
Annual Review 2025

# Biodiversity

# Annual Review 2025: Biodiversity

Submitted to the Minister for Climate, Energy and the Environment on 13 October 2025

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## Summary for All

### Key observations

Climate change poses significant risks to biodiversity and ecosystem services. While actions to conserve and restore biodiversity generally benefit climate goals, the Council recognises that trade-offs can occur. In this Review, the Council stresses the urgent need for strengthened planning mechanisms, adequate financial support, and skills development to conserve and restore biodiversity and accelerate the use of nature-based solutions across sectors.

Progress in expanding protected areas remains too slow and priority habitats continue to be degraded, impairing ecosystem services. The Council welcomes the establishment of an independent advisory committee and related working groups for the development of the National Nature Restoration Plan but underscores the importance of adequate consultations with communities and landowners to ensure its successful design and implementation. Limited resourcing for biodiversity and nature-based solutions across Government remains a serious concern. Given Ireland's estimated €700 million annual biodiversity investment gap, the Council is disappointed by the Government's inaction in prioritising a dedicated allocation for biodiversity conservation and restoration measures in the Infrastructure, Climate and Nature Fund.

Biodiversity-related skills shortages threaten progress on climate targets, notably peatland restoration and renewable offshore energy. Knowledge gaps on climate change impacts across habitats and species, including invasive alien species, remain a significant barrier to effective adaptation measures that build ecosystem resilience and deliver co-benefits for human health and wellbeing.

### Key recommendations

#### Strengthening regulations

1. The Government should urgently develop a specific regulation requiring planning authorities to ensure no net loss of biodiversity and that nature-based solutions are incorporated into all future developments.

#### Improving incentives

2. The Government should ensure continuity of the current agri-environment schemes and timely payments, while also establishing a longer-term programme that incentivises and rewards farmers for delivering ambitious, results-based measures that reduce emissions, build resilience and enhance biodiversity and ecosystem services.
3. As part of the mid-term review of the Forestry Programme 2023–2027, the Government should strengthen incentives for and remove barriers to the Native Tree Area Scheme to encourage the planting of small native woodland pocket forests of 0.1–1 hectare to help meet afforestation targets, enhance biodiversity and protect watercourses.

#### Establishing targets and monitoring progress

4. Government departments and semi-state agencies should coordinate with each other in setting targets for peatland restoration for 2030, 2040 and 2050, and expand restoration and conservation measures within and outside protected areas. Targets should be included in the Climate Action Plan 2026 and be subject to annual progress reporting.

# Abbreviations

| | |
|---|---|
| ACRES | Agri-Climate Rural Environment Scheme |
| CSO | Central Statistics Office |
| DAFM | Department of Agriculture, Food and the Marine |
| DCEE | Department of Climate, Energy and the Environment |
| DHLGH | Department of Housing, Local Government and Heritage |
| EIA | environmental impact assessment |
| EPA | Environmental Protection Agency |
| IROPI | imperative reasons of overriding public interest |
| NBAP | National Biodiversity Action Plan |
| NBS | nature-based solutions |
| NCA | natural capital accounting |
| NHA | Natural Heritage Area |
| NPWS | National Parks and Wildlife Service |
| NRP | National Restoration Plan |
| SAC | Special Area of Conservation |
| SPA | Special Protection Area |

# Contents

## Key observations

- The Council is concerned by the significant risks to biodiversity and ecosystem services posed by climate change, as well as the potential for biodiversity loss to have cascading impacts on other systems, as outlined in the recently published National Climate Change Risk Assessment. Strengthened planning mechanisms are needed to prevent further loss of biodiversity and promote the use of nature-based solutions.
- The Council welcomes the establishment of the Independent Advisory Committee on Nature Restoration, leaders' forums and working groups on land, the marine and finance to develop Ireland's National Restoration Plan. The Council repeats its call for ambition, adequate consultation of communities and landowners, and the necessary financial support and skills resourcing for the implementation of the National Restoration Plan.
- The Council is disappointed by the Government's inaction in ringfencing financing for biodiversity conservation and restoration in allocations made under the Infrastructure, Climate and Nature Fund. This is a missed opportunity to prioritise the substantial existing gap in financing for biodiversity conservation and restoration and to accelerate the use of nature-based solutions in different sectors.
- The Council continues to be concerned about the limited human resources capacity within the National Parks and Wildlife Service (NPWS) and across Government departments, agencies and local authorities to coordinate and upscale biodiversity conservation and restoration initiatives. This manifests itself in delayed implementation of key biodiversity- and climate-related policy actions.
- Ireland continues to fall short of its international biodiversity protection commitments, with only 14.4% of terrestrial areas and just under 10% of marine areas under formal protection. This is far short of the target of at least 30% by 2030 agreed under the Kunming–Montreal Global Biodiversity Framework. The Council is disappointed that legislation for Marine Protected Areas continues to be delayed, which is jeopardising Ireland's ability to meet its 2030 targets and offshore renewable energy goals.
- Priority ecosystems continue to be degraded and their ability to provide ecosystem services impaired. It is estimated that only 25% of Ireland's peatlands are healthy enough to provide ecosystem services, and restoration efforts need to be scaled up, particularly for blanket bogs.
- There continues to be limited understanding of the impacts of climate change on a range of habitats and species, including alien invasive species. This is a significant barrier to the implementation of potential adaptation measures to address these impacts.
- The Council is extremely concerned that specialist biodiversity-related skills shortages are causing delays in the achievement of climate targets in both the rehabilitation and restoration of peatlands and the expansion of offshore renewable energy. There is potential for these delays to worsen as the pipeline of investment in renewable energy and restoration projects increases.

## Key recommendations

1. The Council calls on the Department of Housing, Local Government and Heritage to urgently develop a specific regulation requiring planning authorities to give effect to the principle of no net loss of biodiversity within their plan-making functions and to require developers to incorporate nature-based solutions in all future developments.
2. The Department of Agriculture, Food and the Marine (DAFM) should ensure continuity of existing agri-environment schemes and develop a longer-term programme to incentivise and fairly reward farmers for targeted and ambitious results-based measures that deliver positive outcomes for climate action (adaptation and mitigation) and enhance biodiversity and ecosystem services. Ensuring timely payments is essential to maintain trust and confidence in agri-environment schemes.
3. As part of the mid-term review of the Forestry Programme 2023–2027, DAFM should further incentivise and remove barriers to the uptake of the Native Tree Area Scheme. This would support farmers and landowners to plant small areas (0.1–1 ha) of native woodland pocket forests on farmland to help meet afforestation targets, enhance biodiversity and protect watercourses.
4. NPWS, DAFM, Coillte and Bord na Móna should coordinate with each other in setting targets for peatland restoration efforts out to 2030, 2040 and 2050, and develop an expanded programme of conservation and restoration measures both within and outside protected areas. These targets should be included in the Climate Action Plan 2026, and progress towards achieving these targets should be reported annually through the Climate Action Plan process.
5. NPWS should ensure that a dedicated and funded research programme is established and implemented through the Biodiversity Sectoral Adaptation Plan to better understand the impacts of climate change on priority habitats and species, including invasive alien species.
6. The Department of Housing, Local Government and Heritage and the Department of Public Expenditure, National Development Plan Delivery and Reform should ensure that budgetary and staffing increases for NPWS are sustained so that it can effectively coordinate and implement key policies and plans at the interface of climate and biodiversity. The Council further recommends that the Government carry out an urgent assessment of biodiversity capacity across the public service to strengthen the whole-of-government response to the biodiversity crisis and increase coordination with climate action governance structures within departments, agencies and local authorities.
7. The Council urges NPWS to ensure the delivery of the National Invasive Species Management Plan before the end of 2025, and to include targeted actions to map the distribution of invasive alien species of national concern, conduct climate risk assessments for priority species, and strengthen overall detection and surveillance measures for invasive alien species.

8. The Government should include specialised skills for biodiversity-related professions in the Critical Skills Occupations List to avoid delays in the achievement of climate action targets, including targets related to offshore renewable energy, as well as initiatives to restore priority degraded habitats such as peatlands, salt marshes and seagrass beds. It should establish a dedicated programme to develop and maintain these skills on a sustained basis in Ireland.

## 1. Introduction

Biodiversity loss and climate change were both declared a national emergency in Ireland in 2019, and the National Climate Objective commits Ireland to pursuing and achieving the transition to a climate-resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy by no later than 2050. This objective highlights the need to address the biodiversity and climate change emergency in an integrated manner. Biodiversity is defined as the variability among living organisms from all sources and includes diversity within species, between species and of ecosystems.[1] Recent international research has highlighted the need for policymakers to ensure that climate policies support the health of ecosystems[2] and that interventions to conserve biodiversity generally aid the attainment of climate goals,[3] including enhanced climate resilience.

