

Acknowledgements

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NB: The contents of this document are informed by contributions from our workshop discussion participants as compiled and presented by IEN and NCI. However, every opinion collated within this report does not necessarily represent the individual views of each workshop participant or that of their organisation. A full list of participants is available as Appendix 1.

High-Level Recommendations for Funding Nature Restoration in Ireland

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Summary of high-level recommendations for funding nature restoration in Ireland

Natural Capital Ireland (NCI) was commissioned by the Irish Environmental Network (IEN) to deliver a report on high-level recommendations for funding nature restoration in Ireland.

This project brought together a diverse group of subject matter experts from academia, business, environmental NGOs, farming, government departments, and semi-state bodies to workshop high-level recommendations for funding nature restoration, which are set out below. These recommendations are outlined in detail in Section 3 of this report.

1. Invest in an overarching nature restoration plan

We need a roadmap to nature restoration to ensure everyone is working in tandem towards the same goals. A rapid reform of any elements of existing infrastructure that have hampered delivery to date is needed. A robust structure will enable those who are on the ground, and ready to act now, to deliver evidence-based actions with the confidence that they will be supported and sustained long-term.

2. Rebuild Trust

Focus political will and rebuild trust in environmental policy and schemes. There must be political will and support for effective nature restoration and to rebuild lost trust in agrienvironmental policies and schemes due to past issues. There needs to be accountability for delivering on nature restoration actions within various government departments or an independent Nature Restoration Agency to oversee action. Investment is needed to enforce existing regulations.

3. Mainstream biodiversity

Invest in engagement and awareness raising. Nature restoration should be mainstreamed by a) embedding biodiversity and nature restoration in the general public awareness and b) clear messaging that the biodiversity loss and climate crises are inextricably linked and need to be addressed in a holistic way. Mainstream media has a role to play in communicating the benefits of nature restoration to ensure public buy-in. Investment in training and guidelines for journalists and editors would enable more accurate coverage of the biodiversity crisis.



4. Boost Capacity

Building expertise in nature restoration. Rapid capacity building requires investment in staff, expertise, education, training and upskilling, in particular, in practical nature restoration skills and natural capital accounting. An integrated nature-related data infrastructure to facilitate decision making is needed, as is mapping and measuring ecosystem extent and condition over time to inform and track action and outcomes.

5. Scale up success

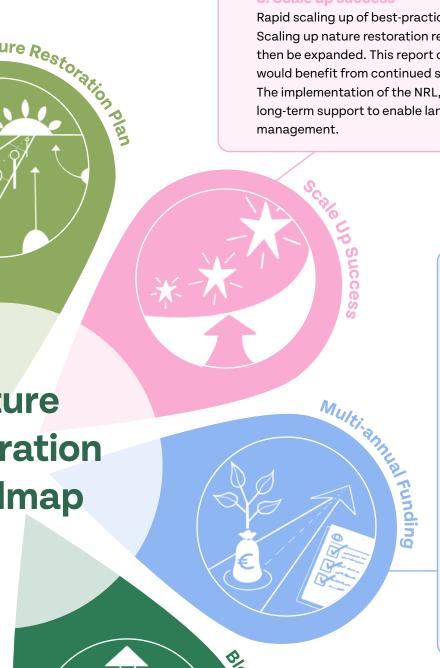
Rapid scaling up of best-practice restoration projects with ongoing supports. Scaling up nature restoration requires well-designed pilot projects which can then be expanded. This report contains examples of best-practice projects that would benefit from continued support to enable scaling up (section 4, p32-33). The implementation of the NRL, Climate Action Plan and Land Use Review require long-term support to enable landowners to implement sustainable land use management.

6. Multi-annual funding

Funding must be sustainable, scalable, ongoing and long-term with continuous monitoring and openly tracked progress. Establish a dedicated Nature Restoration Fund and/or improve the effectiveness of existing biodiversity expenditure through the EU's Multi-Financial Framework. Nature restoration should be mainstreamed through all EU funding programmes. The timeline of just over two years for National Parks & Wildlife Services to deliver on a National Restoration Plan for Ireland requires immediate funding to build capacity and co-create with communities. Locally led EIPs set good examples for results-based schemes (section 4, p32-33) - we need ongoing monitoring, reporting and verification systems built in, as well as prompt and fair financial rewards.

7. Blended funding

A blend of public and private sector funding for nature restoration. Public funding alone is not enough - we need greater access to private resources (e.g. expertise and/or funding). Introduce new fiscal measures e.g. half a percentage onto corporate tax (0.5%) or a levy on profits to be dedicated to nature restoration. Implement cross-party recommendations from the Oireachtas Joint Committee on Environment and Climate Action Report on the Citizens' Assembly Report on Biodiversity Loss, including investigating a Citizens' Green Bond to support investment in nature restoration, conservation and climate-related projects.





Introduction

The Irish Environmental Network (IEN) is a network of environmental Non-Government Organisations (NGOs) that work individually and, as appropriate, jointly to protect and enhance the environment, and to place environmental issues centre stage in Ireland and internationally. The IEN works to promote the interlinked principles of environmental, social and economic sustainability. The Network acts on behalf of its members to secure core and other funding for their activities. It represents the capacity-building and funding needs of its member organisations, all of whom are involved in one way or another in the wellbeing, protection and enhancement of the environment. These individual organisations attempt to achieve these aims through conservation work, raising public awareness and education, advocacy, support and funding distribution to member organisations, conferences, meetings and policy submissions.

Natural Capital Ireland (NCI) is a not-for-profit organisation leading the national conversation on natural capital. Natural capital is an economic metaphor that frames nature's entities and processes as assets or stocks that yield a flow of benefits to people. NCI's mission is to value, protect and restore Ireland's natural capital and ecosystem services, by supporting the adoption of the natural capital approach in public policy and corporate strategy, promoting informed public and private sector decision-making, and assisting in the establishment of natural capital accounting standards.

With the EU Nature Restoration Law (NRL) adopted by the European Council on 17th June 2024, both organisations felt it is timely to grapple with the 'how-tos' of financing the implementation of Ireland's National Restoration Plan (NRP), which is being formulated by Ireland's National Parks and Wildlife Service. The NRL is a patchwork of targets designed to addressed the shortcomings in the existing framework of environmental laws and expand the scope of nature restoration outside of protected areas across farmland, forestry and into the heart of our cities - with a focus on the restoration of peatlands, forests, agricultural and forest ecosystems, reversing the loss of pollinators and restoring free-flowing rivers. Collectively member states must put in place effective and area-based restoration measures with the aim of jointly restoring 20% of degraded land and sea areas by 2030 - and all ecosystems in need of restoration by 2050.



The Government has committed to fulfilling Ireland's obligations set out under the Nature Restoration Law – but there remains a big question, how can we now find the funding necessary to do that and how best to allocate these funds?

Ireland had already committed in the 4th National Biodiversity Action Plan 2023-2030 (NBAP¹) to Objective 2: Meet urgent conservation and restoration needs, including Outcome 2F of objective 2 for an NRP to be put in place to contribute to the ambition of the EU Biodiversity Strategy 2030; and to Objective 3: Secure Nature's Contribution to People, in a context where biodiversity is being negatively impacted by agricultural intensification, development/land use, the legacy of peatland degradation, afforestation and drainage, marine degradation, water pollution, invasive alien species and conflicting policy issues.

The Government has committed to fulfilling Ireland's obligations set out under the Nature Restoration Law – but there remains a big question, how can we now find the funding necessary to do that and how best to allocate these funds?

This project presented the opportunity to bring together a diverse group of subject matter experts from academia, business, environmental NGOs, farming, government departments, and semi-state bodies to workshop high-level recommendations for funding nature restoration. This report details the structure and outcomes of the workshop itself, outlines the themes of the discussion and presents the key considerations and recommendations that emerged from this dialogue.

Section 2 outlines the workshop details and structure with summaries of both expert presentations that were given at the beginning of the workshop. Section 3 outlines the overall high-level recommendations for funding nature restoration in Ireland based on the outputs of each breakout session. Section 4 details the discussions from each breakout session.

¹ Ireland's 4th National Biodiversity Action Plan 2023-2030 (NBAP) https://assets.gov.ie/293802/02ba17a9-fef0-45f2-b0f1-b3ed19ddf358.pdf





Workshop: Funding Nature Restoration in Ireland

NCI developed a workshop to produce high-level recommendations for funding nature restoration within an Irish context. The workshop session was held online on Monday 24th June, 2024 from 10am-1pm and was attended by 31 participants from a variety of disciplines plus a number of NCI and IEN facilitators. See Appendix 1 for a list of contributors.

As participants entered the online workshop, they were asked to input one word that sums up what they considered to be the most pressing issue when it comes to nature restoration. Figure 1 below shows the word cloud based on the responses received.

When it comes to nature restoration, what one word sums up the most pressing issue?



Figure 1. Word cloud (Menti.com) showing responses from participants on the most pressing issues when it comes to nature restoration.

As can be seen in the Word Cloud image, 'engagement', 'political will' and 'funding' were the main concerns of participants. Later discussion was critical of the approach of successive governments to nature restoration which has been inadequate as evidenced by the number of objectives within three previous editions of Ireland's National Biodiversity Action Plans (NBAPS) not yet achieved. However, the 4th NBAP 2023-2030 being placed on a legal footing was welcomed.

Collaboration and community also emerged as key considerations. This was reflected in later discussions around the need for better designed, long-term agrienvironmental schemes that are result-based and locally led and have input from all stakeholders from the outset. Investment is needed to boost Ireland's capacity for successful nature restoration and that funding must be on a secure, longerterm basis to maintain momentum towards goals that are being set by the Nature Restoration Law, our NRP and the Global Biodiversity Framework. 'Information, disinformation, misinformation' also feature as pressing concerns, indicative of the difficulty ensuring the public and policy trends are not swayed from necessary action for nature by vested interests. It highlights the role for investment in education and greater media literacy about the biodiversity crisis and evidencebased transformative action needed to address it.

Expert presentations by Ainle Ní Bhriain, of the National Parks and Wildlife Service & Dr Craig Bullock, University College Dublin, Optimize & WaterLANDS

Ahead of breakout discussions, the workshop hosted two presentations on ongoing work and requirements for nature restoration. The first by Áinle Ní Bhriain, of the National Parks and Wildlife Service (NPWS) and the second by Dr Craig Bullock, University College Dublin, Optimize & WaterLANDS project, both summarised here. You can read more detailed presentation summaries in Appendix 2.

Áinle Ní Bhriain gave an update on her work as Head of the NPWS Business Unit responsible for coordinating the development of an NRP for Ireland in conjunction with their scientific units. NPWS is tasked with putting nature restoration schemes in place, ensuring they are funded and staffed, and stakeholders furnished with the right incentives.

Intensive stakeholder engagement will be crucial from the outset to capture and represent the views and expertise of all stakeholders, including farmers, fishers, foresters, city planners, and developers.



A draft NRP is to be submitted to the European Commission following the date the Nature Restoration Law (NRL) entered force on 18th August 2024. A considerable amount of scientific data collection, collation and analysis must be carried out, which will include emerging information from the Land Use Review². While the Infrastructure, Climate and Nature Fund provides an opportunity to fund measures within the NRL, there is no ring-fenced funding for nature or to resource staff and there will be considerable competition to access this fund. A dedicated EU funding instrument would be desirable but is not currently in the works.

Dr Craig Bullock, environmental and social economist, <u>Optimize</u> consultancy, research fellow, University College Dublin (UCD) and Coordinator of <u>WaterLANDS</u> project, presented his work creating a financial needs assessment for biodiversity.

In 2018, Dr Bullock and Dr Rachel Morrison undertook a National Biodiversity

Expenditure Review supported by NPWS and the Irish Research Council, for
the period 2010-2015, and found that Ireland had only spent a total average of

€250m (just 3% of government expenditure) on biodiversity. This figure had been
decreasing year on year in the period covered. Less than ten percent of this money
came via NPWS, although since then, we have seen small increases under the
current government. There was very little capital spending on nature overall, so
very little restoration was funded and this was mostly by EU Life projects which are
limited in scope and duration.

NPWS subsequently tasked UCD with carrying out a Biodiversity Financial Needs Assessment on how much would be required to reach the targets of the 4th National Biodiversity Action Plan 2023-2030 (NBAP) and international obligations including the EU Biodiversity Strategy 2030. This was delivered in 2021, and updated in 2023 to take account of the draft Nature Restoration Law.

