative Assessment

The Santry River in Co. Dublin is a Priority Area of for Action under Cycle 2 of the Water Framework Directive River Basin Management Plan. The river is split into two sections or waterbodies (SANTRY_010 & SANTRY_020). Both waterbodies have Poor ecological status (2016-2021) and are at risk of not meeting good water quality objectives. A desk study assessment was carried out for the Santry River in 2022, which is available on the LAWPRO website: https://lawaters.ie/app/uploads/2022/10/AFA0161-Santry_River_Desktop-Assessment_F01.pdf.

Excess stream phosphorus, ammonium and organic matter were identified as significant issues impacting on the ecological status of both Santry waterbodies. All the above compounds affect the oxygen dynamics within the river, essentially suffocating sensitive biological species.

During the desk study assessment, all available data was examined, including a comprehensive water chemistry dataset, collated, and provided by Dublin City Council. Utilising the stream chemistry dataset and storm water network distribution, a sub catchment outline was undertaken. Here the river was split into nine smaller sections or drainage basins, each of which has a stream chemistry monitoring point at its base. By sectioning out the river in this way, it was possible to compare stream chemistry and contaminant loads against potential sources or pressures within each river section. The analysis highlighted 131 potential sources of contamination, primarily misconnections and storm water overflows. A misconnection occurs when a foul (wastewater) pipe from a house or business, is mistakenly connected to the stormwater (rainwater) drainage pipe, thereby causing pollution to enter the local river or stream.



Sampled pipe inflow discharging to the Santry River.

Building upon the desk study assessment, a large, cross agency, investigative assessment was undertaken in April 2023. A total of 20 staff were on-site on the Santry including personnel from LAWPRO, Dublin City Council and Fingal County Council. Water chemistry samples were collected throughout the river and analysed for a suite of wastewater indicator parameters. Simultaneously, all accessible, flowing, pipe inflows were sampled and analysed. To complement the water chemistry data, river flows and pipe discharges were also measured. By combining flow data with water chemistry results, it was possible to calculate contaminant loads throughout the river, while also calculating the relative contaminant load contribution of each inflow pipe. The results of the collaborative assessment will help in the design of mitigation measures to address significant pipe inflows, through the Santry River Restoration and Greenway Project: <https://www.dublincity.ie/residential/environment/protection-water-bodies/green-infrastructure/santry-river-restoration-and-greenway-project>

m. Catchment Management Work Plans and Sectoral Work Plans

LAWPRO is tasked under the draft RBMP to develop the Catchment Management Plan template (Action 2) in consultation with stakeholders. Meetings have been held with several stakeholders including EPA, An Fóram Uisce, The Rivers Trust, Local Authorities and implementing bodies. A discussion document was published which outlines a proposed approach and identified five pilot catchments, where work is progressing to inform the development of the template.

In parallel, the DHLGH has convened meetings with the implementing bodies to discuss the scope of the Sectoral Action Plans. LAWPRO staff have provided technical support for these meetings.

These new actions in the dRBMP will provide greater visibility of the actions being taken by all sectors to protect and restore water quality and are a new innovation for water management in Ireland.

5 Farming for Water EIP



The Killehsin Glen and Reservoir, Co. Laois

During 2023 LAWPRO commenced the implementation of the Farming for Water European Innovation Partnership (EIP) project in collaboration with Teagasc / ASSAP and Dairy Industry Ireland, which will operate until 2027. The project is known as Farming for Water EIP.

This is an agri-environmental project providing grant funding for farmers to implement targeted actions to reduce losses of nutrients, sediment and pesticides from agricultural lands.

The total project budget is €60m consisting of €50 million for farm measures, as well as other catchment-based initiatives where water quality issues are identified and require actions on agricultural lands. We aim to engage with up to 15,000 farmers throughout the country in the initiative.

The project supports and facilitates the application of locally led water stewardship following catchment science principles and focuses on water quality and multiple benefits (including climate and biodiversity), through championing project actions, integrating project learnings into sustainability initiatives and ensuring that the work programme is supported at every stage in the delivery process.

The project motto is “working together with farmers and the community at large to deliver enhanced and sustained water quality improvement measures for the benefit of the environment, water life and all society.”

The initiative will focus on supplementary measures for water quality but will also include co benefits such as aquatic and terrestrial biodiversity, climate action and natural flood management measures.

The primary focus of the project, co-partnered by Bord Bia, the Department of Agriculture, Food and the Marine, and the Department of Housing, Local Government and Heritage, centres on mitigating losses of phosphorus, nitrogen, sediment, and pesticides from agricultural lands. We aim to achieve this by advocating for the adoption of innovative best practices in nutrient management, the application of nature-based natural water retention measures and other suitable strategies at the farm level, guided by the principles of integrated catchment management and science.

We now have a dedicated Water EIP team in place, led by Mairead Whitty, and we are eagerly looking forward to making meaningful inroads into the preservation and improvement of water quality throughout the country in collaboration with all our stakeholders and partners.

Following much preparatory work in 2023, the project has moved to the implementation phase with Service Level Agreements being finalised with DHLGH and DAFM, and a separate Memorandum of Understanding between LAWPRO and project partners Teagasc and DII to follow. Project offices have been set up in Rossmore Neighbourhood Centre in Tipperary Town and an ICT package to develop a system to digitise the process from engagement to final payment has been developed and is being refined.

The Water EIP Research hub has been established and involves researchers from a number of institutions including University College Cork, University College Dublin, Dundalk Institute of Technology, Atlantic Technical University and the James Hutten Institute UK. This innovative approach will complement core project evaluation and will facilitate input from the academic community and applied research.

A pilot phase of farm visits was held throughout October 2023 to test the efficacy of the approach. Forty-seven farms were engaged by ASSAP advisors across several farm sectors including tillage, dairy and dry stock. The farms were selected to ensure that a variety of agricultural pressures were represented. These visits have validated the proposed process and have also led to a refinement of the measures to provide clarity for both advisors and farmers.

The grant payment system has now been established and the first grants have been paid to farmers.

Key points of the project:

- Largest EIP ever undertaken in the State.
- Advisor led, promoting “water stewardship” with the farmer at the centre of decision making and mapping of measures.
- Following catchment science principles, local farm knowledge resulting in targeted actions.
- Focus on water quality but also multiple benefits including climate.
- Aim to target all agricultural sectors (as much as possible)
- Aim to integrate with sustainability initiatives, draw in complementary supports including additional partners (e.g., OPW)
- Wider public information campaign to explain why good water quality is a public resource underpinning all sectors and a healthy society.
- Strong support from the industry and sectors will be necessary.



Local Authority 
waters 
Programme 
vibrant communities | catchment assessment | healthy waters