Ongoing declines in biodiversity and nature continue to observed and the overall assessment for nature continues to be very poor.[4] Biodiversity and ecosystem services[a] are further identified as a system vulnerable to climate change in the recently completed National Climate Change Risk Assessment, with 17 risks identified and 10 deemed significant.[5] These risks also have high potential for cascading impacts and need to be urgently addressed. Moreover, trade-offs between biodiversity and climate goals have been observed where there is competition for resources and in areas such as the mining of rare earth metals needed for electric vehicles, locating renewable energy infrastructure in ecologically sensitive areas, and afforestation for carbon sequestration in inappropriate areas.[6] These trade-offs need to be considered and actively managed to ensure the best possible outcomes for both biodiversity and climate.

2025 is a critical year for the conservation and restoration of biodiversity in Ireland. It marks the first year of implementation of the 4th National Biodiversity Action Plan (NBAP), which introduced a new public sector duty on biodiversity and requires public bodies to integrate biodiversity into their plans, policies and programmes. Consultations and work to formulate the National Restoration Plan (NRP) under the EU Nature Restoration Regulation have also been ongoing in 2025 and the Biodiversity Sectoral Adaptation Plan is due to be completed by Q4 of 2025. Local authority biodiversity officers are also working on the development of local authority biodiversity action plans, which are due for completion by 2026. These plans present an opportunity for a more transformative, whole-of-government approach to addressing climate risks to biodiversity and to enhance the role of biodiversity in sequestering carbon, reducing greenhouse gas emissions and increasing resilience to extreme events and climate change impacts.

The integration of natural capital accounting[b] (NCA) and ecosystem services across sectors, organisations and funding schemes has a key role to play in improving decision-making for the delivery of climate and biodiversity benefits. The integration of natural capital accounts into national accounting will make visible the economic cost of continuing to degrade nature and can inform new

**a** Ecosystem services were first defined in the Millennium Ecosystem Assessment of 2005 and are the benefits people obtain from ecosystems, including provisioning services (e.g. food, water, timber and fibre), regulating services (affecting climate, floods, disease, wastes and water quality), cultural benefits (e.g. recreational, aesthetic and spiritual benefits) and supporting services such as soil formation, photosynthesis and nutrient cycling. Healthy biodiversity is regarded as a prerequisite underpinning each of the ecosystem services.

**b** Natural capital accounting is an umbrella term covering efforts to use an accounting framework that provides a systematic way to measure and report on stocks and flows of individual environmental assets or resources (e.g. minerals, timber, fish), ecosystem assets (e.g. forests, wetlands), and biodiversity and ecosystem services.

actions for a safer, healthier and more economically viable future that creates multiple benefits for all. A recent study found that the use of the terms ecosystem services and natural capital has penetrated Irish policy, but is unequal and fragmented across the policy landscape.[7] Greater action is needed to advance NCA; assess stocks, flows and trends in ecosystem services; and integrate these findings into planning and decision-making across sectors. This has a key role to play in ensuring no net loss of biodiversity and should lead to benefits for human health and wellbeing as a result of initiatives to restore nature and increase access to green and blue spaces.[8]

## 2. Climate Action Plan targets relating to biodiversity

The Climate Action Plan 2025[9] and its Annex of Actions[10] do not contain a chapter or theme dedicated to biodiversity. Several actions and measures in the Climate Action Plan 2025 are of direct and indirect relevance (Box 1), including those under the thematic areas of the marine environment; Just Transition; agriculture; land use, land use change and forestry; and adaptation. Actions in future Climate Action Plans should integrate efforts to enhance the health of ecosystems and carbon stores. Explicit area-based and quantitative targets and indicators should be adopted in the Climate Action Plan 2027 as a basis for measuring the achievement of the 'biodiversity-rich' element of the National Climate Objective.

### Box 1. Main biodiversity-related actions in the Climate Action Plan 2025 and longer-term legacy targets

- Action MA/23/5 to develop comprehensive legislation for the identification, designation and management of Marine Protected Areas.
- Action JM/25/4 to support the restoration and rehabilitation of degraded peatlands.
- Actions LU/25/1 and LU/25/2 to publish the report of Phase 2 of the Land Use Review and a mid-term review of the Forestry Programme 2023–2027.
- Action AD/25/3, which requires the National Parks and Wildlife Service to develop the Biodiversity Sectoral Adaptation Plan by Q3 of 2025.
- Land use, land use change and forestry targets to be achieved by 2030 in Climate Action Plans 2024 and 2025, including:
  - afforestation of 8,000 hectares per year up to 2030,
  - optimal management of 450,000 hectares of grassland on mineral soils,
  - reduced management intensity of 80,000 hectares of grassland on drained organic soils,
  - rehabilitation of 65,900 hectares of peatlands,
  - planting of 2,000 km of new hedgerows,
  - organic farming on 450,000 hectares of land.[a]

a Progress on these targets is reported in the Council's 2025 Annual Review on Agriculture and Land Use, Land Use Change and Forestry.

# 3. Progress on previous Climate Change Advisory Council recommendations

## 3.1. Conservation and restoration planning frameworks

The Council has previously made recommendations aimed at strengthening Ireland's conservation and restoration planning frameworks.[11] It acknowledges ongoing progress in this area but remains concerned that there is no credible plan to expand the protected area network on land and at sea. In support of the NRP, due for submission to the European Commission on 1 September 2026, the Independent Advisory Committee on Nature Restoration was established in October 2024[12] to provide strategic oversight and to ensure a participatory and inclusive planning process. This included the creation of a leaders' forum – first convened in March 2025 – to foster cross-sectoral dialogue, as well as the Community Conversations programme, which is designed to deliver a locally led nationwide engagement model. The development of the NRP is also being shaped by technical interdepartmental working groups focused on land, sea and urban themes, which are responsible for establishing baselines, datasets, indicators, restoration measures and monitoring frameworks. A separate finance working group will consider the financial aspects of the NRP, including socio-economic impact evaluation, optimisation of existing programmes and new financial mechanisms. The NRP will also draw on the outcomes of the Land Use Review. Phase 1 of the Land Use Review concluded in 2023;[13] however, very concerningly, Phase 2 is delayed and yet to be published in spite of the Q2 2025 deadline.[9] This is undermining timely action, as the Land Use Review is necessary to inform the development of an integrated national land use strategy, which is urgently required to promote biodiversity protection and restoration as core land use options underpinned by a strategic spatial planning framework. Taken together, the Land Use Review and the NRP will be vital instruments to identify and achieve Ireland's targets for biodiversity protection and restoration out to 2030 and 2050 under the EU Biodiversity Strategy and the Kunming–Montreal Global Biodiversity Framework.

## 3.2. Biodiversity financing

The Council has previously emphasised the need for a significant scaling up of financing to deliver on nature restoration and conservation goals, including the ringfencing of adequate funding through the Infrastructure, Climate and Nature Fund for the full implementation of the 4th NBAP (2023–2030) and the widespread adoption of nature-friendly management practices by farmers.[11] The 2025 Environmental Implementation Review Country Report – Ireland, published by the European Commission,[14] estimates an annual investment gap of €700 million to protect and restore biodiversity and ecosystems. A financial needs assessment, commissioned by the Department of Housing, Local Government and Heritage (DHLGH) and the Irish Research Council and published in 2024,[15] estimated that additional annual expenditure of €463.5 million is required to support the achievement of the initial targets of the Nature Restoration Regulation out to 2030 (Figure 1). In this context, the Council is disappointed that no specific funding has been allocated to nature restoration through the Infrastructure, Nature and Climate Fund, €2 billion of which is allocated to low-carbon transport, €500 million to climate mitigation and renewable energy development, and €650 million to projects and programmes that support improvements in water quality.[16] While the allocation for improvements in water quality will generate indirect benefits for biodiversity, this represents a significant missed opportunity to address the biodiversity and ecosystems investment gap and

commit the necessary funding to specific biodiversity protection and restoration measures and nature-based solutions (NBS)[c] across different land uses and sectors.