The study estimated the expenditure required for nature restoration in Ireland as follows:

² Land Use Evidence Review Phase 1 Synthesis Report (O'Rourke F, Byrne C, Smith G, 2023) (note that limitations on data meant that 14% land could not be assigned to either category with enough certainty) https://assets.gov.ie/246678/989cae78-87c1-49ab-99d7-7e02192de089.pdf

<u>Table 1: The Biodiversity Financial Needs Assessment, McGuinness, S. and Bullock, C. (2023)</u>

Area of restoration	Current average expenditure	Required annual expenditure
Agri-Environmental	€250m per year	€250m per year (must be results driven)
Schemes		
Peatland restoration	€30m per year	€50m+ per year
Coastal environment	€4m per year	€11m per year
Marine	€9m per year	€24m per year (including naval protection)
Native forests	€8m per year	€14-18m per year on invasive species removal, enhanced
		connectivity & planting
Freshwater	€8.2m per year	€23m per year, or €48m under NRL, monitored by the EPA
Further necessary	New fund	€3.15bn to come from the Government's new Infrastructure, Climate and Nature Fund
supports		minastructure, Omnate and Nature Fund

Workshop breakout sessions

Following the expert presentations, there were three 20-minute sessions with a specific topic to be discussed within a framing of funding/finance. Participants were divided into three breakout rooms per session. Following each session, the floor was open to all to feed back on their discussion. A Miro Board and note-takers were used to record the discussions.

Table 2: Details on workshop structure, participants and topic.

Session	No. Breakout rooms per session	*No. of participants in each room	Topic
Session 1	3	8-10	Barriers to nature restoration in Ireland
Session 2	3	8-10	Considerations for nature restoration planning
Session 3	3	8-10	Scaling up nature restoration in Ireland

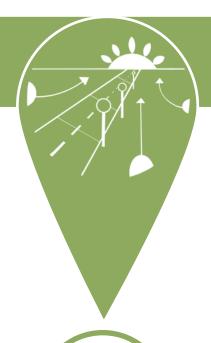
^{*}Number excludes NCI and IEN team members.





High level recommendations for funding nature restoration in Ireland

This section sets out the overall high-level recommendations for funding nature restoration in Ireland based on the outputs of each of the three breakout sessions. For more in-depth details from each session, please go to Section 4.



An Overarching Nature Restoration Plan

Investment in an overarching nature restoration plan

There is a need for an overarching coherent nature restoration plan. It is essential that the NPWS is adequately resourced to deliver on nature restoration.

We need a roadmap for nature restoration. A rapid reform of elements of infrastructure that have failed to deliver in the past is needed, and a robust structure put in place to ensure long-term security for those on the ground who are ready to act now.

This entails long-term and joined-up thinking. Mainstreaming nature-related targets across policy areas will take strong leadership. It is currently not quite clear who is ultimately accountable for Ireland's NRP. "A collegiate approach to inter-departmental research, data and informed knowledge sharing to address

transparency and escalation of nature restoration is overdue."3

We would like the Government to clarify if a single department will have the power to bring other departments together on this issue, for example, the Office of the Taoiseach, which is directly involved in the ongoing Land use Review (Phase 2).

Something to consider is investing in setting up an independent Nature Restoration Agency to oversee implementation of the NRP, with a governance structure integrating local communities within the oversight.



Rebuild Trust

Focusing political will and rebuilding trust in environmental policy and schemes

Political will

A lack of political will and support regarding effective nature restoration and the need to rebuild trust in environmental policies and schemes were themes that came up in each of the sessions, and were also reflected in the Word Cloud, (Section 1, Figure 1).

Accountability

There needs to be accountability for nature restoration. At present, there is a siloed approach in our government and economic systems, despite every aspect of our society being underpinned by nature. Actions for nature within the NBAP and NRL are owned by various departments, some of which lack expert knowledge in the area of biodiversity and restoration and do not consider nature restoration part of their remit.

³ EU Nature Restoration Law Oireachtas Note (Dr Mike Brennan, Senior Parliamentary Researcher, Agriculture and Environmental Science, March 2024) https://data.oireachtas.ie/ie/oireachtas/libraryResearch/2024/2024-03-06_l-rs-note-eu-nature-restoration-law_en.pdf

Interdepartmental approach

Efforts to achieve an all-of-government approach to nature restoration have, in general, failed to date as evidenced by the number of objectives within Ireland's three previous NBAPs that have not yet been achieved. The Department of Housing, Local Government and Heritage (DHLGH) currently has ownership of the NRL, although the Department of Public Expenditure and Department of Finance hold the purse strings for funding.

The NPWS is currently planning the implementation of the Nature Restoration Law in Ireland, but who will ultimately be overseeing the work of the different departments that must implement a variety of actions in tandem for nature restoration to be a success? The NPWS is already overstretched in terms of staffing and much more resourcing will be required to ensure the implementation of the NBAP and NRP succeeds. This needs to be addressed as without investment in the right supports to ensure successful implementation, the NRP is unlikely to be impactful.

Environmental schemes

Uncertainty about whether environmental schemes will last or prove beneficial is linked to the problem of conflicting policy at national and EU level. This issue was raised in each of the workshop sessions. In particular, the lack of trust in environmental schemes. Government has to address the problems with previous and current environmental schemes, particularly agri-environmental initiatives that were often considered unsuccessful due to poor planning and implementation e.g. the failure to tie investment to results-based rather than effort-based measures. There is a lack of joined-up thinking between departments in this area and among those who are designing agri-environmental schemes. The right local engagement is needed from the outset to ensure all stakeholders are confident that the design of projects will work for them.

The Government must fund a review of past and current policy conflicts to learn from mistakes and ensure alignment in the future, particularly when it comes to use of language, designations and definitions which can cause confusion if unclear and unaligned between various schemes and policies. Funding must be linked to positive results.

In addition, investment is needed to fund the enforcement of existing regulations, i.e. EU Habitats Directive, EU Water Framework Directive and EU Birds Directive.

This requires ensuring staffing is resourced to implement enforcement, including ensuring there are sufficient numbers of Biodiversity Officers in each of our local authorities. If we can't enforce existing regulations, how will we implement and enforce the NRL?

Citizens' Assembly on Biodiversity Loss

The Oireachtas Joint Committee on Environment and Climate Action Report⁴ on the examination of the Citizens' Assembly Report on Biodiversity Loss sets out its recommendations, which state that 'rapid and significant investment would be necessary to protect and restore nature for future generations'. The cross-party report provides conclusions and recommendations in a section on funding nature restoration which should be addressed (Recommendations 35-49).

⁴ Joint Committee on Environment and Climate Action published 'Report on the examination of the recommendations of the Citizens' Assembly report on Biodiversity Loss' – 14 Dec 2023, 11:15 – Houses of the Oireachtas. https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_environment_and_climate_action/reports/2023/2023-12-14_report-on-the-examination-of-recommendations-of-the-citizens-assembly-report-on-biodiversity-loss_en.pdf



Mainstream

Biodiversity

Investment in engagement and awareness raising

Mainstreaming biodiversity

An essential step in building awareness is to mainstream biodiversity loss and nature restoration issues, which are not considered mainstream in the media or private sector yet. Climate topics are increasingly front and centre, however biodiversity is not, and we need to embed it in the general public awareness. The message must be clear that the biodiversity loss and climate crises are inextricably linked and need to be addressed together.

We need buy-in from all sectors of society to make nature restoration work. This means putting an end to existing harms, educating the public and private sector about their impacts and dependencies on nature and transitioning to a more sustainable and circular economy.

Media guidelines and training

The media has a big role to play in educating and influencing public perception - and investment in training and guidelines for how the media covers the issues surrounding nature would be a big help in ensuring accurate coverage at the levels required to get the message across. Investment is needed in public campaigns and into support and training in sustainability within the private sector.

The media has a responsibility in communicating on the biodiversity crisis and nature restoration, and must be held accountable for its reporting on nature issues. A charter of media guidelines for reporting on climate and the environment, including the realities of the biodiversity crisis, should be drawn up in collaboration with leading NGOs, and media groups such as Coimisiún na Meán and the Science Media Centre (SMC), which is being piloted for Ireland. It would be useful for RTE, as Ireland's public broadcaster, to lead the way on this issue and commission a major TV show on nature restoration, as well as dedicating more funding to existing TV and radio shows that promote nature topics, particularly within the scope of Children's Programming.



Investment in building capacity and expertise in nature restoration

Practical nature restoration skills

More investment is needed in training, staffing, research and expertise for the coordination of an effective delivery of an NRP. The NPWS are working on the NRP for Ireland but are under-resourced. A large and rapid investment in training and upskilling is needed, including in the short-term to recruit experts from abroad to facilitate rapid training here. In the long-term, there is a need to incorporate education on biodiversity loss and nature restoration within our education system, from primary, secondary, through to third level. A graduate programme in practical nature restoration for ecologists (or other relevant skills), similar to an apprenticeship would be a good long-term action. On-the-ground learning is essential. This will allow students and graduates to consider different paths in their educational journey that they may not have considered before.



The value of ecosystem services is estimated to be at least 8 to 1 in terms of the cost-benefit relationship.5

Rapid capacity building

A dedicated Nature Restoration Agency, or capacity in existing organisations, needs to be built up rapidly with financial investment in staffing, expertise and education.

Table 3 below shows the present value of quantified benefits as set out in the Institute for European Environmental Policy (IEEP) publication relating to the cost of implementation of the Nature Restoration Law⁵.

Table 3: What is the present value of the quantified benefits?⁵

If 90% of ecosystems are	If 80% of ecosystems are	If 70% of ecostsems are
restored	restored	restored
€1,418 billion	€1,260 billion	€1,102 billion

From the 2022 IEEP publication 'How much will the implementation of the Nature Restoration Law costs and how much funding is available?' $\frac{https://ieep.eu/wp-content/uploads/2023/01/4_-Nature-Restoration-Law-and-Funding.pdf}$

Tracking change with Natural Capital Accounting

Funding the development of natural capital accounting in Ireland is called for. Ireland's Central Statistics Office (CSO) set up an Ecosystem Accounts Division⁶ (EAD) in 2020, tasked with developing Irish ecosystem accounts using the UN SEEA-EA⁷ framework. This small team has begun to compile extent and condition accounts and will require further resourcing to develop this work. Natural capital accounting can be implemented at national level and at various scales, including for businesses and farms, with more expertise needed to deliver on the growing demand for natural capital accounts at different scales.

⁶ CSO Ecosystem Accounts Division (EAD) https://www.cso.ie/en/releasesandpublications/in/ea/informationnoteonecosystemaccounting/

⁷ System of Environmental Economic Accounting – Ecosystem Accounting (SEEA-EA) https://seea.un.org/ecosystem-accounting

Data integration

Invest in integrating nature-related data infrastructure in Ireland to facilitate decision-making and disclosure for nature projects and their impacts. See the recommendations from NCI's Data4Nature report⁸ published in 2021.

Measuring and mapping

Invest in mapping to better understand the extent and condition of our ecosystems and to identify priority areas for habitat restoration and reestablishment. Improving this knowledge base would facilitate landowners being accurately rewarded for the restoration and protection of nature. This will require the development of ecosystem maps and land use maps. In addition, investing in an up-to-date National Land Cover Map to set baselines for the NRL should be a priority.

8 NCI Data4Nature Recommendations Report https://www.naturalcapitalireland.com/data4na-ture



Rapid scaling up of best practice nature restoration projects with ongoing long-term supports

Long-term supports

Long-term thinking and long-term funding for projects is vital. Short-term thinking is unfortunately a symptom of changing political cycles but locking in funding to ensure projects continue into the future is the only way to ensure real impact. The implementation of the NRL, Climate Action Plan and Land Use Review⁹ will require long-term supports to enable landowners to implement sustainable land use management. Longer-term supports are available under Forestry Programmes

⁹ Land Use Evidence Review Phase 1 Synthesis Report (O'Rourke F, Byrne C, Smith G, 2023) https://assets.gov.ie/246678/989cae78-87c1-49ab-99d7-7e02192de089.pdf

but agri-environmental schemes are limited to cycles in the Common Agricultural Policy.

Role of state bodies

Although the majority of land in Ireland is privately owned (c. 78%), there is potential to carry out nature restoration on the c. 11% publicly owned land¹⁰, with 9% owned by Coillte and 1% by Bord Na Móna. Given that Coillte and Bord Na Móna are the two largest peatland owners in the State their landholdings also present a strategic opportunity to achieve biodiversity restoration and climate action at a scale and speed that would be difficult to achieve on private land. This is a clear opportunity to achieve results quickly on public land which, in turn, would buy time to develop and roll out ambitious schemes on private land.

