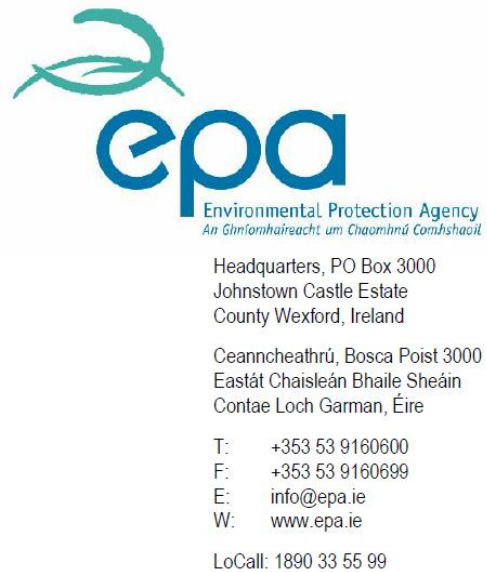


Email: NBAPConsultation@housing.gov.ie

4th National Biodiversity Action Plan Consultation
Biodiversity Policy, National Parks and Wildlife Service
Department of Housing, Local Government and Heritage
90 North King Street
Dublin 7, D07

Our ref: EPAC-2422

08 November 2022



Re: Public Consultation on Ireland's 4th National Biodiversity Action Plan

Dear Sir/Madam

The Environmental Protection Agency (EPA) welcomes the opportunity to comment on Ireland's 4th National Biodiversity Action Plan as part of the public consultation process by the Department of Housing, Local Government and Heritage. We have completed the online survey provided on gov.ie and include the EPA's response below, beginning with some general points for consideration and then moving into more specific observations on the Draft Plan.

Summary documents and Implementation Plan

In finalising the Plan consideration should be given to the preparation of:

- A summary version of the Plan for policy makers, and,
- A summary document for members of the public

In addition, consideration should be given to the preparation of a companion Implementation Plan to facilitate tracking of the Actions set out in the Plan. This could contribute to the development of the proposed robust Monitoring and Evaluation Framework.

Key considerations in the development of the Plan

On achieving greater coherence between biodiversity policy and other policy areas, consideration should be given to including a figure or a series of figures showing links between the Plan and other sectoral plans such as WFD RBMP. A schematic showing the hierarchy of biodiversity-related plans should also be included.

Second National Biodiversity Conference

The key relevant findings of the report of the Second National Biodiversity Conference should be reflected in the final Plan.

Objective 1 - Adopt a whole of Government, whole of society approach to biodiversity

The title page and the Foreword(s) to the Plan should reflect the commitment to all of government ownership of the Plan.

The title of the Plan should reflect the duration of the Plan i.e., 2023-2028.

The statutory basis of the Plan should be confirmed prior to its finalisation.

There would be merits in including a map of the territory which the Plan covers including the marine area in the introduction. There may also be merits in including a map(s) of SACs, SPAs, MPAs, NHAs, National Parks and Biosphere Reserves.

Consider establishing an all-of-Government Implementation Group with membership from the National Biodiversity Forum, Biodiversity Working Group, Citizens Assembly on Biodiversity Loss and relevant Government Departments.

The commitment to prepare an annual progress report on implementation of the Plan's actions is welcome. The presentation of this progress report to the Cabinet Committee on the Environment and Climate Change is a positive development.

The commitment to having a Biodiversity officer in each local authority is welcome as is the requirement for each local authority to have a Biodiversity Action Plan in place by the end of 2026. These Plans should be screened with respect to the requirements for SEA and Appropriate Assessment. Consideration could also be given to having a Biodiversity officer role in each of the three Regional Assemblies.

As the Introduction reflects themes explored in more detail in the report, the EPA's State of Environment Report, [*Ireland's Environment: An Integrated Assessment 2020*](#), could be cited in the Introduction (page 3) and included in the Reference section.

Outcome 1C: The root causes and key drivers of biodiversity loss are tackled by each responsible department

Under Outcome 1C, consider having a specific action around using outputs and data from environment and pollution monitoring programmes for the protection of protected habitats and sensitive ecosystems, such as the National Ecosystems Monitoring Programme (others could be listed as well such as WFD, MSFD etc.). These environmental monitoring programmes could also be relevant for input to **Action 2A2**: publish detailed site-specific conservation objectives for all SACs and SPAs.