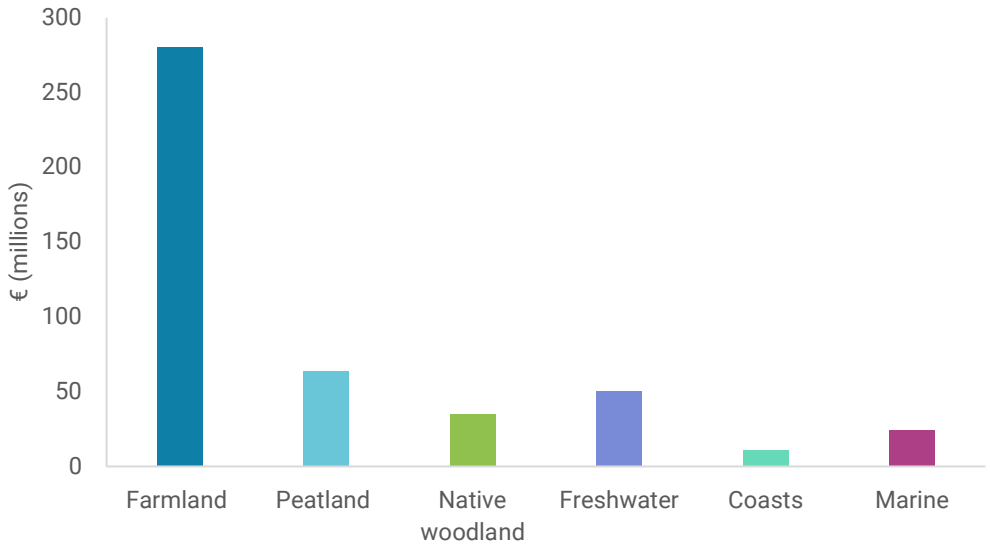


**Figure 1: Breakdown of estimated additional expenditure needed per year to support the initial 30% target of the Nature Restoration Regulation.**
(Source: Adapted from University College Dublin, Funding Ireland's Biodiversity.[15])

The Council welcomes the continued increase in core funding for the National Parks and Wildlife Service (NPWS), which rose to over €100 million for the first time in Budget 2026, an increase of 20% on 2025.[17] This uplift in funding must be increased and sustained in the long term to ensure full implementation of the 4th NBAP, the Biodiversity Sectoral Adaptation Plan and the development and implementation of the forthcoming National Invasive Species Management Plan and NRP. The Council has also stressed the importance of expanded financial support for long-term, nature-friendly land management under the Common Agricultural Policy Strategic Plan, along with systematic monitoring of biodiversity outcomes on farmland. The additional €20 million allocated to the Agri-Climate Rural Environment Scheme (ACRES) in Budget 2026 brings the total funding for the scheme in 2026 to €280 million.[18] Monitoring capabilities are also advancing: the Area Monitoring System, which uses satellite data to assess compliance with environmental farming practices, expanded in 2025 to include five additional ACRES measures, including consideration of riparian buffer zones and arable fallow areas.[19] Additionally, the Central Statistics Office (CSO) launched a new Agri-Environmental Indicator resource in February 2025,[20] providing accessible national data on biodiversity, soil health, ecosystem services and environmental impacts across the Agriculture sector. Together, these measures represent steps towards a more coordinated and strategic approach to biodiversity restoration and monitoring on agricultural land.

c Nature-based solutions are actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems that address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human wellbeing, ecosystem services, and resilience and biodiversity benefits.

The Local Biodiversity Action Fund continues to be a key mechanism for supporting community-led biodiversity initiatives, with €2.9 million allocated in 2025 to fund 262 projects across all 31 local authorities.[21] These mainly urban-focused projects cover a wide range of priorities for delivery of the 4th NBAP, including biodiversity awareness, bird conservation, invasive species management and wetland surveys. The Community Climate Action Programme, which has received €61.5 million from the Climate Action Fund, supports community climate action projects and initiatives,[22] and some biodiversity-related initiatives are funded under the theme of local climate and environmental action. NPWS also continues to support place-based action through the Peatlands and Natura Community Engagement Scheme, which in 2025 awarded over €800,000 to 45 community-led projects.[17] At least one biodiversity officer has now been appointed in each local authority,[23] helping to mainstream biodiversity considerations in planning and support community action. Concerted efforts should be made to ensure vulnerable and disadvantaged communities are targeted for support through these funds. While some local authorities provide information on the projects that have been supported through these funds, the Council recommends that the Department of Climate, Energy and the Environment (DCEE) and DHLGH develop a database with information on all projects supported through the Community Climate Action Programme and the Local Biodiversity Action Fund, including the categories of projects supported, timeframe, funding provided, location and impacts achieved.

## 3.3. Implementation of nature-based solutions

The Council has repeatedly called for a holistic and coordinated approach to the implementation of NBS across sectors and land uses. The National Biodiversity Working Group and the National Biodiversity Forum are the most appropriate structures to support and coordinate systematic monitoring and annual reporting of NBS implementation under the 4th NBAP. The Wildlife (Amendment) Act 2023[24] introduced a new legal obligation requiring public bodies to consider biodiversity conservation and the objectives of the 4th NBAP when carrying out their functions. The launch of the Biodiversity Duty Reporting Guidance for Public Bodies[25] in April 2025 marks an important milestone in operationalising this new requirement. This practical guidance supports public and state bodies in embedding biodiversity considerations into their operations, including through the implementation of NBS, and provides a structured framework for recording and reporting on progress. It is extremely disappointing that the first report on the implementation of the 4th NBAP is yet to be published. This undermines timely accountability by delaying the initial review of the plan's delivery since its publication in January 2024. It is essential that a summary of the high-level actions progressed be made available through an online tracker hosted by the National Biodiversity Data Centre by the end of 2025.[25] Area-based and quantitative metrics should also be developed to assess progress in implementation of the 4th NBAP and its impact on different ecosystems and their components. These developments will lay the groundwork for a more transparent, accountable and outcomes-focused delivery of NBS across the public sector. It will also be important to extend this progress by engaging communities and the private sector in the implementation of NBS.

## 3.4. Biodiversity and climate research gaps

The Council has previously called for the establishment of a dedicated research programme, led by NPWS, to better understand the impacts of climate change on Ireland's habitats and species. NPWS continues to co-fund research under the Environmental Protection Agency (EPA) Research Programme[26] for projects aligned with its priorities. The increased funding allocated to NPWS under Budget 2025 included an additional €6.5 million specifically for science, research and nature protection.[27] As of May 2025, however, the lack of a comprehensive, climate-focused biodiversity research programme remains a significant gap, particularly as pressures on species and ecosystems

intensify. Such a research programme would also be important to inform NBS that are being considered and implemented as adaptation measures, and assess the impacts of these on local biodiversity processes and components in different ecosystems.

The Council has also recommended that the Department of Enterprise, Tourism and Employment undertake an assessment of the international impacts of domestic policies, to avoid the 'offshoring' of negative climate and biodiversity effects. This would include exploring options to limit the import of non-sustainably produced products, enhance the sustainability of supply chains for all imports and exports, and promote the application of sustainability certifications such as the International Sustainability and Carbon Certification[28] in a range of areas. To date, there is no evidence that such an assessment has been completed or is planned. Addressing this gap will be essential for ensuring that Ireland's domestic actions are aligned with global commitments and do not contribute to environmental degradation in other countries.

# 4. Analysis and discussion

## 4.1. Planning considerations

### 4.1.1. Integrating biodiversity into planning processes

The drafting of policies and legislation for biodiversity in Ireland has gained momentum in recent years, placing greater emphasis on integrating biodiversity considerations into decision-making processes. The revised National Planning Framework, approved in April 2025,[29] aligns with the 4th NBAP and includes a requirement for planning authorities to achieve no net loss of biodiversity within their plan-making functions. It aims to facilitate this through developing national guidance to support the integration of biodiversity into planning processes; encouraging consistency and a strategic approach to biodiversity protection across planning authorities and administrative boundaries; and supporting the implementation of both the 4th NBAP and the forthcoming NRP. The development of national guidance to support the integration of biodiversity into planning processes should be progressed without delay, given the projected growth in new housing supply and other infrastructure over the next decade.[30] Several public, semi-state and private organisations have started to develop policy regarding no net loss of, or net gain to, biodiversity, which runs the risk of different organisations using different approaches in the absence of guidance.[31]

Regulation is needed on how no net loss of biodiversity should be practically achieved in the planning and execution of individual projects. No net loss will require that individual developments cause no measurable loss to biodiversity, compared with what was there before development. This will require further clarity and systems on key issues such as metrics on how biodiversity is measured and valued, as well as the impact of applying measures on- and off-site to benefit biodiversity, including complex processes and components, and to avoid or offset negative consequences. In developing a regulation for no net loss of biodiversity, DHLGH should consider the experiences of other jurisdictions, such as England, which has put in place more ambitious systems to ensure biodiversity net gain in all developments since 2024 and requires all land use developments to have a net positive effect on biodiversity by enhancing it on- or off-site.[32,33] The regulation should also ensure that the use of NBS and biodiversity enhancement measures are incorporated into future developments and schemes such as nature-inclusive design of infrastructure and active creation of nature-friendly habitats and biodiversity corridors. The requirement of no net loss of biodiversity must be consistently applied and will provide a basis for the further development of nature credits and compensatory measures for biodiversity in licensing and permitting processes.