A roadmap for action linked to climate action (net zero meets nature positive)

There is also an opportunity for the Climate Action Regional Offices (CARO) to coordinate and support local authorities in implementing regionally appropriate actions for nature that enhance climate resilience.

We need a roadmap to scale up nature restoration which entails developing well-designed pilot projects and expanding those that have already been successful; we need to fund staffing with expertise; ensure we have good communicators on project teams to get the message across; enable collaboration and share the success stories, as well as challenges faced, that will convince others to follow suit. Sharing stories from unsuccessful projects is really important too – we learn from our successes and our failures. Impactful projects that resonate with people and set an example for others should be granted the investment to continue, expand and share learnings on a country-wide scale. A recent publication¹¹ on integrating communities into restoration planning used peatland restoration in Ireland as a case study to support restoration frameworks in other regions.

Figures from the Land Use Analysis. National Land Use Evidence Review Phase 1 Document 03 (Byrne C and Murray T, 2023) https://assets.gov.ie/246674/df01c56f-8b46-48e9-93d7-f51783147205.pdf

¹¹ Charting a course for peatland restoration in Ireland: a case study to support restoration frameworks in other regions. Farrell, C.A., Connolly, J. and Morley, T.R (2024) https://onlinelibrary.wiley.com/doi/10.1111/rec.14216?af=R



Multi-Annual Funding

Sustainable, scalable, ongoing and long-term with continuous monitoring and progress openly tracked

Long-term vision

Nature restoration and conservation requires long-term projects with long-term investment. Lack of long-term projects and continuous funding is a major issue. Funding for nature restoration must be sustainable, scalable, ongoing and long-term. Commitment to nature restoration should not be adversely impacted by the political cycle, which is short-term.

The timeline of over two years for NPWS to deliver on a National Restoration Plan (NRP) for Ireland will require immediate funding, both monetary and in terms of human resources, in order to deliver.

Monitoring, reporting, and verification (MRV)

Many participants highlighted that nature restoration needs ongoing monitoring, reporting, verification, and progress tracking. Data management and mapping is a vital area for monitoring that also needs funding to boost capacity - at present, nature-related data must be drawn from multiple sources, with very little alignment between these disparate sources, which presents a challenge to scaling up nature restoration at the speed required.

Stakeholder mapping is also an essential part of the engagement process, as is going out on the ground to engage with local stakeholders. It takes time and skilled communication. Current staffing levels are insufficient to achieve this.

Locally driven

A focus on results-based locally-led schemes with fair and prompt financial rewards for those tasked with delivery is required, with monitoring built into schemes from the start. It was highlighted that unfortunately certain aspects of the NRL were weakened to be more efforts-based than results-based e.g. Article 4 (1) and Article 5 (1) restoration targets are efforts-based, however, Ireland can lead the way on ensuring a results-based system as the precedent is there. Local European Innovation Partnerships (EIP) have been some of the most successful schemes.



Nature provides us with multiple benefits, or ecosystem services, which we need to assess and value. We invest in and produce detailed accounts of our produced capital, such as our roads and buildings, and our human capital, including our health knowledge and skills. However, we have long underinvested in and undervalued our natural capital.

Financing

There is a need for a dedicated Nature Restoration Fund. The establishment of a Biodiversity and Nature Restoration Fund was one of the recommendations of the recent Oireachtas Joint Committee on Environment and Climate Action Report¹².

There is also a need to improve the effectiveness of existing biodiversity expenditure through the EU's Multi-Financial Framework. Nature restoration should be mainstreamed through all EU funding programmes. For example, an assessment by the European Court of Auditors into the contribution made by the Common Agricultural Policy (CAP) to maintaining and enhancing biodiversity, found that the CAP has failed to halt the decline of farmland biodiversity. The effect of CAP direct payments – 70 % of EU agriculture spending – on farmland biodiversity is limited or unknown. The auditors recommended that the Commission enhances the contribution made to biodiversity by direct payments and rural development action, tracks biodiversity-related expenditure more accurately and develops reliable indicators that are suited to monitoring progress in farmland biodiversity.

The new Infrastructure, Climate and Nature Fund (ICN Fund) was discussed in all sessions. The fact that funds for nature restoration were not ring-fenced within the ICN Fund was of concern, along with the competitive approach to accessing these funds. Ireland has a legal obligation to deliver on nature restoration and as such a ring-fenced Nature Restoration Fund is vital. Ireland is a net contributor to the EU budget and the NRL contains both national and union restoration targets; therefore, a national and EU Nature Restoration Fund may be the best way to ensure that Ireland is contributing to the full implementation of the NRL. Ireland should champion the need for an EU Nature Restoration Fund during the reform of the EU's Multiannual Financial Framework.

There needs to be a swift adjustment to the current policy infrastructure to ensure that nature restoration can be implemented long term - that means irrespective of political changes, shifting policy priorities or economic downturn. We need to find ways to lock in multi-annual and continuous funding in order to restore trust and guarantee the longevity of impactful restoration projects.

¹² Joint Committee on Environment and Climate Action. Report on the examination of recommendations of the Citizens' Assembly on Biodiversity Loss (December 2023) (pg 15, 42) https://citizensassembly.ie/wp-content/uploads/Report-on-Biodiversity-Loss_mid-res.pdf



A blend of public and private sector funding for nature restoration

Many of our experts believe that public funding alone will not be enough for successful nature restoration in Ireland. We need access to private resources (i.e., expertise and/or funding). Funding could be accessed via new fiscal measures, such as a taxation or a levy, both of which will be contentious. The Government should consider putting a half a percentage onto corporate tax (0.5%) or introduce a new levy on profits that can be dedicated to nature restoration.

Ireland holds 'first mover' status on a number of environmental and health issues such as the introduction of the smoking ban and plastic bag tax and, as an English-speaking financial market in the EU, is in a prime position to influence greener business transactions on a broad stage. Ireland also held the first Citizens' Assembly on Biodiversity Loss¹³ and has issued an Oireachtas Joint Committee on Environment and Climate Action Report¹⁴ on its recommendations. Recommendation 47 of that report is for the State to investigate the establishment of a citizens' Green Bond to support investment in nature restoration, conservation and climate related projects, which would have a dual purpose of an educational element about projects being undertaken and a sense of contributing to the funding of nature restoration.

Ireland can be leaders of change by taking bold steps for funding nature restoration.



Joint Committee on Environment and Climate Action. Report on the examination of recommendations of the Citizens' Assembly on Biodiversity Loss (December 2023) https://data.oire-achtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_environment_and_climate_action/reports/2023/2023-12-14_report-on-the-examination-of-recommendations-of-the-citizens-assembly-report-on-biodiversity-loss_en.pdf







Workshop session outputs on funding nature restoration in Ireland

In this section the themes that emerged from the breakout sessions are set out along with the proposed next steps and considerations for funding restoration in Ireland within each theme. The seven high-level recommendations set out in Section 3 were drawn from the outputs of the breakout session discussions.

Session topics

Each session comprised a topic for discussion, a challenger question with the output being next steps and recommendations. There were three breakout rooms in each session with a facilitator and note taker in each. A summary of observations made during the discussion sessions are set out below:



Session 1: Barriers to nature restoration

The aim of Session 1 was to identify and explore the barriers to nature restoration in terms of how it is currently planned, implemented and funded. Below are the key issues raised by the attendees.

Focusing political will and rebuilding trust in environmental policies and schemes

The lack of political will and support regarding effective nature restoration was considered a significant barrier to nature restoration (as reflected in the Word Cloud, Section 1, Figure 1).

It was noted that although the current government has taken a lot of positive actions for nature (including increased resourcing for nature restoration and the NPWS under the Green Party and Minister of State for Nature Malcolm Noonan, with recruiting under way of Biodiversity Officers for every local authority, putting the 4th National Biodiversity Action Plan 2023-2030 on a statutory footing,

backing the Nature Restoration Law in Europe, and setting up the unprecedented €3.15billion Infrastructure, Climate and Nature Fund), funding for biodiversity under previous governments had seen a steady decline. Funding nature restoration should not have to rely on who is in government at any given time.

The need for accountability was highlighted. At present, there is a siloed approach in our government and economic systems, although every aspect of our society is underpinned by nature. Actions for nature within the NBAP and NRL are owned by various departments, some of which lack expert knowledge in the area of biodiversity and restoration and do not consider nature restoration part of their remit.

A lack of trust due to issues with previous and current environmental schemes was identified, particularly agri-environmental initiatives that were often considered unsuccessful due to poor planning and implementation e.g. the failure to tie investment to results-based rather than effort-based measures. This is unfortunately coupled with the spread of misinformation from lobby groups via mainstream media, social media, and now increasingly being echoed or instigated from right-leaning and far-right candidates and politicians here and in Europe.

There is a profound uncertainty that nature projects will last, and that multiannual, long-term funding will be delivered. There is an unfortunate perception of
funding as being merely hand-outs to farmers as the value of the environmental
schemes has not been demonstrated fully for the most part. A lack of certainty and
continuity will lead to stakeholders remaining unwilling to embrace new schemes.

Some of these issues have been exacerbated within the current CAP by delays in
payments and a weakening of the results-based and locally led elements within
flagship agri-environmental schemes. The right engagement is needed from the
outset to ensure stakeholders are confident in the design of projects that will work
for them.

There is a lack of joined-up thinking. The approach to project funding must be geographical in nature, and coherent with a landscape-based approach to nature restoration, as small pockets of successful restoration and individual pilot projects need to be brought together to restore habitats and species at scale. There is currently a lack of connectivity and cohesion in projects. There is a very fragmented approach to agri-environmental schemes at government level, with various departments dealing with various aspects and conflicting rules, which makes it



There is also a need to improve the effectiveness of existing biodiversity expenditure through the EU's Multi-Financial Framework.

Nature restoration should be mainstreamed through all EU funding programmes.



We need to take a multidimensional policy approach to nature-based solutions that ensures varying approaches are taken into account and applied sensibly in conjunction with other policies and schemes. difficult for farmers and fishers to understand what is required of them, and adds onerous paperwork to what is already a heavy workload.

Conflicting policies, often determined by historic industry norms, i.e. Common Agricultural Policy (CAP), forestry, peatlands, have caused problems. One example given by workshop participants highlighted that peatland depths still used in regulation and research (30cm) are a legacy of industrial exploitation, but different depths are, in fact, needed to optimise other ecosystem services (<10cm). It was noted that to reduce greenhouse gas emissions (GHGs) from farmed organic soils, current understanding suggests that the water table may only need to be raised to within 30cm of the surface, but for habitat restoration, the water table may need to be raised to the surface to restore wetland and reinitiate the conditions for carbon sequestration.

One of the biggest issues affecting funding is a conflicting CAP as it makes up one third of the EU budget. We need to take a multi-dimensional policy approach to nature-based solutions that ensures varying approaches are taken into account and applied sensibly in conjunction with other policies and schemes.

In terms of integrated land use and nature restoration, the Land Use Review has so far flagged that there are conflicts on what is possible to achieve. One quote: "Ireland would need to be three times the size to accommodate each desired landscape use." This highlights the extent to which market forces have directed land use over preceding years and that a return to a more diverse and multifunctional approach to land use is needed to ensure that we continue to manage resources within planetary boundaries.

Lack of understanding between sectors could inhibit potential funders e.g. a brewers' understanding of farming. Tradition and culture can also be a barrier to adaptation, collaboration and to providing funding. There is still a lack of willingness to pay for nature on the part of businesses. There is a challenge in articulating the return on investing in nature in a way that everyone can grasp, the return for business being the continuity of their business.



The need for the right type of engagement was expressed by the majority of participants. There are many ways to engage. A number of sub-themes arose relating to engagement, set out below:

Multi-stakeholder engagement from the outset is essential

The need for multi-stakeholder engagement from the opening stages of any project was identified as a vital part of the engagement process. This includes early and sustained engagement with communities, such as farming and fishing communities. It is essential to get people onboard before any restoration project commences. A sense of ownership within communities is vital.

Investment in building expertise in nature restoration

It was highlighted that, in Ireland, there is a lack of ecologists and practitioners in the field of nature restoration to do the necessary work on the scale and at the speed required. Investment in training and upskilling within government departments is called for. A suggestion was made to consider, in the short-term, recruiting experts from abroad to facilitate rapid training here. A more long-term solution is to incorporate education on biodiversity loss and nature restoration within our education system, from primary, secondary, through to third level.

Alignment of data gathering

Good nature-related data and maps are precursors for investment. It was noted that we simply do not currently have the knowledge base to satisfy the requirements for reporting and monitoring of results. The need for larger investment in mapping, monitoring, verification and assessment was highlighted, with particular emphasis on the lack of data on marine restoration.