Consider a specific action around further collaboration between DHPLG (i.e., NPWS) and other organisations on national environmental monitoring programmes that are relevant to habitat protection. For example, there is an MoU between EPA and NPWS on collaboration to set up the National Ecosystems Monitoring Network (NEMN).

Objective 2 - Meet urgent conservation and restoration needs

Outcome 2B: Biodiversity and ecosystem services in the wider countryside are conserved

Under Action 2B4 on measures to reduce pesticide use, this could also have an indicator to reduce impact on water quality and exceedances. It could also link to an action around a campaign for the disposal of old pesticides that might be a risk to wildlife.

Outcome 2E: a National Restoration Plan is in place to meet EU Biodiversity Strategy 2030 nature restoration targets.

There is merit in including a specific Target in relation to the preparation of a National Restoration Plan in accordance with the Nature Restoration Regulations. A target to have a Restoration Plan in place by the end of 2025 would seem reasonable and achievable. The Restoration Plan should be screened with respect to the requirements for Strategic Environmental Assessment and Appropriate Assessment.

Objective 3 - Secure nature's contribution to people

Outcome 3D: Planning and development will facilitate and secure biodiversity's contribution to people.

The Target to produce Guidance on best practice for biodiversity, green infrastructure and nature-based solutions in planning and development should also be captured as an Indicator. This could be integrated with the proposed "*SEA and Biodiversity, Flora and Fauna Guidance*" to be prepared by DHLGH under the SEA Action Plan 2021-2025.

Objective 4 - Embed Biodiversity at the heart of climate action

Outcome 4B: Climate change adaptation and mitigation measures contribute where practical to biodiversity and ecosystem conservation.

There would be merits in including a Target and related Action/Indicator associated with the implementation of the Peatlands and People LIFE project, as captured in the Climate Action Plan 2021- Action No. 22.

Objective 5 - Enhance the evidence base for action on biodiversity.

Outcome 5B: Data relevant to biodiversity and ecosystems, including conservation needs, is widely accessible and standardised.

We recommend changing Action 5B2 as follows in italics. "EPA will *explore the feasibility* of an integrated site and monitoring data solution to make data available relating to industrial consents and licences and associated monitoring data collected pre and post projects". It is considered this is a significant task and merits further discussion with the EPA to agree the scope and nature of the action. It will most likely involve a research project. There may be opportunities to explore a specific sector and pilot geographical area, which would be more achievable within the timescale specified, building on EPA initiatives in this area. In this context, the Target date for this action should be amended to 2027.

Outcome 5C - Long-term monitoring programmes are in place to guide conservation and restoration goals.

Action 5C1 states: 'A site-based monitoring programme to monitor changes in biodiversity over time will be developed'. More information would be useful here, as it is unclear whether this is a new programme or will incorporate existing relevant programmes such as under Article 17, WFD, NEMN etc. Also, there is no time frame or owner listed in the Draft Plan.

Action 5C2 refers to 'Collaboration across Government to support biodiversity monitoring will be enhanced, in particular to support the biodiversity-related reporting requirements for the WFD, MSFD, NECD, EU Biodiversity Strategy and the CBD'. This is a very broad action. Consider having one overarching action on collaboration across Government then subdivide the actions to cover the different monitoring programmes - for example NEMN is covered under the NECD that is mentioned.

Under Action 5C2, include reference to the Nature Restoration Regulation also.

Additional Actions could be included alongside the National Land Cover Map in relation to Habitat and Ecosystem Services mapping.

Consider moving Action 5C9, on priority invasive species, to under Outcome 2G relating to the control and management of invasive alien species.

Under the broad heading of Outcome 5, consider including an action to cover chemicals. It could be related to collaboration, enforcement of regulations, data sharing and monitoring of persistent organic pollutants, pesticides and other specific hazardous chemicals that are of interest for biodiversity protection, including data on monitoring in biota/wildlife and restrictions on certain chemicals. Consider establishing further collaboration between biodiversity and biota chemical monitoring and the descriptor on contaminants under MSFD and chemicals monitoring under the WFD. The enforcement aspect around chemicals could also be relevant to **Action 1E3** around resourcing to enforce environmental and wildlife legislation.