Better integration of biodiversity considerations into local-level planning is also required. At the local level, by the end of 2026, all local authorities are required to have a biodiversity action plan in place.[34] These plans must play an important role in identifying and protecting habitat corridors and ecological networks to support greater species dispersal and colonisation. Alignment between local biodiversity action plans and land use plans will be critical in this regard. In order to address consistently the dual challenges of biodiversity loss and climate change, the Nature Restoration Regulation notes the need for biodiversity restoration measures to take into account the deployment of renewable energy, and vice versa.[35] It emphasises the need to combine restoration activities and the deployment of renewable energy projects wherever possible, including in renewables acceleration areas and dedicated grid areas. The appointment of biodiversity officers in local authorities is intended to support this integration of biodiversity into planning processes, including through local development plans and zoning decisions.

The deployment of renewable energy infrastructure in or adjacent to protected areas is likely to have adverse impacts on the conservation objectives and integrity of such sites. The Government needs to urgently designate renewables acceleration areas, and the application of the imperative reasons of overriding public interest (IROPI) principle should result in adequate compensation measures for biodiversity conservation and restoration. Provisions under Article 6(4) of the EU Habitats Directive, transposed in Ireland through the European Communities (Birds and Natural Habitats) Regulations of 2011,[36] allow for derogation in cases of IROPI, subject to compensatory measures being undertaken and based on human health or public safety considerations where a site hosts a priority habitat or species.[37] Both the Nature Restoration Regulation[35] (Article 6) and the revised Renewable Energy Directive[38] (Article 16f) state that the planning, construction and operation of plants for the production of energy from renewable sources shall be presumed to be in the overriding public interest. The revised Renewable Energy Directive also states that renewable energy projects are presumed to serve public health and safety when balancing legal interests in individual cases for the purposes of Article 6(4) of the EU Habitats Directive. However, the Government has failed to transpose Article 16f of the revised Renewable Energy Directive on time, and renewables acceleration areas have not yet been designated.[39] This ongoing non-compliance risks undermining renewable energy deployment.

The increased roll-out of renewable projects on land and at sea, the planned expansion of protected areas and the imminent expiry of planning permission for the first phase of Irish wind farms all increase the urgency of addressing IROPI deployment. Irish wind farms with a capacity of approximately 850 MW will reach the end of their planning permissions or have to be decommissioned between now and 2030, and this rises to 2,488 MW by 2040.[40] Some of these wind farms are located in areas that have since been rezoned as areas unsuitable for wind energy or are now designated as Special Protection Areas (SPAs) – for example, 34 wind farms generating 732 MW of wind energy are currently installed within six SPAs and 24 wind farms generating a further 347 MW are installed in buffer zones within 5 km of these SPAs.[40] In this context, it is vital that adequate compensatory measures for the conservation and restoration of priority species and habitats are put in place, as is required in the IROPI process. The Council calls for sectoral guidelines on biodiversity compensatory measures to be developed for the renewable energy sector to enable evidence-based compensatory measures and appropriate monitoring to be put in place.

Private-sector companies and semi-state agencies are a potentially significant further source of information for biodiversity monitoring. Companies and semi-state agencies commit considerable resources to surveying and monitoring biodiversity as part of the planning process for developments; however, these data are not publicly accessible or usable, as they are submitted to planning authorities only. Planning authorities should ensure that the monitoring of species and habitats carried out by

developers, operators and semi-state agencies is robust and repeatable and that the data collected are findable, accessible, interoperable and reusable, and are made accessible through the National Biodiversity Data Centre.

### 4.1.2. Integrating biodiversity into construction projects

Measures to enhance biodiversity and use of NBS are urgently needed in construction projects to deliver improved benefits for the climate, biodiversity and human wellbeing. In line with the no net loss of biodiversity approach, DHLGH should ensure that NBS are integral to future housing developments, household surroundings and residential estates, and establish a programme to support the retrofitting and upgrading of public spaces and existing infrastructure for the incorporation of NBS and biodiversity enhancement features.

The Irish Green Building Council has highlighted the negative impact that current development patterns and construction methods are having on nature, particularly their contribution to biodiversity loss.[41] Four of the five main drivers of biodiversity loss identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services are directly linked to the built environment – specifically, land use change, climate change, pollution and invasive alien species.[42] Integrating biodiversity into planning and development presents a transformative opportunity to create healthier and more resilient communities. To promote a shared understanding of how biodiversity can be better integrated into planning and enhanced within the built environment, the Irish Green Building Council has published a suite of case studies that demonstrate the successful integration of NBS across a variety of building types and development projects. It has also delivered a webinar series,[43] insights publication[44] and practical checklist of 10 things to do for a better built environment.[45] Further recommendations to support the scaling up of NBS in new residential developments are currently being developed and are expected to be published in November 2025.

In January 2025, the Local Authority Waters Programme also published guidance on the implementation of urban NBS for planners and developers.[46] This followed the identification of urban run-off as a significant contributory factor to waterbody quality and quantity pressures in the Water Action Plan 2024,[47] which also highlighted the current tendency towards integrating engineered solutions into the built environment rather than NBS. The recently published guidance outlines steps that can be taken to integrate NBS into development proposals at the initial stages and considerations to ensure robust and best-practice NBS design. Together, these recent publications and initiatives provide accessible and practical information and guidance for planners and developers. The Council recommends that these publications be widely disseminated among planning authorities and developers to facilitate and encourage wider adoption of NBS in urban development.

### 4.1.3. The role of natural capital accounting and ecosystem services accounting

NCA and ecosystem services accounting have key roles to play in promoting decisions and actions that are positive for both the climate and biodiversity and need to be better integrated into planning and decision-making frameworks. Nature and natural ecosystems play a vital role in supporting livelihoods, economies and quality of life and are therefore essential to sustaining human life on Earth.[48,49] Natural capital refers to ecosystems and the services they provide (Figure 2),[50] and NCA can make these services more visible (Figure 3).[49] Accounting for ecosystem services in policy decisions that impact nature can help to avoid decisions that degrade ecosystems and natural resources and have knock-on effects for the economy and society.[51]

**Regulating services** maintain environmental conditions that are beneficial to individuals and society.

- Global climate regulation
- Rainfall pattern regulation
- Local climate regulation
- Air filtration
- Soil quality regulation
- Soil and sediment retention
- Solid waste remediation
- Water purification
- Water flow regulation
- Flood control
- Storm mitigation
- Noise attenuation
- Pollination
- Biological control
- Nursery population and habitat maintenance

**Provisioning services** provide benefits that are extracted or harvested from ecosystems.

- Biomass
- Genetic material
- Water supply

**Cultural services** are intangible and experiential, relating to perceived qualities for cultural benefit.

- Recreation
- Visual amenity
- Education, scientific research
- Spiritual, artistic and symbolic

**Figure 2: Categories of ecosystem services used by the United Nations System of Environmental-Economic Accounting – Ecosystem Accounting.**

(Source: Derived from the United Nations System of Environmental-Economic Accounting – Ecosystem Accounting.[52])