Standardisation between frameworks and methodologies for nature restoration

Standardisation in biodiversity accounts and metrics was called for. There are too many frameworks and methodologies for assessing and monitoring biodiversity without an agreed definitive standard as yet. These frameworks can be complex and difficult for non-experts to understand.

Building awareness and understanding among the general public and landowners on nature restoration

There is a lack of awareness and understanding among the general public and many landowners of the issues facing us in terms of biodiversity loss and its effects on our societal and economic wellbeing. It took decades to educate the public on the need to tackle greenhouse gas emissions and carbon markets (which are still very divisive, and there is a general lack of trust in such carbon markets). The

success of this campaign is that climate concepts are now in the mainstream. This needs to be replicated for nature. Building awareness of the biodiversity crisis requires an urgent and rapid response, especially among the business community who generally do not consider their impacts and dependencies on nature due to business activities. The private sector must be brought on board rapidly to harness their financial support for nature restoration.

Accessible language and clear definitions

The language used to describe biodiversity and nature restoration should be more accessible. Taking a strictly academic approach to explaining the benefits of nature restoration has its limitations. Clear messaging is very important now - "we need to move hearts and minds" to ensure public buy-in to tackle biodiversity loss on all fronts. Highlighting the co-benefits of ecosystem services from a social and nature perspective is important.

Following on from language used, there is a need to have clear definitions for nature restoration. The EU Commission failed to define some important elements of the Nature Restoration Law articles within their original proposal - for example on rewetting, the difference between 'rehabilitation' and 'restoration' was not clear, although these issues were somewhat resolved in the final regulation. It is important that legal obligations are unambiguous to ensure everyone is on the same page in order to properly assess impacts, share information and replicate success.

There is a role for the media in communicating nature restoration

Elements of the media have pushed a dominant narrative that the NRL is controversial, however the general public are overwhelmingly in favour of nature restoration. (A poll of public attitudes on the Nature Restoration Law, carried out in six Member States whose governments were not supporting the law showed that 75% of citizens supported the law's adoption¹⁵). Our workshop attendees felt that



Link to survey results on citzens' perceptions on nature and biodiversity in the EU https://www.restorenature.eu/File/Citizens-survey-nature-biodiversity-NRL-EU.pdf

the media often ignores the issue of biodiversity loss or amplifies misinformation on climate change and solutions for nature loss. A strong mainstream TV show would be helpful to educate the public on these issues. Unfortunately, we are moving in the wrong direction with environmental programming with existing shows such as RTE's EcoEye no longer funded.

There is also the problem of misinformation and disinformation on nature topics, which is particularly rife on social media. In both social and mainstream media, farmers are often pitted against environmentalists, when ultimately, they should be on the same side, ensuring nature continues to thrive, since without pollinators, clean water, and a healthy society, working a prosperous farm will become untenable.

The vast majority of total national investment in nature conservation is currently allocated to farmers through agri-environmental schemes. These schemes are consistently among the most in demand measures within CAP among farmers and they make a significant socio-economic contribution towards the viability of family farms, particularly among small and marginal farms. It stands to reason that greater investment in nature restoration would disproportionately benefit the farming sector if done correctly.

Funding needs to be sustainable, scalable, ongoing, and long-term

Lack of long-term projects and continuous funding was identified as a major issue. It is an unfortunate fact that political cycles are relatively short but successful nature restoration and conservation requires long-term projects with long-term vision and long-term investment. For example, tackling the issue of sprawling invasive species such as *Rhododendron ponticum*, or deer management to allow native woodland regeneration, needs ongoing work to be successful. The piecemeal approach, often undertaken by volunteers or very small projects, can feel like a losing battle.

There is also an ambitious, but achievable, timeline in terms of the Nature Restoration Law and its targets. Member States have two years to consult and design their NRP with restoration measures to be in place by 2030. Some workshop participants expressed concern that the government's decision not to ringfence a Nature Restoration Fund within the Infrastructure, Climate and Nature Fund meant that there will be challenges in ensuring projects are designed and 'shovel-ready' for funding in this timeframe. However, based on the timeframe outlined

above, there are six years yet to have projects designed and up and running. Some participants considered that the greater issue is in relation to the competitive format that the government has designed to access the ICN Fund rather than ringfencing money for each aspect of the ICN Fund.

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Challenger Question: What does nature restoration success look like?

Participants felt that nature restoration success relates to stewardship, pride and a sense of ownership, where farmers are excited about the thriving nature they see on their land, while also seeing the economic rewards.

It was generally considered that nature restoration success is having stable and resilient ecosystems - good water quality, good carbon sequestration, good ecosystem services for society. We would look beyond the flagship species to encompass the bigger picture on ecosystems, with an integrated approach, strong knowledge base and greater investment in innovation support services. One NRL benefit will see greater emphasis on the connection between land use emission and healthy ecosystems as larger carbon-related projects show successful results - but how do we start to funnel funding to smaller nature projects also?

Lessons learned to date shows us that success will come from starting from a clear knowledge base, with multi-stakeholder engagement from the outset, taking small pilot projects to begin with and then scaling these up rapidly as possible. Ireland is fortunate in that there have been many innovative pilot projects which established best-practice examples of sustainable land use. With the right political will and investment these can be scaled up. An example of this would be European Innovation Partnership Schemes which are focused on rewetting farmed organic soils in the midlands, FarmPEAT & FarmCarbon¹⁶, funded under the Rural Development Programme, 2014-2022 and awarded a budget extension in recognition of their importance on informing policy. Schemes like these need to be scaled up if the government is going to deliver on the existing national targets within the Climate Action Plan. (The Department of Agriculture has announced a

Midlands Carbon Catchment Study, under the Just Transition Fund, expected to replace both EIPs from 2025.¹⁷)

Our participants felt that success depends on sitting down and looking at targets and coming up with a well-thought-out plan for restoration as we have estimates of what needs to be restored. Many of the targets within the Nature Restoration Law are incremental and based on the implementation of existing obligations under the Habitats and Bird Directives. Some targets place an emphasis on restoring Natura 2000 sites up to 2030. These are sites which should already be well understood and are an excellent starting point for restoration interventions. These will demonstrate the co-benefits of restoration for society and farmers to begin with, and the benefits should become self-evident to all stakeholders very soon.

A proposed framework for delivery of nature restoration was outlined by Farrell et αl . (2024) ¹⁸ - the main aspects were:

- → An overarching legally binding national restoration plan that considers all ecosystem types, developed under the EU Nature Restoration Law and Ireland's NBAP commitments (NPWS 2024), will provide the basis for -
 - Focused national restoration plans for specific ecosystem types (such as peatlands), with targets clearly aligned with cross-sectoral ambitions to achieve EU and national climate, water, and biodiversity targets by 2050



¹⁷ Update on EIP https://www.agriland.ie/farming-news/open-call-to-launch-shortly-to-deliver-new-rewetting-project/.

¹⁸ Charting a course for peatland restoration in Ireland: a case study to support restoration frameworks in other regions. Farrell, C.A., Connolly, J. and Morley, T.R (2024) https://onlinelibrary.wiley.com/doi/10.1111/rec.14216?af=R

Based on the best available scientific evidence, with clear oversight and support from respective responsible agencies relating to land uses, climate, water, biodiversity, and Just Transition -

- · With agreed time-bound actions and resourcing,
- · Co-designed with local communities,
- · Integrating local action teams to enable local leadership,
- Embracing flexibility while being adaptive to respond to changes in peatlands and climate over time, as well as -
- Being responsive to changes in people's needs over time.

Concrete examples of successful projects include past Irish EU LIFE projects - these and others across Europe demonstrate that, when properly funded, conservation management can restore the populations of threatened species.

PROJECT BOX 1: Roseate Tern LIFE Project

Since 1989 BirdWatch Ireland and NPWS have worked to conserve and protect Roseate Terns on Rockabill Island, North County Dublin, with wardens carrying out special conservation measures including habitat management and deployment of nest boxes. Rockabill has, at times, supported 85% of Europe's breeding Roseate Terns. There were 180 pairs on the island in 1989 and, since management has been implemented, the population has increased tenfold. This phenomenal growth has led to the emigration of young birds and boosted the recovery of other colonies in Wexford and Northumberland (England) 2021. The project has been nominated for multiple awards at an EU level, reflecting its status as arguably the most successful conservation project in Ireland.





PROJECT BOX 2: Corncrake LIFE Project

eight corncrake catchments across Ireland. It is increasing the breeding population of corncrakes by working with farmers and landowners to improve habitat for the birds within the Special Protection Area network and surrounding farmland. In the past 5 years, the number of corncrakes has increased nationally by 35%.

PROJECT BOX 3: The Burren Programme

Burren Programme (2010-2022) was built on the findings of the BurrenLIFE project (2005-10), one of Ireland's most successful EU LIFE projects. It pioneered an approach to agri-environment schemes which was locally-led, farmer-centered and entailed result- based-payments. Through this approach, farmers decided how they wanted to balance environmental and food production priorities on their farms, with support and advice from a local team. Payments to farmers were based on the quantity (based on area) and quality (based on a field score) of ecosystem services generated, while funding was also made available for 'conservation support actions'. The resultsbased approach was important because it empowered landowners and delivered measurable benefits for nature, while improving value for public investment. The local team worked with farmers since 2005 to co-create this approach and help protect the farmer's way of life and rich natural, built and cultural heritage. The collaboration between farmers and conservationists won the joint 'Best Ever European LIFE project' in 2017 and has gone on to inspire similar conservation initiatives at home and abroad. The programme ended in 2022 and was succeeded by the ACRES Cooperation Project. While this has seen a quadrupling of farmer participants over a wider area, and also includes a local team and result-based payments, it employs a more standardised approach and different payment structures which, along with administrative challenges, have

PROJECT BOX 4: Wild Atlantic Nature LIFE Project

Wild Atlantic Nature LIFE and the European Innovation Partnership projects (EIPs) took a Results-based Payment Scheme approach to incentivising improvements. Measurement of ecosystems is needed to ensure improvements are tracked over time to prove success and encourage greater uptake and buy-in on a larger scale. The Wild Atlantic Nature LIFE team won the 2024 Natura 2000 Award23 in the category 'Working together for nature', for their work with farmers, advisors, NGOs and government. There is a need for a common way of measuring biodiversity with the suggestion of a Wild Atlantic Scorecard.



These examples highlight that, with the political will, proper investment and a delivery model that empowers communities and landowners to be the custodians of their own natural heritage, Ireland can deliver innovative and award-winning approaches to nature conservation. Unfortunately, the duration of financial supports afforded by the EU LIFE project is inadequate to deliver long-term sustainable land-use management and there is as yet no overall Nature Restoration Fund that is dedicated to the long-term recovery of nature across Europe. Progress for these types of projects has not always been linear and even the best grass-roots conservation initiatives are not immune to backsliding and top-down interference.

With regard to urban spaces, with successful nature restoration, 'green space' projects would hold major influence in the public mind, as significant numbers of people can clearly see and feel the benefits of thriving nature up close in a built-up environment, such as the cooling effects, air quality, recreation and health benefits. The majority of people increasingly live in urban environments and it is important to ensure that nature is part of their lives given its proven ability to

improve mental health and quality of life¹⁹. In Ireland, VNiC-Health²⁰ is a Science Foundation Ireland-funded project exploring how to value natural resources in our communities for health and wellbeing, using scientific methods such as heart-rate monitoring to quantify the real effects of green spaces on health. We can see a positive impact from 'Green Prescription' pilots such as NatureRX²¹, engaging the public in preserving local biodiversity while interacting with nature to benefit physical health and mental wellbeing through restorative and artistic practices.

The connection between human health and the environment was raised in the European COPHES project²², linking, among other aspects, food intake and health. This contributed to a new initiative, the Partnership for the Assessment of Risks from Chemicals (PARC²³), of which Ireland's Environmental Protection Agency (EPA) is a grant signatory. In addition, the EPA is funding the Human Biomonitoring Programme for Ireland (HBM4IRE²⁴) study, which will explore the feasibility of setting up a permanent national human biomonitoring programme in Ireland, advancing work across a spectrum of issues related to chemical exposure.