Outcome 5D: Ireland has prepared national assessments of ecosystem services and natural capital.

Actions 5D1 and 5D3 have different target dates for achieving the first national assessment of ecosystem services. The target date associated with 5D3 of 2027 would appear to be more achievable.

Outcome 5E: Biodiversity is mainstreamed across relevant research disciplines.

There may be merits in setting up a portal for biodiversity related EU LIFE projects, if not already available.

Objective 6 - Strengthen Ireland's contribution to international biodiversity initiatives

Outcome 6A: Science, policy and action on biodiversity conservation and restoration is effectively coordinated in an all-island approach.

Action 6A2 – Ireland has adopted an all-island approach to invasive species by 2025 – this could also be reflected under Outcome 2G in relation to Invasive Alien Species.

Action 6B1 states that: 'Ireland will enhance its engagement with EU and international biodiversity initiatives and research, e.g., EU Biodiversity Platform, CBD, OSPAR, RAMSAR and IPBES'. We recommend including a reference to EEA Eionet (Biodiversity and Ecosystems Groups). NPWS and EPA are active participants in these newly reformed European network groups.

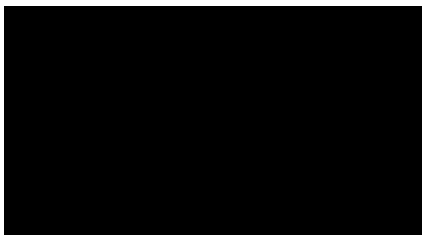
APPENDIX – SEA and AA Screening

The SEA screening for the Plan should, as appropriate, be undertaken in consultation with the relevant statutory environmental authorities. Where required, the SEA process should commence as early as possible in the Plan-making process.

The Table of all actions in the 4th NBAP should be referred to as Appendix 2.

The EPA looks forward to the adoption of **Ireland's 4th National Biodiversity Action Plan** and to working together with the Department, a strengthened NPWS, other partners and stakeholders towards its full implementation leading to a reduction of human-induced pressures on the environment and, ultimately, the restoration and conservation of nature in Ireland.

Yours sincerely



Programme Manager
Office of Evidence and Assessment



4th National Biodiversity Action Plan Consultation,
Biodiversity Policy, National Parks and Wildlife Service,
Department of Housing, Local Government and Heritage,
90 North King Street, Dublin 7, D07 N7CV

Emailed to: NBAPConsultation@housing.gov.ie

9th November 2022

EDF Renewables Response to the DHLGH Consultation, Ireland's 4th National Biodiversity Action Plan

EDF Renewables (EDFR) Ireland is part of one of the world's largest electricity companies and our investment and innovation in renewable energy projects is bringing down costs for consumers and delivering significant benefits for communities. EDFR Ireland's team has a wealth of experience in bringing complex development projects to fruition, across onshore and offshore wind, solar PV and battery storage technology, and is supported by more than 300 colleagues in the UK.

In 2020 we acquired 50% of Codling Wind Park, a major offshore wind farm which will be located off the coast of Co. Wicklow, with a dedicated team who have begun developing the project, and 100% of Wexford Solar, which includes eight solar projects across Ireland. In total we have an Irish onshore development pipeline of almost 1GW. We have constructed and energised three of the first utility-scale solar farms in Ireland in Wexford and Kilkenny and have announced five new onshore wind projects in the past two years. We continue to assess M&A and JV opportunities, and are actively looking at battery co-location options for all of our renewables projects.

EDFR welcomes the opportunity to engage with the DHLGH and to respond to this consultation. We welcome the accelerated pace at which the Government is moving, to ensure that Ireland will be enabled to achieve its national energy target of 80% renewable electricity by 2030. That includes the generation of 7 GW of electricity from offshore wind, 8 GW from onshore wind, and 5.5 GW from solar, as set out in the Programme for Government and the Sectoral Emissions Ceilings. With this context in mind, this submission contains a number of remarks about, and recommendations for the Biodiversity Action Plan in its current draft form. EDFR would welcome implementation of these points into future revisions of the document.