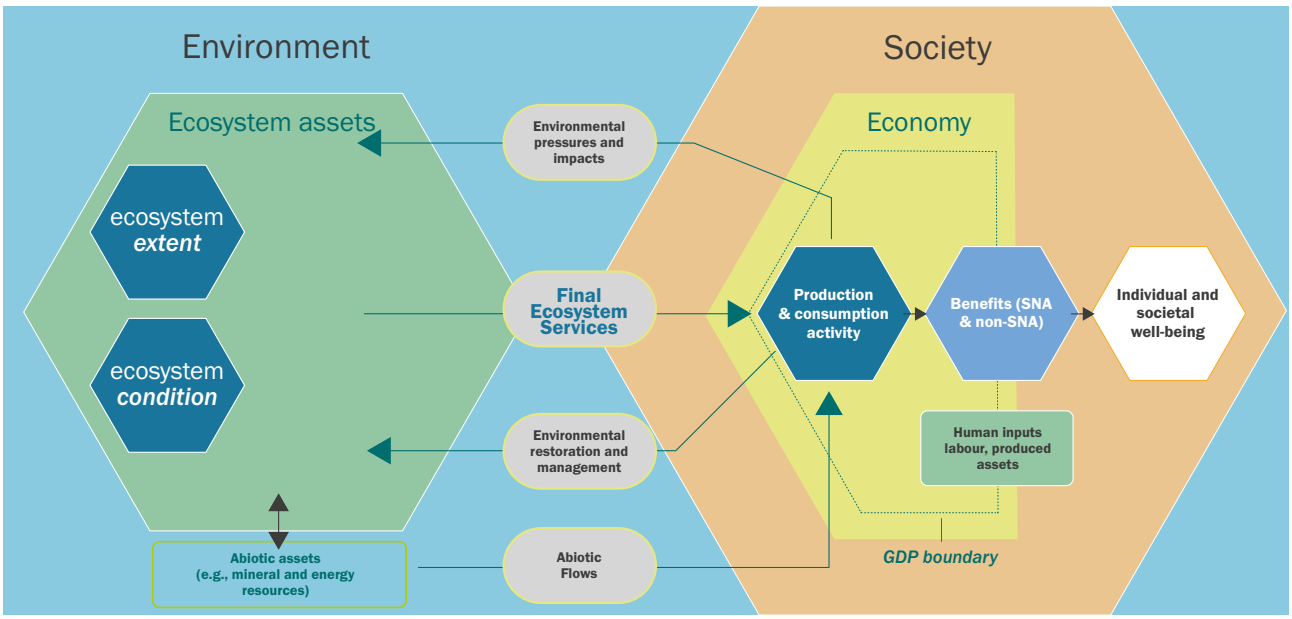


**Figure 3: The United Nations System of Environmental-Economic Accounting – Ecosystem Accounting conceptual structure, taking into account the extent and condition of different ecosystems and the contributions of ecosystem services to the economy and society.**

GDP, gross domestic product; SNA, special needs assessment.

(Source: United Nations, An Introduction to Ecosystem Accounting.[53])

The EU Biodiversity Strategy for 2030[54] highlights NCA as a key tool for assessing the environmental impact of products and organisations on the environment. The National Economic and Social Council underscores the value of NCA as a way to work more closely with nature and recognise its positive contribution to livelihoods, food, culture, recreation and people's health and wellbeing.[49] Research published by the EPA in 2023[55] indicates that NCA meets several national policy objectives, including the integration of ecosystems into national and local planning. The project developed natural capital accounts for four Irish subcatchments, focusing on ecosystem extent, condition and services to provide a comprehensive view of natural capital assets and their benefits. Recommendations from the EPA research closely align with those of the more recent Natural Capital Accounting: A Guide for Action,[49] published by the National Economic and Social Council in 2024 to help develop NCA and embed it into the wider policymaking system. It recommends:

- capacity building for skills around ecosystem services, spatial mapping and operationalising ecosystem accounting across public bodies,
- consideration of payment for ecosystem services schemes, incorporating ecosystem condition indicators and reference levels,
- support for integration by advising on how to integrate NCA into the wider policy system.

In Ireland, the 4th NBAP contains commitments to advance ecosystem accounting and to work towards assessment of stocks, flows and trends in ecosystem services.[34] It commits to developing systems and standards for NCA through DCEE, DHLGH and other relevant stakeholders by 2027. The CSO is tasked with developing national ecosystem accounts by 2027, with the first ecosystem extent accounts expected to be published in late 2025 and ecosystem condition and services accounts in 2026. Ireland's Bioeconomy Action Plan 2023–2025[56] commits to developing a natural capital approach to policy development, leading to the establishment of accounting frameworks and baselines to measure changes in the stocks and flows of natural capital at a variety of scales for better management of nature and biodiversity. This was scheduled for delivery in Q4 2024 but, as yet, remains unpublished, therefore delaying urgently needed action to account for nature in Ireland's policy system.

While the 4th NBAP contains an action to mainstream the natural capital approach across sectors by 2027, commitments are vague, with relevant bodies to develop appropriate guidance for key sectors on the use of NCA. Systems and standards are clearly required to guide key semi-state agencies and private companies on the use of NCA and ecosystem services accounting to better inform decision-making and integrate environmental benefits into infrastructure design, cost–benefit analysis and activities. As part of their efforts to ensure no net loss of biodiversity, NCA and ecosystem services accounting should be used by public bodies that have significant impacts on biodiversity and as outlined in the Biodiversity Reporting Guidance.[25]

## 4.2. Agriculture, forestry and other land use and biodiversity

Agriculture and forestry are the dominant land uses in Ireland and represent approximately 67.3% and 13.3% of Ireland's land cover, respectively.[57] Approximately 59% of Ireland's land cover is grassland, 6% is used to grow cereal crops and 2% is used for horticulture and to grow fruit and other crops.[57] Biodiversity and ecosystem services underpin the agricultural system, yet agriculture is recognised as the main threat to and pressure on Ireland's protected habitats and species.[58] Greater action is needed to enhance the condition of habitats and species in agricultural and forested areas and to

integrate biodiversity-friendly practices into the systems of production – practices that are detailed in agri-environmental schemes such as ACRES, Farming for Nature and the Eco-Scheme and are also listed in Annex VII to the EU Nature Restoration Regulation.[35]

Ireland's Common Agricultural Policy Strategic Plan (2023–2027) has a strong focus on climate and environment action through minimum standards for good agricultural and environmental conditions, Pillar 1 eco schemes and Pillar 2 climate- and environment-related interventions (Figure 4).[59] Several environment-related interventions have direct benefits for habitats and species, such as space for nature, planting of native woodlands and restoration of hedgerows, while others offer indirect benefits, such as reduced fertiliser and pesticide use, use of multi-species swards, planting of cover crops and various initiatives to reduce run-off and water pollution.

**Pillar 1**
Direct payments and sectoral interventions

**Pillar 2**
Rural development

**Eco-Scheme**

A farmer must deliver 2 practices or 1 enhanced option to qualify for a payment

- Space for nature
- Extensive livestock production
- Limiting chemical nitrogen use
- Planting of native trees/hedgerows
- Use of GPS-controlled spreader and/or sprayer
- Soil sampling and appropriate liming
- Planting a break crop
- Sowing a multi-species sward

**Agri-Climate Rural Environment Scheme (ACRES)**

Structured on a 3-tier basis designed to ensure the targeted and prioritised delivery of environmental benefits. A mandatory farm sustainability plan informs the most appropriate selection of actions. Actions include:

- Low-input grassland
- Extensively grazed pasture
- Unharvested cereal headlands
- Winter bird food
- Ryegrass seed set for birds
- Environmental management of arable fallow
- Riparian buffer strips
- Management of intensive grassland next to watercourse
- Planting trees in riparian buffer zones
- Planting new hedgerow and coppicing of hedgerows
- Catch crops
- Overwinter/brassica fodder stubble
- Grass margins arable/grassland
- Low-input peat grassland
- Tree planting
- Tree belts for ammonia capture from farmyards
- Barn owl nest box
- Conservation of rare breeds
- Geese and swans
- Planting a traditional orchard

**Agri-Environment Climate Training Scheme**

A voluntary programme designed to train farmers in environmental practices and safety standards

**Organic Farming Scheme**

- Livestock and crops must be produced to EU organic standards
- Applicants must complete training and be approved as an organic producer

**Straw Incorporation Measure**

Payment for chopping straw post harvest and incorporating it into the soil

**Figure 4: Overview of key agri-environment schemes under the Common Agricultural Policy Strategic Plan 2023–2027.**
GPS, global positioning system.

(Sources: Created from information derived from the Department of Agriculture, Food and the Marine[60] and CAP Network Ireland.[61])

Approximately 122,000 farmers, or almost 97%, have subscribed to the Eco-Scheme,[62] which accounts for €1.485 billion of the Pillar 1 budget of the Common Agricultural Policy Strategic Plan for direct payments and market measures. ACRES, to which €1.5 billion has been allocated for the period 2023–2027 under Pillar 2, makes use of management- or action-based payments as well as results-based payments. ACRES has a cooperation component for high nature value farms in high-priority geographical areas and a general component for individual farmers outside these areas. Over 54,000 farmers have subscribed to ACRES, with 62% of these farmers subscribing under the general component.[63] It is estimated that participation in the Eco-Scheme and ACRES has resulted in over 200,000 completed habitat scorecards and the widespread development and adoption of farm sustainability plans.