Some other excellent projects to consider:

Hometree²⁵ Wild Atlantic Rainforest project engages public buy-in and partner finance for land regeneration and biodiversity through afforestation, restoration and education, with a core value of stewardship

Raised bogs in the midlands - we are increasingly seeing positive results which will provide valuable information on how to better target areas for

Faculty of Health and Life Sciences, University of Liverpool article on new study that highlights the inequality in green spaces and mental health https://www.liverpool.ac.uk/health-and-life-sciences/news-and-events/articles/new-study-highlights-inequality-in-green-spaces-and-mental-health/2

²⁰ Valuing Natural Capital in Communities for Health (VNiC-Health) Project https://vnic-health.com/

²¹ Irish Times Article 18th August 2018 on Nature RX (www.nature-rx.org) on a lifeline to nature in Dublin City https://www.irishtimes.com/life-and-style/travel/ireland/a-lifeline-to-nature-in-dublin-city-1.3596088

The European COPHES/DEMOCHOPHES project: towards transnational comparability and reliability in human biomonitoring results (Schindler et al. 2013 https://pubmed.ncbi.nlm.nih.gov/24405937/.

Partnership for the Assessment of Risks from Chemicals (PARC) https://www.eea.europa.eu/en/about/who-we-are/projects-and-cooperation-agreements/hbm4eu-parc

²⁴ UCD School of Public Health, Physiotherapy and Sports Science. Human Biomonitoring Programme for Ireland – HBM4IRE study https://www.ucd.ie/phpss/research/institutescentresthemes/occupationalenvironmentalstudies/

Hometree Wild Atlantic Rainforest Project https://www.hometree.ie/

restoration. The INCASE²⁶ project pilot produced a paper on applying Ecosystem Accounting to develop a risk register for peatlands and inform restoration work at catchment scale²⁷.

We can look outside of Europe at successful nature restoration projects also, the example of Costa Rica was offered as one where natural capital is accounted for with good results for nature and the community from its investment in infrastructure with cost-recovery potential and nature-based tourism model²⁸.

Next steps and considerations

Investment in engagement is essential

An openness to meaningful engagement with communities and all stakeholders from the outset is vital from policymakers and academics when developing and implementing all restoration plans. Investment in stakeholder mapping and engagement is crucial.

Investment in education and capacity building

Ireland must build its nature restoration capacity and expertise as quickly as possible with urgent major investment in training and staffing. Restoration methodology requires expertise, and to do it at scale requires the input, labour and expertise of a broad range of experts, including good communicators who can engage and share both the urgency and the opportunities and rewards of actions for nature.

→ Fund multi-disciplinary research in universities while ensuring topics of natural capital accounting and restoration are included in curriculums across a range of subjects, including at primary and secondary level

²⁶ Irish Natural Capital Accounting for Sustainable Environments (INCASE) Project https://www.incaseproject.com/

Applying ecosystem accounting to develop a risk register for peatlands and inform restoration targets at catchment scale: a case study from the EU Region (Farrell et al., 2022) https://onlinelibrary.wiley.com/doi/10.1111/rec.13632

²⁸ Wealth Accounting and the Valuation of Ecosystem Services (WAVES). Natural Capital Accounting and Policy Cost Rica https://www.wavespartnership.org/sites/waves/files/kc/Costa%20Rica%20offer%20doc_FINAL.pdf

PROJECT BOX 5: Cuilcagh-Anierin Uplands Special Area of Conservation Action Site

Funders: WaterLANDS via EU Horizon Green Deal call and Shared Island Initiative

LIFE IP Wild Atlantic Nature runs a programme at the WaterLANDS Action Site to monitor and report on restoration actions on blanket bogs to inform agri-environmental policy payments for positively impacting ecological and hydrological integrity. Also removing invasive species and reducing exposed peat areas.

What made this project work? Farmers were engaged with throughout the process - organisers walked the land with them, identified funding available, discussed threats and pressures, then trained the farmer, who was rewarded for work carried out. Site-level teams and further peer-to-peer learning created a collective consciousness that led to an expansion of restoration success. This SAC is also the site of Cuilcagh Lakelands Geopark, which aims to align conservation and tourism, working towards becoming a Carbon Neutral Destination.

Local councils jointly developed a 10-year plan for cross-border cooperation in managing the site. A sense of connection to the natural environment is fostered through conservation-focused collaborations and cultural partnerships, involving the local community, including schoolchildren. The park aims to align conservation and tourism and is working towards becoming a Carbon Neutral Destination.

https://waterlands.eu/project-sites/life-ip-wild-atlantic-nature/



- → The Natural Capital approach is useful to address many of these common barriers, particularly in demonstrating financial benefits to the business and financial sector it uses a common language that links to economics and can integrate monetary and physical valuations of ecosystem services. The INCASE (Irish Natural Capital Accounting for Sustainable Environments) project report also recommends early and thorough stakeholder engagement, aligning data and policy, and taking a long-term approach to measure changes²9. Monetary valuation can help to demonstrate the value of nature to all stakeholders. Further investment in research and expertise in this area would allow for successfully scaling up the approach to national level (a number of ecosystem accounts are currently being undertaken by the Central Statistics Office (CSO) but it can also be applied at farm scale and within a business context.
- → <u>Cuilcagh-Anierin Uplands SAC</u> (see Project Box 5) has a cross-border 1,000-hectare GeoPark in Co Cavan, managed by NPWS to provide significant benefits for nature and the community. Investment in digital mapping of SACs, linked to educational and cultural heritage projects, enhances learning and connection to nature.

Long-term scalable supports are needed for nature restoration

Investment is vital to deliver on rapid timelines for nature restoration planning and implementation. The forthcoming Phase 2³⁰ Land Use Review will drive longer termthinking, and an understanding that biodiversity recovery and societal wellbeing is interlinked, along with climate and air quality issues. It is necessary to align land use policy across departments and avoid contradictions, with local planning laws for example. The Government must act fast to address existing policy conflicts – it must commission a review of policy issues which have hampered progress to date, in conjunction with stakeholders and align these issues urgently before we go any further. We need to learn from past mistakes and address legacy issues. One example that was highlighted was the issues of payment delays in the ACRES³¹, causing confusion and upset in terms of clashing regulations for farmers, as outlined in an article in Agriland³² in relation to 380 farmers still waiting for interim

²⁹ EPA Research 411, INCASE, 2023 https://www.epa.ie/publications/research/epa-research-2030-reports/research-441.php

³⁰ Phase 2 of Land Use Review press release https://www.gov.ie/en/press-release/90a74-phase-2-of-land-use-review-commences/

³¹ ACRES is Ireland's new agri-environment climate scheme and financed under Ireland's CAP Strategic Plan https://www.gov.ie/en/service/f5a48-agri-climate-rural-environment-scheme-acres/.

³² Article in Agriland dated 18th April 2024 ACRES: Over 380 farmers still waiting for interim payment https://www.agriland.ie/farming-news/acres-over-380-farmers-still-waiting-for-interim-payment/



The economic system exploits nature and does not account for nature

payments under the scheme.

A need to focus on harm reduction

Harm reduction is a necessary early step - we need a strong focus on halting nature degradation in the first place by having a more sustainable, bio-circular economy approach across the board. We must take a sustainable approach in every sector to reduce and avoid further harm, for example an end to the use of horticultural peat. Harmful subsidies from Europe must also be reviewed and financial flows redirected from activities which do not positively impact nature. Proper enforcement of existing regulations would also go a long way to achieving a healthy environment. At the time of publishing this report, a public consultation on review and update of Wildlife Legislation, including Ireland's Wildlife Act was under way.³³

It was also highlighted that shortcomings in the Common Agricultural Policy must be addressed - for example, ensure Pillar 1^{34} (agri-environment schemes) payments / conditionality is adhered to and link these with Payments for Ecosystem Services. Improving the positive impact of the CAP on Nature is all the more pressing given the recent weakening of environmental conditionality.

Private and public sector buy-in on nature restoration is needed

It is essential to boost private sector and public buy-in on nature restoration by investing in good supports for businesses to learn how to act positively for nature. We need solid well-funded education and awareness campaigns which will allow the concepts of businesses dependence and impact on biodiversity to enter into the mainstream thinking. Funding training for the private sector through business support networks such as the Business for Biodiversity Ireland³⁵ Platform and regional Chambers of Commerce Skillnet³⁶ to ensure sustainability topics and the importance of supporting nature restoration are widely understood.

³³ Public consultation on review and update of Wildlife Legislation https://www.gov.ie/en/consultation/on-review-and-update-of-wildlife-legislation/

Common Agricultural Policy (CAP) explained – government website explaining the CAP, including Pillar 1 https://www.gov.ie/en/publication/8ea74-cap-explained/#pillar-1-agri-environment-schemes

³⁵ Business for Biodiversity Ireland Platform https://businessforbiodiversity.ie/

³⁶ Skillnet Ireland Chamber Networks https://chambers.ie/skillnet-networks/



Rebuilding trust in government, environmental policy and schemes

Clear leadership on nature and a healthy democracy is vital – as we've seen the rise of far-right social media agitators, and the issue of divisive, populist political groups and candidates being given a platform. Far right sentiments have proliferated online and even in mainstream media in Ireland and abroad, while funding for environmental NGOs and nature in general is under attack by these 'anti-woke' elements. Politicians and election candidates must be questioned about their stance on environmental issues by the media and the public and that those who maintain a steadfast pro-nature platform are supported and elected to office.



Session 2: Considerations for nature restoration planning

The aim of Session 2 was to discuss considerations for nature restoration planning and issues around funding. Below are the key issues raised by attendees.

Rapid scaling up of best practice restoration projects with ongoing long-term supports in place

Longevity of projects arose again in this session. It highlighted that restoration initiatives and funding need to be long-term and ambition must extend beyond political cycles. Investment in delivering on timelines is essential, which includes building and expanding capacity to deliver.

Restoration at landscape scale is needed

It is essential to plan and implement nature restoration at scale and not just small, fragmented pockets of work carried out here and there.

Private and public buy-in on nature restoration is needed

Statistics from the 2023 Land Use Analysis³⁷ (Phase 1) were highlighted noting the high proportion of privately owned land in Ireland (reported at c. 78%) compared to publicly owned land at c. 11%. It was noted that although there is a lot of scope to

work with private landowners, there is a clear opportunity to achieve results quickly on public land which in turn would buy time to develop and roll out ambitious schemes on private land e.g. rewetting of farmed organic soils.

Investment in engagement is essential

Stakeholder mapping is vital in order to identify the stakeholders that may be impacted (positively or negatively) by any proposed projects or schemes, and to consider how best to work with different groups. Early and ongoing community involvement needed and deep, meaningful engagement is essential to counteract misinformation and mistrust. For this, staffing levels must be boosted and betterfunded.

With regard to the need for ongoing long-term supports, an example was given regarding continuity of care being a key concept in healthcare, suggesting similar continuity of care for nature restoration.

Restoring trust must happen to enable nature restoration. The relationship between rural communities, including farming communities, and those running government environmental schemes must build trust with the farm advisors, farmers and rural organisations, with the relationship being maintained over time.

Fostering collaboration is crucial, given that activities on one person's land may impact their neighbours land or water table - therefore taking a landscape level approach and working together is important. See Project Box 1: "Burren Programme".

Alignment of data gathering

Solid baseline data is needed for rapidly scaling up and showing what is possible.

Accessible language and clear definitions are needed

It was noted that a lot of work needs to be done on definitions, with an example given of definitions for various habitat types - "There are four or five maps of peatlands and organic soils in Ireland and all are different!" Even if terms and concepts only differ on the fringes, that is where conflict will occur - there needs to be agreement early on as to what constitutes a 'good wet heath', what is a 'good' peatland? Definitions need to be aligned before private finance can be a success.

Private and public sector buy-in on nature restoration is essential

It was highlighted that at present the majority of funding for nature in Ireland is from the public purse. Additional funding is needed to plug existing gaps in the supports available. Businesses and private investors need to be engaged and to work towards a nature-positive business model that accounts for nature in decision making and takes steps to understand the impact on nature that their direct operations and value chain (upstream and downstream) may have. Unfortunately, many businesses are still unaware of how dire the situation for nature is and how their business operations depend on healthy functioning biodiversity and ecosystem and the ecosystem services their business benefits from. The introduction of the Corporate Sustainability Reporting Directive (CSRD) will require that certain businesses in the EU (corporates, large organisations, and listed SMEs) will have to report on their impacts and dependencies on nature (including within their value chain). Attention was drawn to the fact that the financial sector has now largely woken up to the need for action in this area, due to regulation such as the Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy. Such organisations would have access to funds that could be invested in best practice nature-based solutions projects.

A suggestion was made to explore the concept of a Nature Bank to facilitate the development of a well-functioning nature investment market in Ireland. Most nature banks are private entities. Below are some examples from the UK and Europe:

- → Natural Habitat Bank³⁸ which is actively engaged in large-scale biodiversity restoration.
- → The UK, an Environment Bank³⁹ provides mechanisms for the private sector to fund nature recovery at landscape scale.
- → The Landbanking Group⁴⁰ which is the first Nature Equity management platform. Its tagline is 'Get nature on your balance sheet and mitigate your climate risk'.