In summary, EDFR would like to make the following recommendations and comments:

- We welcome this Biodiversity Action Plan and support DHLGH's aim to halt biodiversity loss. However, we note the lack of specific and quantitative sectoral actions, whether for energy, infrastructure, industry, agriculture, or housing. In our view, all of these sectors are necessary for human, habitats, and species well-being and the economy of Ireland and these will all interact with the environment and possibly biodiversity in their development, operation, and decommissioning. We would recommend that the Action Plan considers how the interactions

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from such sectors can be positive, while still enabling sectoral growth. In the draft Action Plan's current form, the lack of recognition of these sectors could be interpreted as suggesting their exclusion from areas where biodiversity protection and improvement is being targeted. However, the co-existence of sector activities with biodiversity enhancement is feasible and has been successful.

- We believe that The Action Plan should reflect on the potential for each sector to achieve a net positive impact on the environment. We recommend that the Plan considers actions to enable and assess this.
- We believe that the renewables sector must be part of the conversation on the future approach to biodiversity. The most significant global threat to biodiversity is climate change and the objective of the renewables sector is to mitigate climate change by displacing fossil fuels with zero carbon electricity. Therefore, the renewables sector has the potential to assist in protecting biodiversity from the impacts of climate change and we would recommend that this is acknowledged in the Action Plan, including actions to help enable the development of sustainable renewable energy generation. Moreover, there are further benefits to biodiversity in addition to climate change mitigation, which can be implemented by renewable energy developers, and these are mentioned later in this response.
- EDFR believes that the Action Plan should consider the co-existence of the various sectors mentioned above in areas with significant biodiversity value. The Action Plan should be considering how to enable co-existence to align the Action Plan with Ireland's other national policies. This includes how to develop measures that will ensure a net zero or net positive impact on the environment.
- In our view, the draft Action Plan seems to be written in isolation from other work that the Irish Government is undertaking, such as meeting the 2030 Renewable Energy Targets. There should be much clearer cross reference to other initiatives, and demonstration of how these will support the goals of each. We would recommend that collaboration and cooperation with other Irish Government departments should be part of the Action Plan.
- The Plan discusses 'increasing offshore wind'. This doesn't fully reflect (i) the scale of this objective, as the offshore industry in Ireland is in early development, or (ii) the requirements of the Climate Action Plan, which requires the increase of onshore wind to 8 GW. The Plan does not discuss onshore wind, which is a technology targeted for future growth, but is heavily constrained by the availability of suitable locations. We recommend that a balanced approach towards offshore and onshore wind is taken in the Action Plan to prevent unintended consequences on either technology.
- A number of initiatives have recently been launched to promote the enhancement of biodiversity as part of the development of renewable energy projects in a sustainable manner.
 - In Ireland, a new system for protecting key species and accounting for the value of nature in the vicinity of wind farms was launched in early 2021. The environmental monitoring system was devised by scientists in Trinity College Dublin, MaREI energy



institute in University College Cork and Maynooth University. The Nature+Energy project aims to maximise the benefits of biodiversity near onshore wind farms. The experts involved have developed “natural capital accounts” and a biodiversity action plan for the wind sector to facilitate nature-enhancement measures and to help mitigate the effects of wind farms on species and habitats. We would recommend that The Department considers a common monitoring system, to ensure that renewable energy developments are compliant with national biodiversity requirements under the new Action Plan.

- In Ireland and the UK, best practice guides have been produced to raise awareness and promote the design, construction and operation of wind and solar farm projects which support ecology and deliver additional benefits arising from multiple land use. These provide detailed guidance on how to deliver wind and solar farms with an emphasis on promoting environments which provide natural capital, biodiversity, and in some cases agriculture, alongside green energy supply.
 - In Ireland, for example, Wind Energy Ireland (WEI) have developed best practice guidance for wind farm developers, “Pollinator-friendly management of Wind Farms”¹. The wind industry can play a vital role in conserving our biodiversity and natural habitats if sites are managed in a pollinator-friendly way.
 - One Ireland-based renewable energy developer is running a peatlands restoration programme² which aims to restore a total of 8,125 hectares of bog to peat-forming conditions. Rehabilitating peatlands will help absorb carbon from the atmosphere while creating spaces for biodiversity and renewable energy to co-exist.
 - In the UK, Solar Energy UK have produced best practice guidance for solar energy developers: “Natural Capital Best Practice Guidance - Increasing biodiversity at all stages of a solar farm’s lifecycle”³. According to Solar Energy UK, there is a growing body of scientific evidence which indicates that well-designed and well-managed solar can support wildlife habitats and meaningfully contribute to achieving national biodiversity targets, while also providing renewable, low-cost energy. This also applies to well-designed and well-managed wind energy projects. Solar Energy UK’s latest best practice guidance⁴ explains how project developers are responding to this ecological emergency, by developing high-quality solar farms that can help land recover from intensive farming, enable the natural environment to flourish, and support community buy-in for solar farms. EDFR UK has recently launched a new research program that proposes to examine the benefits large-scale solar farms can have on biodiversity, soil health and carbon, wildlife habitats and farmland management in the UK.
- In order to improve Biodiversity, we believe that there will be a need for the Irish Government to set aside a budget to resource this. There are opportunities that co-existence can support, whereby developers can contribute to biodiversity improvement schemes. However, such an approach needs to be cross sector, rather than targeting sectors such as energy alone.