The Council notes that the implementation of ACRES is currently under review by the Department of Agriculture, Food and the Marine (DAFM). Considerable challenges have been experienced in relation to the large volume of participating farmers and actions, pressure on the administrative and IT structures for the schemes, high volumes of payments, high level of delays in payments, and challenges with the scorecard system and monitoring the impact of the scheme. The Council recommends that DAFM make available and track information from the Eco-Scheme and ACRES on the spatial coverage of different features such as the space for nature area on farmland, the types of measures implemented across farms, the impacts of measures on biodiversity and ecosystem services, and performance in the implementation of farm sustainability plans.

There are several other important schemes that support farmers to conserve and restore nature on their farmland (see Figure 5). The NPWS Farm Plan Scheme has been in place since 2006 and promotes a focused, targeted and innovative approach to farming to protect habitats and species of conservation interest in some of Ireland's most important biodiversity areas.[64] Over 1,000 5-year farm management plans have been developed through the scheme and a new measure introduced in 2024 supports farmers with one-off actions for nature.[65] European Innovation Partnership projects, funded through the Common Agricultural Policy Strategic Plan (2023–2027), also have an important role, developing and trialling environmentally friendly practices on farms to ensure practical outcomes and learnings that can be upscaled and shared. Of indirect benefit to biodiversity is the €60 million European Innovation Partnership for Agricultural Productivity and Sustainability, launched in 2024, to develop targeted actions at farm level to improve water quality.[66] Eleven new European Innovation Partnership projects worth €17.8 million were also funded in 2025.[67] Farming for Nature is an important non-profit initiative, started in 2018, that seeks to support, encourage and inspire farmers to improve the natural health of the countryside.[68]

Looking ahead, considerable uncertainty remains around the funding of agri-environment measures beyond the current Common Agricultural Policy Strategic Plan and around the broader implementation of the NRP. It is essential that this uncertainty is addressed through long-term multi-annual investment with effective delivery mechanisms and robust monitoring frameworks to ensure funding is translated into measurable outcomes that are positive for biodiversity and climate. Lessons learned from existing schemes should be used to scale up financing and support for targeted and ambitious actions in agriculture that deliver the necessary positive outcomes. These should include the existing Infrastructure, Climate and Nature Fund and the Prioritised Action Framework 2028–2034, as well as financing mechanisms that will be established for the NRP and the Carbon Removals and Carbon Farming Regulation. Furthermore, it is of critical importance that greater financing is mobilised from

| NPWS Farm Plan Scheme | Farming for Water European Innovation Partnership | Farming for Nature |
|---|---|---|
| **Key objective:**<br>To trial novel approaches to farming for the environment.<br>**Target areas:**<br>▪ High nature value farmland<br>▪ Natura 2000 sites<br>▪ Natural Heritage Areas<br>▪ Sites with protected species and habitats under the EU Birds and Habitats Directives<br>5-year farm management plan with option to include one-off 'Action for Nature', for example:<br>▪ Create a nature pond<br>▪ Saving seeds for nature<br>▪ Address alien invasive species<br>▪ Installation or protection of bat roosts, barn owl boxes | **Key objectives:**<br>▪ Innovative best practice in nutrient management<br>▪ Apply nature-based solutions<br>▪ Apply principles of integrated catchment management<br>**Target areas:**<br>'Areas for Action' that require the most attention to restore and enhance water quality<br>**Measures** (with examples) **include:**<br>▪ **Source control** (multi-species swards, catch/cover crops)<br>▪ **Pathway interception** (riparian buffer zones, swales, sediment traps)<br>▪ **Receptor** (livestock exclusion from waterbodies, bunded drain)<br>▪ **Other measures** (bespoke measures on a case-by-case basis) | **Key objective:**<br>To support high nature value farming in Ireland and demonstrate that farming for nature can be agriculturally, economically and socially progressive<br>**Target areas:**<br>All farmers and landowners in Ireland<br>**Programmes include:**<br>▪ Network development<br>▪ Knowledge exchange<br>▪ Information provision<br>▪ Action for Nature (e.g. pond installation, heritage orchard creation, establishment of ecological corridors) |

**Figure 5: Overview of schemes that support nature-friendly farming practices that are not part of the Common Agricultural Policy Strategic Plan.**
(Sources: Farming for Nature, Farming for Water EIP and NPWS.[68–70])

retailers and processors for payment for ecosystem services through the offsetting and insetting[d] of negative impacts and scope 3 emissions.[e][71] DAFM should ensure the development of a longer-term payment approach for ecosystem services that is fair and ambitious and that subsidises and incentivises targeted actions by farmers.

Limited ambition has been shown in terms of adopting specific targets for space for nature[f] at both EU and national levels. Although the EU Biodiversity Strategy identifies the urgent need to

**d** Offsetting is any reduction of greenhouse gas emissions to make up for emissions that occur elsewhere. Insetting focuses on efforts by organisations to reduce emissions within their own supply chains, both upstream and downstream. The concepts of offsetting and insetting have been applied mostly to greenhouse gas emissions to date, but should also be applied to conservation activities designed to deliver biodiversity benefits in compensation for losses in a measurable way.

**e** Scope 3 emissions include all indirect emissions that occur in the upstream and downstream activities of an organisation.

**f** According to the Eco-Scheme, space for nature features include hedges, drains, stone walls and margins in arable parcels, and area features such as habitat, patches of scrub, rock, copse/trees and woodland.

bring at least 10% of agricultural areas back to high-diversity landscape features[g] for wild animals, plants, pollinators and natural pest regulators, the EU Nature Restoration Regulation did not set a specific legally binding target. However, Good Agricultural and Environmental Condition 8 requires farmers to devote 4% of eligible land to biodiversity and landscape protection as a requirement for the Basic Income Support for Sustainability Scheme, with enhanced payments for devoting 7% and 10% of land as space for nature. A recent European Commission report estimated that the share of agricultural land covered by non-productive landscape features in Ireland is 7.5%,[14] while DAFM figures show that over 85% of farmers participating in the Eco-Scheme already have more than 10% of land designated as space for nature.[72] However, there is no breakdown of the spatial coverage of different high-diversity landscape features, and it is important to map the coverage of the different types of high-diversity features. Greater ambition and incentives are needed overall to expand the coverage of high-diversity landscape features on farmland and to optimise their potential to sequester carbon and enhance biodiversity.

The planting of native forests is an important option for enhancing space for nature and local biodiversity on farmland. The Council has been repeatedly critical of afforestation rates in Ireland.[73] The uptake of the Native Tree Area Scheme and the Native Woodland Conservation Scheme, which support the establishment of small native forests on farmland and the creation of native forests for water protection, has been particularly disappointing, with just under 2% of Ireland estimated to be covered by native woodland.[74] The Council urges the Government to prioritise the mid-term review of the Forestry Programme 2023–2027 and take immediate steps to resolve regulatory and operational issues and strengthen policy levers to support an immediate increase in the afforestation rate under the Native Tree Area Scheme. This could include targeted supports for necessary environmental assessments and surveys, enhanced premiums, longer-duration premiums and enhanced payment options for increasing the area of space for nature designated as native woodland.

Peatlands and areas of peat soils are important carbon stores and, when in good condition, can sequester significant volumes of carbon and provide climate change adaptation services through their ability to hold and filter significant amounts of water. It is estimated that only 25% of Ireland's peatlands are healthy enough to provide ecosystem services such as carbon sequestration and freshwater filtration,[75] and restoration efforts need to be scaled up. The 2025 Programme for Government states that restoration actions under the NRP will be prioritised on state lands and voluntary measures will be undertaken in consultation and partnership with farmers and local communities.[76] The extent to which Coillte, NPWS and Bord na Móna lands will be restored as part of the Nature Restoration Regulation targets is unclear, as is how much farmland on organic soils will be included through voluntary restoration and rewetting measures. Restoration and rehabilitation measures to date have largely been confined to raised bogs, as well as extensification measures on organic soils, and need to be upscaled on blanket bogs. The National Peatlands Strategy of 2015 estimates that raised bogs occupy an area of 237,190 hectares, compared with 765,890 hectares occupied by blanket bogs.[77]

The Council recommends that NPWS coordinates with Coillte, Bord na Móna, DAFM and landowners to set targets and ensure a large-scale programme of conservation and restoration measures in priority habitats inside and outside protected areas. Coillte is Ireland's largest landowner, managing approximately 440,000 hectares, which accounts for 7% of Ireland's total land area. Of this, around

**g** High-diversity landscape features on agricultural land include buffer strips, rotational or non-rotational fallow land, hedgerows, individual trees or groups of trees, tree rows, field margins, patches, ditches, streams, small wetlands, terraces, cairns, stone walls, small ponds and cultural features.