³⁸ Natural Habitat Bank https://www.naturalhabitatbank.co.uk/

³⁹ Environment Bank https://environmentbank.com/discover/about-us/

⁴⁰ The Landbanking Group https://www.thelandbankinggroup.com/



Challenger Question: How do we set targets with shifting baselines?

The need for co-creation with adequately resourced teams is key for sustainable projects. Short timeframes were highlighted as an issue. For example, the Tailte Éireann National Land Cover Map (NLC 2018⁴¹) took 10 years to produce and was already 6 years out of date when it was published in 2023. There is a need for a more up-to-date NLC Map to set baselines for the NRL. Investing in an updated NLC map should be a priority.

In addition, long-term datasets are needed to ensure funding for monitoring and tracking changes over time – the shifting baseline has to be quantified, not just qualitative.

Monitoring nature restoration projects is vital. Under Article 17 of the EU Habitats Directive, each EU member state must report on the conservation status of annex habitats and species every 6 years and submit a National Conservation Assessment for each annex habitat and species. The dataset linked to the Article 17 reporting contains all available digital mapping of the habitats and a baseline of their condition but is not complete. More investment is needed to update and streamline our monitoring systems.

There is room for new approaches to monitoring but such research and implementation must be funded. An example was given of the potential of remote sensing, which is an important tool in expanding our knowledge of the extent and condition of our ecosystems and habitats.

The issue of useability of data was mentioned, with it being highlighted that there is a need to identify and agree on a baseline, and once that is agreed, then projects can be implemented to prevent deterioration of existing baselines. It was further noted how we set a baseline depends on what target we want to reach. It was recommended that Irish experts should link in with international bodies such as



⁴¹ Tailte Éireann National Land Cover Map (NLC 2018) https://www.tailte.ie/en/surveying/products/professional-mapping/national-land-cover-map/

the Biodiversity Credit Alliance⁴² where global discussions on this are taking place, especially as nature credits are on the horizon.

Another example given was the Landscape Finance Lab⁴³ which is independent and not-for-profit. Although landscape finance is an emerging industry, there is great potential to scale up nature capital based investments.

It was noted that a particular strength of the NRL is that it allows member states to tailor their plans to their particular needs. However, the monitoring needs for private finance and public are different, notably that private is more site-specific, and public is likely larger or at a national scale to monitor improvements. For monitoring purposes, it was mentioned that there is an opportunity to utilise stakeholders already working on the ground day-in-day-out who are perfectly primed to observe and record changes. Building trust, collaborating, rewarding farmers and other landowners and demonstrating the win-wins for nature and people is hugely important – these people have the potential to become nature monitors on a daily basis.



The need to invest in a coherent overarching plan was highlighted, with it noted that increased resourcing of the NPWS is urgently required.

Financial rewards on results-based schemes

42

The need for results-based schemes with fair and prompt financial rewards for those tasked with delivery is required, with a suggestion that monitoring be built into schemes from the start. Local European Innovation Partnerships (EIP) have been some of the most successful schemes. See project Box 4 "Wild Atlantic Nature LIFE".

Stakeholder engagement and stakeholder mapping is key

Stakeholder engagement is essential. Involving stakeholders at the outset of projects helps build trust. A suggestion was made that a good starting point would



Biodiversity Credit Alliance https://www.biodiversitycreditalliance.org/

⁴³ Landscape Finance Lab. Incubating and financing sustainable landscapes https://landscape-financelab.org/about-the-lab

be rectifying the current structural and administrative issues that have afflicted past and current programmes. Policy coherence and siloed mentality in current policies needs to be urgently addressed, with the economic bias of policies being an issue.

It was also noted that alignment of definitions is important so that conflicts and ambiguity are avoided between various schemes, policies, and departments. A suggestion was given for a multidisciplinary review, funded by DAFM and NPWS, to ensure specific delineations and terms being used within various restoration schemes are aligned.

Stakeholder mapping was highlighted as the first step in the stakeholder engagement process. Time and funds need to be invested in developing a rigorous stakeholder mapping process which will enable different stakeholders and their needs to be identified and will enable different perspectives to be included. The agri-food industry is a critical sector, however, engagement can be difficult in terms of environmental topics and issues. It is vital to identify engagement strategies to enable environmentalists to work with farmers, advisors, and the industry to protect nature and livelihoods. An example was given of a project that is underway, the Irish Living Lab⁴⁴ whose vision is to 'create a more transparent AKIS⁴⁵ network in Ireland and use data and evidence to show the value of sustainable farming'.

Investment in education and capacity building is required

The need for funding adequate levels of staffing to provide on-the-ground communication that is inclusive of everyone within rural life, beyond the category of farmer, is necessary. This means building robust local teams that are working towards long-term solutions with local farmers and the wider communities and connect with other local teams to share learnings. It is important to have champions - taking a 'block leaders' strategy - engaging first with those with a lot of social influence in the area. The community will more readily listen to a trusted local figure when it comes to their locality and livelihoods. It is important to also work with the farm advisors who can engage with multiple farmers.

The Irish Living Lab https://www.eu4advice.eu/ireland/

⁴⁵ AKIS – Agricultural Knowledge and Innovation System https://eu-cap-network.ec.europa.eu/topics/akis_en

It was also noted that it is important that the EU Commission is well resourced and staffed to be able to support individual member states to implement the NRL.

Alignment with international projects

It is necessary to be aware of the potential to align national projects with international projects when setting targets, as there is potential for nature credits coming on stream, and it was further noted that any such credits would need to be highly regulated.



Session 3: Scaling up nature restoration in Ireland

The aim of Session 3 was to discuss issues around funding the rapid scaling up of nature restoration in Ireland. Below are the key issues raised by attendees:

Current funding for ongoing nature restoration:

The new Infrastructure, Climate & Nature Fund (ICN Fund) for Ireland was announced by the Government in Budget 2024. This is under the Future Ireland Fund and Infrastructure, Climate and Nature Fund Act 2024⁴⁶. The initial contribution to the ICN Fund will be €2bn in 2024 and €2bn each year thereafter until 2030. Under the legislation it will not be possible to draw down the resources of the Fund until 2026. The expenditure of the Climate and Nature element of the ICN Fund is capped at €3.15bn between 2026 and 2030.

⁴⁶ Future Ireland Fund and Infrastructure, Climate and Nature Fund Act 2024 https://www.irishstatutebook.ie/eli/2024/act/16/enacted/en/html

Infrastructure, Climate & Nature Fund (ICN Fund) for Ireland

This fund is ringfenced for capital works so does not cover the kind of long-term payments needed to build staffing capacity and pay staff wages, for example. It is intended to help avoid the need to cut capital spending in future downturns. Its dual purpose is stated to provide 'for countercyclical investment in the economy and to help achieve climate and nature goals'. The Fund is to provide support when 1) there is a significant deterioration in the public finances; and 2) there are projects that can help achieve Ireland's climate and nature goals.

Funding from the ICN Fund will be issued at 20% per annum for restoration projects which equates to €900 million per year from 2026-2030. There is a set of criteria that projects must fall under to be considered, with a list to be drawn up by NPWS (likely by Budget 2025 in October 2024), which will then be sent to the Department of Public Expenditure for consideration mid-2025 (with detailed, costed plans). The Department of the Environment will also input in the process, with projects to be announced for funding by January 1, 2026. Restoration projects must fall under the Water Framework Directive, the Marine Strategy Framework Directive and projects signed off by the Minister under Section 50C of the Wildlife Act.

Any Minister can designate a project where it contributes directly or indirectly to a reduction in greenhouse gases or a range of water quality objectives, the achievement of conservation objectives in respect of birds and natural habitats and the implementation of a plan under the National Biodiversity Action Plan. The environmental criteria which determine the nature of the expenditure are set out in Section 20⁴⁷ of the Act.

In terms of process, the relevant Ministers will engage with the Minister for Public Expenditure, National Development Plan Delivery and Reform (PENDPR) to determine the allocations based on specific projects they present to the Minister for PENDPR. The expenditure will be included as part of the normal expenditure process. The Fund will, once the expenditure is committed, provide the resources to fund such projects based on a report from the Minister for PENDPR in respect of the expenditure incurred.

Future Ireland Fund and Infrastructure, Climate and Nature Fund Act 2024. Designated environmental projects Section 20 https://www.irishstatutebook.ie/eli/2024/act/16/section/20/enacted/en/html

The need for 'shovel-ready' projects so that swift action can be taken under the NRL was mentioned a number of times. On this point, it was noted that this approach has been set by the Government, not the NRL. The lack of a dedicated Nature Restoration Fund at national or EU level to deliver the kinds of certainty around long-term financial supports needed to drive long-term sustainable land use management is a missed opportunity which needs to be addressed.

While the ICN Fund is positive and welcomed, it is not ringfenced for nature or for the longer-term and will not address the EU funding gap which must be filled to deliver action on EU targets, nor does it address the issue that existing EU funds include those which incentivise destruction of biodiversity, as well as wholly unambitious supports to protect biodiversity. A 2020 report⁴⁸ by the European Court of Auditors on biodiversity on farmland reported that CAP contribution has not halted the decline in biodiversity. A 2024 publication⁴⁹ on farmland bird populations reported the adverse impacts of agricultural intensification driven by the CAP continue to override the benefits of conservation measures.

It was mentioned that the National Strategic Plan for Aquaculture 2022-2030 (NSPSA) has built Nature Restoration into its funding measures.

With regard to EU funding, it was noted that there is pressure on for a new dedicated EU fund to be put in place to support the Nature Restoration Law targets but, otherwise, existing funding will need to be sought under schemes such as Horizon Europe, Biodiversa+ and the Just Transition Fund, however such funding is competitive and not guaranteed in the long term.

Ireland is now a net contributor to the EU budget - a national-based approach to restoration via the National Restoration Plan is good for achieving our own particular targets, however some NRL targets are EU level and it is possible that the required action simply will not happen in other countries where most needed. Joined-up thinking extends to collaborating with projects outside of Ireland, finding funding from sources beyond Ireland and sharing learnings with global partners, projects and experts.

⁴⁸ https://www.eca.europa.eu/Lists/ECADocuments/SR20_13/SR_Biodiversity_on_farmland_EN.pdf

Accelerated farmland bird population declines in European countries after their recent EU accession (Reif et al., 2024) https://www.sciencedirect.com/science/article/abs/pii/S0048969724044292?dgcid=coauthor

Multi-stakeholder engagement from the outset

Multi-stakeholder engagement is essential in order to ensure successful nature restoration projects. Engagement at the outset regarding funding availability is needed. Integration of funding is useful to avoid sensitivities around 'double funding' where it is coming from more than one source, potentially with conflicting demands and double the bureaucracy. We must incentivise more farming diversification to deliver better quality food with co-benefits for soil, water, health, nature and society.

How to mobilise the private sector?

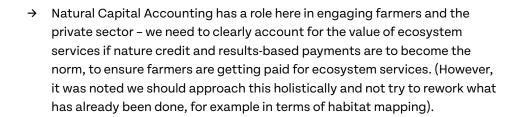
The long-term investment in nature returns can be a precursor to the creation of social and financial gains with complementary roles and income streams e.g. EcoTourism and developing and implementing Nature-based Solutions.

Joined-up thinking in advancing investment includes aligning the remit of the Ireland Strategic Investment Fund (ISIF), which is managed and controlled by the National Treasury Management Agency (NTMA) sovereign development fund. The ISIF Fund is uniquely positioned to make connections and drive innovation across multiple industry players developing and delivering innovative opportunities that might otherwise go unrealised. EU regulation is also creating the right environment for change in the private sector.

- → The CSRD means many businesses are legally obliged to report their environmental impacts, however any action to address impacts would be voluntary. The reporting regulation will allow the public, clients, investors and other companies within the supply chain to make better informed decisions about which companies they do business with, and reputation will be at stake for those not addressing issues head on.
- → With most of the current focus on climate, how can we build nature restoration into existing climate funds and frameworks? For example, via Bundled Nature Credits, including nature and biodiversity with carbon, water, etc. There remain many questions around this approach, and what the benefits and risks may be, some of which are addressed in a recent paper on the theory and practice of 'stacking' and 'bundling' ecosystem goods and services resource paper⁵⁰.

Theory and Practice of 'Stacking' and 'Bundling' Ecosystem Goods and Services: a Resource Paper (von Hase & Cassin, 2018). https://www.forest-trends.org/wp-content/uploads/2018/11/Stacking-Bundling-Resource-Paper-01-11-18.pdf





- → Businesses should be held fully accountable for their damage. Biodiversity Net Gain⁵¹ (BNG) was mentioned, noting that developers in the UK are now legally obliged to deliver a 10% BNG with the aim being that habitats for wildlife are left in a better state than they were before. However there are potential issues with this as many habitats and ecosystems are not replaceable so the likelihood of a better quality natural habitat than there was before development started is difficult to imagine. Reference was made to a briefing paper published in December 2023 by CIEEM Ireland Policy Group on Biodiversity Enhancement (BE) for new developments in Ireland which provides recommendations on the approach to BE for use in Ireland⁵².
- → To build capacity, we must engage with universities on expanding their offerings in terms of nature and ecology courses, including modules on nature and biodiversity within their business and economics and every other relevant discipline, health, tourism, sociology. We need more ecologists and more educators who are up to speed in this field. Business people will need expert help from ecologists to put their biodiversity strategies into action.
- → Training needs may be met via objectives of the International Sustainable Finance Centre of Excellence (ISFCOE) a collaborative, solution-oriented institution that recognises the immense potential for positive change within the world of finance.
- → The concept of the Wellbeing Economy is gaining traction, i.e. Wellbeing Economy Alliance⁵³, a global network pushing for "an economy that serves people and planet". Local authorities here have set up successful collaborative pilots e.g. Wicklow County Council delivered a €75,000 funding boost via the Healthy Ireland Fund (HIF) for locally led schemes to boost community wellbeing with a focus on activities to boost mental health and target health inequality⁵⁴.

⁵¹ Gov.UK Guidance on understanding Biodiversity Net Gain (BNG) https://www.gov.uk/guidance/understanding-biodiversity-net-gain

⁵² CIEEM (Chartered Institute of Ecology and Environmental Management) Briefing Paper Biodiversity Enhancement for New Developments in Ireland. CIEEM Ireland Policy Group https://cieem.net/wp-content/uploads/2023/12/CIEEM-Breifing-Paper-on-Biodiversity-Enhancement-in-Ireland.pdf

⁵³ Wellbeing Economy Alliance https://weall.org/

⁵⁴ Wicklow Count Council Welcomes €17.000 Healthy Ireland Fund Award https://bray.ie/wicklow-county-council-aelcomes-e75000-healthy-ireland-fund-award/



Challenger Question: What are the risks to solely depending on public funding?

A number of risks to solely depending on public funding were highlighted:

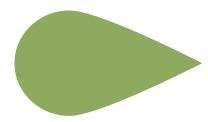
- → Lack of stakeholder engagement, knowledge and trust, a jadedness around public funding
- → Barriers include delays due to poor planning and infrastructure, schemes that are overly complicated, clunky, unresponsive, for example the issues with the ACRES scheme
- → There is a lack of political will and knowledge in this area and not enough money is being allocated by the Government to address these issues
- → The public funding that is in place is not guaranteed, and can be lost due to government and policy changes and other emerging priorities due to socioeconomic events
- → The type of funding available is another issue capital funding, such as the ICN Fund, does not cover staff salaries to boost the capacity needed
- → Schemes are not integrated or long-term enough, and often later fold, leaving many potentially successful projects floundering without continued core funding, so nature restoration success loses momentum or declines yet again
- → The EU can operate at the level of the weakest state, although it is good that the NRL allows for individual state restoration plans.

In regard to private funding, a number of points were made:

The private sector is extracting value and should be contributing more, however, crowding in the private sector space could alleviate the public obligation to fund.

Private funding will bring a sense of urgency that is lacking

Greenwashing and Greenhushing will inevitably be an issue - are existing restoration projects just band aids or PR exercises?



Next steps and considerations

Investment in engagement is essential

Fund urgent engagement: We need to start talking to stakeholders and potential project leaders as soon as possible to formulate a scaling-up strategy, for nature restoration planning and implementation. There is potential to have 'shovel-ready' projects where there are people already working on nature restoration who are eager to do more with the right supports. Businesses also have a responsibility to invest in nature and are often more likely to invest in a specific project.

Projects need to be co-created and co-designed

Good design of projects takes work. Structuring of projects and funding is something to be conscious of from the outset – we need to invest in impact, results based on delivery (Ireland is a relatively wealthy country so funding is not the real issue, it is the current systems that are failing to translate funding to action on the ground).

Private and public sector buy-in on nature restoration is needed

- → A structure for blended funding needs to be in place, such as a nature fund that both government and private stakeholders can pay into. We must look at what other countries are doing as nature markets are going to develop very quickly. A suggestion was put forward to establish a Nature Bank, similar to the Environment Bank.
- → Design policy to encourage business and finance to address and remedy their legacy damage.

The role of private financing in nature restoration

There is still a lot of uncertainty around where private funding could come from. There are risks to accepting private finance, in particular the potential for greenwashing – this is particularly important if a company name and branding is linked to a project. Often investors or organisations want to fund the flagship projects but less glamorous projects may struggle to attract the attention of investors.





A number of other suggestions were made by workshop participants in relation to private funding:

- A Global Agreement on Aviation Fuel Taxation and ringfencing of this tax for nature funding
- Peatlands Finance Ireland is researching financing but all major projects should be working together on this, for example Coillte, Bord Na Móna, and NPWS to share learnings and potentially coordinate finance goals as highlighted in the 2024 publication on charting a course for peatland restoration in Ireland55
- A standard scorecards system, such as biodiversity score cards, needs to be developed further to report on how we are achieving and maintaining our targets
- Further investment is needed to understand how to mobilise the private sector - work is under way at universities such as Trinity College Dublin's 'Business of Nature Positive' a developing module in the Trinity Business School for 2025⁵⁶
- Business for Biodiversity Ireland (BFBI) is working with businesses to develop best practice guidance and it is becoming clear that many businesses want to invest in nature restoration projects. We need increased funding for existing work in this area and more investment in developing similar supports for engaging and educating business leaders, from large corporates to SMEs
- High impact sectors must be at the table to co-design and co-create transition plans to nature positive. BFBI plans to engage with the energy sector to co-design guidance to nature positive energy generation. Businesses can be reached through existing networks such as the BFBI sectoral Community of Practice to educate and get more feedback on the business view
- There is a growing market for green bonds, and perhaps soon more opportunities for biodiversity bonds that would function more like a longterm loan than a one-off Corporate Social Responsibility (CSR) project. The Central Bank of Ireland has published an article on Green Bonds⁵⁷

Green Bonds: A Snapshot of Global Issuance and Irish Securities Holdings https://www. centralbank.ie/statistics/statistical-publications/behind-the-data/green-bonds-a-snapshot-of-global-issuance-and-irish-securities-holdings 53



Charting a course for peatland restoration in Ireland: a case study to support restoration frameworks in other regions (Farrell et al., 2024) https://onlinelibrary.wiley.com/doi/10.1111/rec.14216

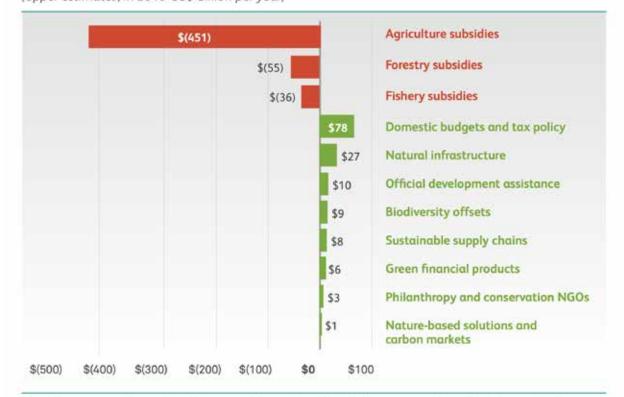
https://businessforbiodiversity.ie/wanted-participants-for-trinitys-business-of-nature-posi-56 tive-module/

- → Build on the Environmental Social Governance (ESG) principle of 'do no significant harm' (DNSH) right across business and farming with regards to nature. These basic principles require an aligned vision in order to build forward, responsibly and positively.
- → We need to find ways to incentivise better food systems as our current systems are unsustainable. This means working with farming communities towards a just transition.
- → Integrated approaches will work best to achieve change at systemic level. This entails bringing people along, which requires long-term ongoing supports. There needs to be a build-up of behavioural change.
- → There is a need to review agricultural subsidies to avoid and reduce harm to nature, and that they are more efficiently administered. Current harmful subsidies should be redirected to prevent further damage.



See Figure 2 which shows harmful subsidies and global financial flows towards biodiversity conservation in 2019.

FIGURE 2. Harmful subsidies and global financial flows towards biodiversity conservation. (upper estimates, in 2019 US\$ billion per year)



Note: The estimates of agricultural, forestry, and fisheries harmful subsidies correspond to OECD's "potential biodiversity harmful" category of production subsidies. This graph excludes the estimated additional US\$ 395–478 billion in fossil fuel production subsidies.

Graph from: Financing Nature: Closing the Global Biodiversity Financing Gap (2020)58

Deutz, A., Heal, G.M., Niu, Rose., Swanson, E., Townshend, T., Li, Z., Delmar, A. Meghji, A., Sethi, S.A., Tobin-de la Puente, J. (2020). FINANCING NATURE: Closing the Global Biodiversity Financing Gap. 10.13140/RG.2.2.26226.32968. https://www.nature.org/content/dam/tnc/nature/en/documents/FINANCINGNATURE_FullReport_091520.pdf



Conclusion

The adoption of the EU Nature Restoration Law by the European Council on 17th June 2024 is an unprecedented step towards restoring Europe's degraded ecosystems. Ireland's commitments to deliver a National Restoration Plan will require immediate investment to resource the development of this plan. The NPWS has been tasked with delivering an NRP and will need to engage with all relevant departments and stakeholders to explore how Ireland will deliver on its obligations. As such, the NPWS needs an immediate boost in resourcing from the Government.

We have some excellent examples outlined in this document of best-practice projects that we can scale up and implement on a national level.

We have learned that there is a greater chance of delivering a robust National Restoration Plan if key elements are co-created with local stakeholders, coming together in the age-old concept of a *meitheal*, a co-operative group with a common purpose. We need clear thinking and an inter-departmental approach to develop a roadmap on how we can implement, monitor and track progress on nature restoration. We must ensure that lessons are learned by reforming elements of policies that have not worked in the past. This can only be achieved by bringing people together. We need to look beyond what is possible in the short-term and set up our system for ongoing success in the battle against biodiversity loss.



Ní neart go cur le chéile

(There is no strength without unity)



Appendices

Appendix 1: List of participants/organisations

Participants list

NB: The contents of this document are informed by contributions from our workshop discussion participants as compiled and presented by IEN and NCI. However, every opinion collated within this report does not necessarily represent the individual views of each workshop participant or that of their organisation.

Organisation	Name
An Taisce	Elaine McGoff
Bord lascaigh Mhara	Grainne Devine
Bord na Móna	David Mc Nicholas
Burrenbeo Trust / Consultant	Brendan Dunford
Business for Biodiversity Ireland	Lucy Gaffney
Central Statistics Office	Nova Sharkey
Clarke Engineering / Scottish Forestry	William Clark
Community Wetlands Forum	Micheal O'Callaghan
Department of Agriculture Food and the Marine	Patrick Barrett
Dublin City University	Jimmy O'Keeffe
Fair Seas	Donal Griffin
Feasta / IEN	Caroline Whyte
Hometree	Ray Ó Foglú
Irish Environmental Network	Fintan Kelly
Irish Environmental Network	Aoife Ní Lochlainn
National Parks and Wildlife Service	Jenni Roche
National Parks and Wildlife Service	Áinle Ní Bhriain
National Parks and Wildlife Service	David Fenner
National Parks and Wildlife Service	Deirdre Lynn
Irish Peatland Conservation Council	Tristram Whyte

Organisation	Name
Natural Capital Ireland	Emer Ní Dhúill
Natural Capital Ireland	Fiona Smith
Natural Capital Ireland	Jimmy O'Keeffe
Natural Capital Ireland / Trinity College Dublin	Catherine Farrell
Natural Capital Ireland	Deirdre Lane
Natural Capital Ireland	Martina Von Richter
Teagasc	Stuart Green
Trinity College Dublin	Cian White
Trinity College Dublin	Orlaith Delargy
University College Cork	Noreen Byrne (UCC)
University College Dublin / Optimize / Waterlands	Craig Bullock
University College Dublin	Sarah Nolan
University College Dublin	Mark Scott
Wetland Surveys Ireland	Paddy Crushell
Wild Atlantic Way LIFE	Gary Goggins

Appendix 2: Summary presentations

Summary presentation by Áinle Ní Bhriain, of the National Parks and Wildlife Service

Áinle Ní Bhriain, of the National Parks and Wildlife Service (NPWS), Head of the Business Unit for coordinating the development of a Nature Restoration Plan (NRP) for Ireland, presented on the EU Nature Restoration Law (NRL) and the work under way to develop the NRP in accordance with the articles laid out in the law. She was appointed to collaborate on the Plan with NPWS scientific units in 2022 after the NRL was first proposed by the European Commission and was present in the European Parliament in Luxembourg on June 17, 2024, the day the NRL finally passed after a long series of negotiations. A number of voting stages took place over several months in a climate of often negative publicity and online misinformation, which meant that, even up to the last moment, getting the NRL over the line was far from "a foregone conclusion."