96,000 hectares (or 20%) are currently designated as SPAs, Special Areas of Conservation (SACs), Natural Heritage Areas (NHAs) and proposed NHAs.[78] In line with its Forest Estate Strategic Land Use Plan (2023–2050),[78] Coillte reported in September 2025 that it has increased the share of its estate that is managed primarily for nature to 30%, and has a longer-term ambition of reaching 50%. This commitment is particularly significant given that Coillte owns the largest extent of peatland in the country, with approximately 174,000 hectares of deep peat soils (around 40% of its total estate), most of which remain under conifer plantation, contrary to climate and biodiversity objectives.

Coillte and NPWS have signed a memorandum of understanding to strengthen collaboration on nature projects.[17] It will be important to build on this memorandum with concrete actions to ensure meaningful progress towards Ireland's 2030 and 2050 obligations under the EU Biodiversity Strategy and EU Nature Restoration Regulation. Bord na Móna owns about 80,000 hectares of mostly former industrial peatland and, under its peatland restoration plan,[79] has committed to restoring 33,000 hectares of peatland, with 19,000 hectares rehabilitated as of May 2025,[17] while NPWS has completed the restoration of 5,143 hectares of peatland. Coillte has set targets to restore 30,000 hectares of peatlands by 2050,[80] but there is no up-to-date information on progress. The Council recommends that NPWS, Bord na Móna and Coillte be required to report annually on their progress in meeting peatland restoration targets as part of Climate Action Plan reporting and to develop an expanded programme of conservation and restoration measures in priority habitats, including raised and blanket peatlands and other habitats with high carbon sequestration potential.

## 4.3. Capacity constraints and engagement

### 4.3.1. Capacity needs

In terms of biodiversity governance, NPWS has a key coordination and leadership role. However, key government departments, agencies and local authorities need to mainstream and accelerate initiatives to conserve and restore biodiversity in and outside protected areas. Figure 1 highlights the substantial annual gap in financing biodiversity restoration initiatives in Ireland: addressing this gap will also require considerable investment in staffing and capacity development across Government departments, agencies and local authorities.

The 2019 Programme for Government committed to reviewing the remit, status and funding of NPWS. The 2025 Programme for Government[76] contains commitments to increase funding to NPWS to support its operations and to further develop and strengthen NPWS as Ireland's leading natural heritage agency. The multi-phase review of NPWS was completed in 2022 and culminated in a strategic action plan for renewal of NPWS (2022–2024).[81] The strategic action plan aims to provide NPWS with the right organisational and management structure to fully deliver on its mandate and drive the protection and restoration of Ireland's habitats and species while managing its national parks and nature reserves.

The Council welcomes the recent increases in funding allocated to NPWS and its expansion in staff numbers. However, the Council, through its Climate Change Adaptation Scorecard, has repeatedly highlighted NPWS shortcomings in coordinating and overseeing implementation of climate resilience measures. The workload of the organisation has expanded greatly in recent years and is expected to increase further to ensure the effective implementation and coordination of the 4th NBAP, the Biodiversity Sectoral Adaptation Plan, further expansion of protected areas and the forthcoming National Invasive Species Management Plan and NRP. Sustained capacity building and budgetary increases are required in this context to ensure that NPWS is in a position to fully deliver on its mandate. The Council recommends that NPWS establishes a climate action unit and, with

support from DHLGH and the Department of Public Expenditure, National Development Plan Delivery and Reform, ensures that the agency is adequately staffed and has sufficient budget to oversee these obligations.

In order to ensure that all key departments, agencies and local authorities have the necessary staff and skills to address the biodiversity crisis, the Council recommends that the Government carry out an urgent assessment of biodiversity capacity across the public service. This assessment should lead to concrete actions that strengthen the whole-of-government approach to planning, implementation and evaluation of biodiversity actions and promote increased alignment and synergies with climate action governance structures.

### 4.3.2. Skills shortages

Ireland has a severe skills shortage in a range of specialist areas linked to the conservation and restoration of biodiversity. This includes shortages of specialists in environmental impact assessment (EIA) and strategic environmental assessment, taxonomists, ecologists, marine ecologists, ornithologists and specialist contractors in rehabilitation and restoration. Going forward, skilled ecologists and habitat managers will be increasingly needed as climate change impacts increase the focus on NBS, habitat restoration, urban greening, water management, flood attenuation and river management.[82] The Council is highly concerned that this skills shortage will lead to delays in the achievement of climate targets on the rehabilitation and restoration of peatlands and the expansion of offshore renewable energy as well as on the broader implementation of NBS.

A recent report on Ireland's offshore wind skills and talent needs[83] highlighted challenges in hiring professionals in EIA and other areas of environmental management due to lack of offshore expertise and experience. The risk that this skills shortage poses to the development and project management phase of offshore wind projects was particularly highlighted. The report recommends attracting workers from abroad, as it is highly unlikely that the local workforce has the capacity to meet short-term demand. It suggests that the Department of Enterprise, Tourism and Employment, the Department of Further and Higher Education, Research, Innovation and Science and the Department of Foreign Affairs consider financially incentivising employers and individuals available elsewhere, such as in northern Europe, to relocate and build up domestic skills capability over the medium and long term.

Ireland is home to a significant portion of Europe's remaining peatlands, which are vital carbon sinks with the potential to reduce national greenhouse gas emissions by up to 5%.[84] Achieving peatland restoration targets will be challenging due to a significant shortage of skilled professionals in peatland rehabilitation and wider ecological restoration. The Chartered Institute of Ecology and Environmental Management has highlighted a capacity crisis in the sector,[85] which is likely to intensify as restoration demands grow not only for peatlands but also for other priority habitats identified under the Nature Restoration Law, such as dunes, seagrass beds and salt marshes. Accelerating the use of NBS also requires considerable skills development across disciplines.

The Council welcomes the identification of a skills gap in biodiversity and environmental occupations in the Green Skills 2030 strategy and its inclusion as one of the seven economic sectors considered. In the implementation plan for the strategy, the Council encourages SOLAS and the Department of Further and Higher Education, Research, Innovation and Science to identify and implement a targeted programme of actions that builds domestic capacity over the next 5–10 years for restoration of a diverse range of habitats, monitoring the condition of species and habitats, and environment-related assessments. In the short term, the Government needs to incentivise and attract critical biodiversity-related skills to Ireland by adding EIA and SEA specialists, taxonomists, ecologists, marine ecologists and ornithologists to the Critical Skills Occupations List.

### 4.3.3. Engaging citizens in biodiversity and climate action

The development of local authority biodiversity action plans offers opportunities to promote synergies and avoid duplication of efforts with the local authority climate action plans. Local authority biodiversity officers should collaborate closely with their climate counterparts to develop joint initiatives on public engagement collaboration and co-creation of programmes on biodiversity and climate, encouraging individuals to participate in biodiversity and citizen science initiatives, and also develop supports for the adoption of NBS and actions to make private and public spaces more biodiversity friendly. This could also include increased harmonisation of the Community Climate Action Programme and the Local Biodiversity Action Fund to promote activities that provide win–win outcomes for biodiversity and climate action at the local level. DCEE and DHLGH should collaborate to develop a database with information on all projects supported through the Community Climate Action Programme and the Local Biodiversity Action Fund, including the categories of projects supported, timeframes, funding provided, locations and impacts achieved.

There are specific opportunities linked to expanding research and monitoring at the interface of biodiversity and climate. The Council reiterates its call for NPWS to establish a dedicated research programme to better understand the impacts of climate change on keystone species and habitats and the ability of habitats to provide ecosystem services. More research to understand the impacts of climate change on invasive alien species and related resilience measures is also required. A consolidated national ecosystem map should also be urgently developed to support the identification of strict protected areas and to understand trends in the health and condition of different habitats. More broadly, demands for monitoring the condition of a range of species and habitats continue to increase as part of environmental assessment processes and in order to assess the impacts of different restoration initiatives and NBS on biodiversity. The implementation of the EU Nature Restoration Regulation requires comprehensive monitoring of a range of indicators linked to enhancing biodiversity in agricultural and forest ecosystems, such as pollinator diversity and populations, stocks of organic carbon in agricultural areas and forests, soil health, populations of common forest and farmland birds, the grassland butterfly index, forest connectivity and the share of agricultural land with high-diversity landscape features, urban green space and urban tree canopy cover.

Citizen science initiatives focused on crowdsourcing biodiversity data are increasing rapidly in number and scale, with citizen science now one of the predominant sources of biodiversity data.[86] These initiatives are also growing in Ireland in the form of bird surveys, farmland assessments through the ACRES scorecard and pollinator monitoring. Such initiatives have become an important element supporting the work of the National Biodiversity Data Centre in making biodiversity data and information more easily available.[87] In an effort to recruit and support new citizen scientists, the National Biodiversity Data Centre has established learning supports on biological monitoring. Local authority biodiversity officers should develop awareness programmes advocating for individuals to participate in citizen science initiatives on biodiversity and climate monitoring.

## 4.4. Alien invasive species

The National Climate Change Risk Assessment identifies the increase in occurrence of invasive species due to changes in climatic conditions as a substantial risk by 2050 and a critical risk by 2100, according to both Representative Concentration Pathway 4.5 and 8.5 scenarios. Climate change continues to alter environmental conditions, with milder winters and warmer summers expected to make Ireland more favourable to invasive species, enabling them to thrive and disrupt local ecosystems and outcompete native flora and fauna in terrestrial ecosystems. Changes in average ocean conditions, such as variations in temperature, pH, salinity, de-oxygenation and circulation,

significantly impact marine ecosystems and are also expected to favour invasive species. This impact of climate change, as well as the impacts of diseases such as ash dieback and recent sightings of invasive species such as the Asian hornet (*Vespa velutina*), highlight the urgent need to strengthen systems for the surveillance, control and management of invasive alien species in Ireland.

The Council notes that the EU Invasive Alien Species Regulation of 2014 was transposed through Statutory Instrument No. 374 of 2024.[88] This statutory instrument lists invasive alien species of national concern. The regulation also requires EU Member States to carry out the following measures with regard to the species listed: prevention, early detection and rapid eradication of new invasions and management of invasions that are already widespread.[89] The Council also notes the target in the 4th NBAP to control, manage and, where possible, eradicate invasive alien species by 2030 and the following related actions:

- establishment of an invasive alien species unit within NPWS,
- all-island cooperation on invasive alien species,
- development and implementation of a national management plan for invasive alien species,
- resourcing and implementation of on-the-ground actions to control, manage and, where possible and feasible, eradicate occurrences of invasive alien species, including the removal of stands of invasive species within and outside protected areas and national parks.

Recent EPA research reports have also highlighted the need for targeted biosecurity measures to manage the arrival pathways of invasive alien species and the need to develop baseline data on the current extent of invasive species, as well as timely and effective monitoring of their expansion.[90,91] As part of the national management plan that is being developed for invasive alien species, the Council recommends that NPWS collaborates with relevant agencies to urgently develop targeted actions to map the distribution of invasive alien species of national concern, conduct climate risk assessments for priority species and strengthen overall detection and surveillance measures, bearing in mind the impact of changing climate conditions on invasive alien species. The Council also supports the undertaking of large-scale invasive alien species removal projects in affected areas to promote the resilience and adaptability of ecosystems both within and outside protected areas.

## 4.5. Protected areas

Well-managed protected areas have a key role to play in safeguarding biodiversity, storing and capturing carbon dioxide, and flood mitigation by providing natural barriers to help absorb and reduce the impacts of extreme weather events.[92,93] Without healthy ecosystems (which are supported by protected areas), Ireland's ability to mitigate, buffer and adapt to climate change impacts is significantly reduced. The Global Biodiversity Framework, agreed under the Convention on Biological Diversity in 2022, requires parties to ensure that at least 30% of their land and marine environments are effectively conserved and managed by 2030 through systems of protected areas and other effective area-based conservation measures. Coverage of protected areas and improving the status of terrestrial, freshwater and marine areas is a key headline indicator of the Global Biodiversity Framework and is of high relevance to the 'biodiversity-rich' element of the National Climate Objective.

Ireland has consistently lagged behind in meeting its international obligations and is below the EU average for coverage of protected terrestrial and marine areas. Approximately 26.1% of EU land is designated as Natura 2000 sites and 7.5% is under other complementary national designations,[94] while approximately 12.3% of Europe's seas is covered by Marine Protected Areas. Ireland has the

seventh lowest terrestrial coverage of Natura 2000 sites (13.2% coverage) in Europe and has a further 1.2% of land covered under complementary national designations, along with almost 10% of marine and coastal areas.[95]

The enactment of legislation for the identification, designation and management of Marine Protected Areas, identified as a key action in the 2023 Climate Action Plan, has been subject to unacceptable and prolonged delay. This is jeopardising Ireland's ability to meet its offshore renewable energy targets and its international obligation to protect 30% of its seas by 2030.[96] The Council called for the urgent enactment of the Marine Protected Areas Bill in its Biodiversity Annual Review published in October 2024, stressing that legal certainty for the conservation and restoration of biodiversity, as well as other sea uses, including renewable energy and fisheries, is dependent on the bill's passage. As a direct consequence of the Government's inaction, the draft bill is now out of date and requires revision to reflect new ministerial responsibilities and transfers of functions between departments following the election.[97] It remains unclear whether this will take the form of a dedicated bill or an amendment to the existing Maritime Area Planning Act 2021. This uncertainty is unacceptable, as Ireland urgently requires a strong legislative framework for Marine Protected Areas that provides the legal tools necessary to effectively manage and protect Ireland's marine biodiversity and ensures that conservation efforts are enforceable and aligned with international commitments. DHLGH should ensure the urgent finalisation of the legal framework for Marine Protected Areas without any further delay.

The European Communities (Birds and Habitats) Regulations 2011 establish the process for identifying and designating protected areas as SACs, for habitats, and SPAs, for birds. Together, these sites form part of the Natura 2000 network across the EU,[98] supplemented by national parks, NHAs and nature reserves. These sites cover around 14.4% of terrestrial and inland water areas, which is well short of the 'at least 30%' international commitment under the Global Biodiversity Framework. National parks, NHAs and nature reserves are designated under the provisions of the Wildlife Act; however, there is no legislative framework for defining or managing national parks in Ireland. A recent public consultation, Your Parks, Your Say – The Future of Ireland's National Parks, which closed in February 2025, explored future legislation, conservation priorities and strategies for Ireland's national parks[99,100] as well as Ireland's obligation under the EU Biodiversity Strategy to protect at least 30% of its land area, with one-third of this 'strictly protected'. Strictly protected areas are those that have very high biodiversity value and are the most vulnerable to climate change.

The 2025 Programme for Government commits to creating new national parks,[76] but further ambition, area-based targets and urgency should be shown by NPWS in identifying and designating priority habitats for protection. NPWS should also urgently conclude the legislative framework for the management of national parks and designate strictly protected areas in Ireland.

According to the last assessment, in 2019, 85% of Ireland's EU protected habitats were of unfavourable status, with 46% of habitats demonstrating ongoing deteriorating trends.[58] The next assessment is due to be published in Q4 of 2025, but protected areas in Ireland are clearly struggling with degraded habitats, polluted water sources and competition with invasive species. Recent reports of the deterioration of Lady's Island Lake SPA in Wexford[101] and a large fish kill in the Blackwater River SAC in Cork[102] highlight the vulnerability of protected habitats and species to pollution from distant and adjacent sources and the need to tighten up assessment and enforcement processes to prevent such incidents from occurring.

While the designation of protected areas is an important starting point, active management approaches are needed across the full range of protected area types to ensure the optimum health of priority habitats and species. All Natura 2000 sites must legally have clearly defined conservation objectives and measures. Detailed site-specific conservation objective documents have been published for 519

Natura 2000 sites (all 439 SACs and 80 out of 168 SPAs), with the remainder to be completed in 2025.[103] Although recent Government-led initiatives reflect a growing commitment to national restoration goals and integrated conservation planning, conservation measures were implemented on only just over 90 Natura 2000 sites in 2024.[103] Positive initiatives include the 2024 acquisition of the Conor Pass, which led to the creation of Ireland's first marine national park;[104] the recent purchase of a critical Annex I corncrake breeding site on the Belmullet Peninsula;[105] and the launch of a new Natura communities initiative that is working across 35 Natura 2000 sites to enhance the conservation status of priority blanket bog habitats.[105] While positive, these initiatives represent only initial progress, and more ambitious conservation and restoration measures are needed. Existing initiatives now need to be rapidly built upon and significantly scaled up through the timely delivery and effective implementation of the NRP and the Land Use Review, in order to establish a comprehensive and integrated policy framework capable of delivering the transformative outcomes required for biodiversity.

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