The wording of the Nature Restoration Law requires member states to contribute to the "continuous, long-term, sustained restoration of biodiverse, resilient nature" across the EU's land and sea areas through the recovery of ecosystems and requires each member state to draw up its own plan to achieve this. Ireland's NRP as currently being devised by the NPWS is broken into three key areas: 1. Land 2. Sea 3. City and Towns

Seven discrete ecosystems are listed in the NRL document but none of the articles relating to them is a truly a standalone as all impact the others to some extent:

- Article 4¹: Includes restoration of terrestrial ecosystems. Certain terms used here are defined in pre-existing EU legislation via the EU Habitats Directive². Articles 4 & 5 of the nature restoration regulation include defined targets and timelines with a requirement to put in place for restoration measures that are necessary to improve areas of habitats which are not in good condition, covering at least 30% of such habitats by 2030.
- Article 5: Restoration of marine ecosystems. Ireland has a particular challenge regarding our almost 500km2³ marine area. The Baltic States inserted a point on renewable energy into the NRL which, while it does not specify offshore activity, balancing marine conservation and off-shore renewables will require a sustainable approach to marine spatial planning.

Regulation on Nature Restoration, Article 4 – Restoration of terrestrial, coastal and freshwater ecosystems

² EU Habitats Directive - Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

³ Regulation on Nature Restoration, Article 9 - Restoration of the natural connectivity of rivers and natural functions of the related floodplains

- Article 8: Restoration of urban ecosystems. For the first time Ireland will be required to increase green space and the
 overall tree canopy with climate-focused actions to decrease temperature and allow for flood mitigation. NPWS plans
 to create diverse and connected green spaces to ensure continuous wildlife corridors.
- Article 9: Restoration of river ecosystems. The target is for 25,000km of free-flowing rivers by 2030. While no specific quota is given for Ireland, we must contribute towards this target. The plan will entail the removal of artificial barriers in rivers and restoration of flood plains, to enable flood mitigation and develop the biosystem as a carbon store.
- Article 10: Restoration of pollinator populations. We must reverse the decline of our pollinators, we must measure this and show an increasing trend for pollinating insects.
- Article 11: Restoration of agricultural ecosystems. This is the most debated area of the NRL. The majority of Ireland's land is agricultural, and restoration, including rewetting is on the cards. However, the amount of rewetting stipulated is relatively small compared to national targets and allows for rewetting to be carried out on Bord na Móna and State lands to cover Ireland's targets. The article absolves farmers from obligation. Action to rewet must be voluntary and incentivised by the State.
- Article 12: Restoration of forest ecosystems. No quota is given for Ireland for restoration of forest ecosystems, but the
 NRL direction is that forest ecosystems should achieve an upward trend for native broadleaf woodland and indicators
 of biodiversity within forest ecosystems. However, Ireland is predominantly made up of single-species forestry. NPWS
 are looking at ways to increase native species without being detrimental to the forestry industry.
- · Article 13 seeks to plant 3 billion additional trees across the Union, and Ireland will be contributing to that target.

Key asks for the Nature Restoration Plan:

- · Specify how targets are to be delivered by 2030, 2040 and 2050 (with interim reviews).
- · Quantify and map areas to be restored to identify the baseline for extent and condition of these.
- Describe restoration measures in place and how targets will be reached.
- · Outline timescales, monitoring requirements, financing needs.

Intensive stakeholder engagement will be crucial from the outset to capture and represent the views and expertise of all stakeholders, including farmers, fishers, foresters, city planners, and developers. NPWS is tasked with putting the schemes in place, ensuring they are funded and staffed, and that stakeholders are furnished with the right incentives.

Practical challenges:

A draft NRP is to be submitted to the Commission 24 months following the date the nature restoration regulation enters into force. This includes quantification of targets and measures within the plan itself to ensure delivery of targets. This is an ambitious timeframe.

There will need to be a considerable amount of scientific data collection, collation and analysis carried out, which will include emerging information from the Land Use Review.

The requirements for consultation and engagement are considerable. The resources required for preparing, implementing and monitoring the NRP are not currently in place. While the Infrastructure Climate and Nature Fund provides an opportunity to fund measures within the NRL, there is no ringfenced funding for nature and there will be competition between departments to access this fund. A dedicated EU funding instrument is not foreseen at this time.

Summary Presentation by Dr Craig Bullock, University College Dublin, Optimize & WaterLANDS

Dr Craig Bullock, environmental and social economist, <u>Optimize</u> consultancy, and Coordinator of the <u>WaterLANDS</u> project at University College Dublin (UCD), presented on the financial needs assessment for biodiversity.

National Biodiversity Expenditure Review

In 2018, his team undertook a National Biodiversity Expenditure Review supported by NPWS and the Irish Research Council, which covered the period 2010-2015, and found that Ireland only spent a total average of €250m (just 3% of government expenditure). This figure had been decreasing year on year. Ten per cent or less of this money came via NPWS, although we have since seen small increases under the current government. Some of this money came in response to EU match funding, with 74 per cent through agricultural policy, with the co-benefit of supporting farming incomes.

Although there has been some good news within and following the period in question, including Bord na Móna moving from commercial peat extraction and site rehabilitation, most reviews of the funded agri-environmental schemes have not shown great effectiveness in boosting biodiversity. In this period, there was very little capital spend on nature overall, so very little restoration was funded and this mostly by EU Life projects which are limited in scope and duration.

Biodiversity Financial Needs Assessment

NPWS tasked UCD with carrying out a Biodiversity Financial Needs Assessment on how much would be required to reach the targets of the 4th National Biodiversity Action Plan 2023-2030⁴ (NBAP) and international obligations including the EU

Biodiversity Strategy 2030. The Biodiversity Financial Needs Assessment was delivered in 2021, and updated in 2023 to take account of the draft Nature Restoration Law.

The NRL requires member states to restore 20% of degraded land and sea areas by 2030 - and all of it by 2050 - with the focus on peatlands, forests, agricultural systems, reversing the loss of pollinators and restoring our rivers to free-flowing status.

Ireland is already committed in the NBAP to Objective 2: Meet urgent conservation and restoration needs, including Outcome 2F of objective 2 for a NRP to be put in place to contribute to the ambition of the EU Biodiversity Strategy 2030; and to Objective 3: Secure Nature's Contribution to People in a context where biodiversity is under severe pressure from:

- Agricultural intensification, development/land use, legacy of peatland degradation, afforestation and drainage,
 marine degradation, water pollution, invasive alien species, conflicting policies
- · 85% of habitats monitored under the EU Habitats Directive are inadequate or bad status
- · 30% of species monitored under the EU Habitats Directive are unfavourable or bad conservation status
- Countless barriers to rivers (EPA funded <u>Reconnect</u> project was working on this but only a small number of barriers have been removed each year to date)
- Only 133,000 ha of native forest remaining, small isolated plots, and much threatened by invasive species, deer browsing and disease
- Natura sites already cover 13% land area, (below the EU average 18.6%) but most sites lack site specific conservation objectives and management plans.

With Ecosystem Accounting/Natural Capital Accounting we can estimate the value of ecosystems services in monetary terms – and there are major economic benefits from ensuring their continuing good condition:

Provisioning services:

- · Soil fertility (soil biota) and food, timber and fibre supply
- · Direct capture fisheries and natural products

Regulating services:

- Pollination
- · Supplies of clean water (natural storage minimising bacterial contamination)
- Moderation of run-off and flood mitigation (vegetation: forests, hedgerows, peatlands and other wetlands in particular)
- · Moderation of coastal erosion and storm damage (dunes, saltmarsh)
- Mitigation of soil erosion (ground cover, roots and soil biomass)
- · Natural pest control
- · Carbon storage and sequestration (especially peatlands and forest)

Cultural services

- Social wellbeing and mental health
- · Physical health through recreation
- Social-ecological relationships and cultural associations.

NRL expenditure will largely be determined by our large area of peatland and small area of remaining native forest. Coastal and marine areas are potentially under-protected as their status has hitherto been considered to be better but efforts to protect and maintain this good status are needed along with policies to restore fish stocks.

Dr Bullock's study estimated the expenditure required for nature restoration:

Current spend of c.€250m/yr on Agri-Environmental Schemes, must be results driven

- Raise peatland expenditure from €30m/yr to over €50m/yr. In the short-term, 10-20 years, restoration targets can be achieved largely via Bord na Mona, horticultural lands and forested peatlands (Much greater ambition however will be needed to achieve targets linked to national climate and land use policy)
- · Raise expenditure on the coastal environment from c€4m per year to €11m
- · Raise expenditure on the marine environment from c€9m per year to €24 including Naval protection of new MPAs
- Native forests raise spending from c€8m per year to €16m/yr. (Some areas are very degraded and would cost this
 much alone to begin removing invasive species. Could be benefits in terms of ensuring connectivity and new planting)
- · Freshwater from €8m per year to at least €23m/yr, or €48m under the NRL
- · Supports of €3.15bn to come from the new Infrastructure, Climate and Nature Fund

Dr Bullock made the following suggestions for improving the situation on restoration in Ireland.

- Stakeholder engagement needs to be better to bring fishers and farmers into the plan. Competing policies on agriculture and food production need to be aligned to allow for more rapid scaling up of pilot projects.
- Harm reduction is a priority, for example in the marine, we have allowed stocks to be overfished, and damage accrued to marine habitats, for example by bottom dredging.
- Water should be a policy priority as we are seeing only localised improvement and must spend a lot to treat it for human consumption.
- Deer management needs direct intervention to allow natural forest restoration as well as implementation of existing legislation on turf-cutting.

We are already seeing some positives in the private sector:

The CSRD will see companies required to report their nature related impacts annually.

A lot of companies are keen to invest in peatlands and forestry schemes. Coillte Nature and the Nature Trust are encouraging corporates to invest in native species restoration.

We are now seeing much interest and some bespoke investment with large software companies investing in water or carbon credits by restoring peatland. The carbon price is still rather low for voluntary offsetting, although there could be opportunities to bundle carbon credits with biodiversity, water and social outcomes linked to CSR and the CSRD.

Peatland Finance Ireland is encouraging corporations to invest in peatland restoration – Ireland is leading the way in developing a Peatland Standard which will help to provide assurance for investors and help deliver tangible results.

Carbon removals regulation is coming down the line from the European Commission – farmers are sensing an opportunity to farm carbon but it's still in early stages. Support for equity investments in Nature-based solutions are becoming available from the European Investment Bank.

Biodiversity Net Gain legislation in the UK is in place for planning and development – for example adding 10 per cent for nature – the legislation has potential, despite some criticism of its effectiveness.

Business For Biodiversity initiatives are engaging businesses and they are realising their liability and dependence on ecosystem services – a recent KPMG Ireland report demonstrated the risk to inputs and also of reputational damage due to mismanagement. BFBI is attracting a lot of interest from companies who are now coming together to discuss solutions.

We had €250 million continuous spend through agri-environmental schemes and little to show for it so far. It is likely that more locally-led schemes based on long-term engagement are needed to show results. Dr Bullock concluded that Ireland could achieve more through a results-driven system, granting stakeholders including farmers more input and flexibility on what they can do to determine how best to use their land for maximum results for nature.

He also stressed the importance that we get the message of the EU Nature Restoration Law out there, given that in the recent EU Parliamentary elections we have seen a shift to popularism and the right including resistance to nature restoration policy.

Dr Bullock stressed that these are just preliminary estimates – and will need to be updated as they are already a year old.

Appendix 3: List of projects

NB: The contents of this document are informed by contributions from our workshop discussion participants as compiled and presented by IEN and NCI. However every opinion collated within this report does not necessarily represent the individual views of each workshop participant or that of their organisation.

List of Projects

A list of past and present nature restoration projects is available on the Natural Capital Ireland site, and more environmental projects can be found on the Irish Environmental Network site.

See www.naturalcapitalireland.com/restoration-project-list & https://ien.ie











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