¹ https://pollinators.ie/wp-content/uploads/2021/04/Windfarm_Pollinator_Guidelines-WEB.pdf

² <https://www.bordnamona.ie/peatlands/peatland-restoration/>

³ <https://solarenergyuk.org/wp-content/uploads/2022/05/NCBPG-Solar-Energy-UK-Report-web.pdf>

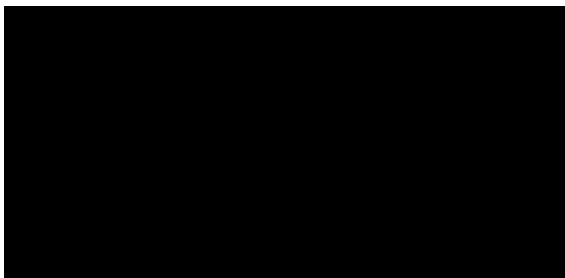


- EDFR believes that greater collaboration and communication between nature conservation bodies and the renewable energy sector is needed, to identify suitable sites for wind development at an early stage. This is needed to ensure that (i) the development does not contribute to net biodiversity loss but also (ii) to ensure that renewable energy targets and the legal requirements of the CAP are met within the required timeframe. We recommend greater funding for nature conservation bodies to allow early-stage collaboration with developers to become more efficient. We also recommend that the Government identifies priority areas and species.
- In our view, there is a need for greater resourcing and staffing across all key statutory and advisory bodies to allow for adequate monitoring, data analysis, adaptive management, whole life cycle of monitoring, etc. Furthermore, we would note that there is currently a skills gap in the environmental sector, as Ireland needs more trained ecologists, planners, marine specialists across many sectors. While we welcome the recent news of new biodiversity officers for county councils, we believe that the Government needs to tackle this growing skills shortage and the overall resourcing issue as an ongoing priority.
- We would welcome a clearer roadmap demonstrating how the actions in the Plan will be achieved.

In conclusion, we would like to thank The Department of Housing, Local Government and Heritage for the opportunity to engage on this matter and look forward to continuing our work with you in future.

Should you wish to discuss any of the issues raised in our response or have any queries, please contact Stella Burke on stella.burke@edf-re.ie, or me. I confirm that this letter may be published on the DHLGH website.

Yours sincerely,



EDF Renewables Director, Offshore and Ireland

DECC Renewable Electricity Division – submission to Public Consultation on Ireland’s 4th National Biodiversity Action Plan

28 October 2022

We note that the draft of Ireland’s 4th National Biodiversity Action Plan includes reference to engagement with biodiversity representatives in respect of offshore wind energy matters as part of the targets under Outcome 4B, however there is no mention of solar energy in the plan.

The October 2020 Programme for Government committed to the development of a ‘Solar Energy Strategy for rooftop and ground-based photovoltaics to ensure that a greater share of our electricity needs is met through solar power.’”

The Climate Action Plan 2021 sets a roadmap for taking decisive action to halve Ireland’s emissions by 2030 and reach net zero no later than 2050, as also committed to in the Programme for Government.

This includes a target of up to 80% renewable electricity on the network by 2030, to include between 1.5-2.5 GW of solar PV, and up to 500MW of Community Energy. On 28th July 2022, Government announced an increased target of 5.5GW of solar, as part of the agreement on the Sectoral Emissions Ceilings.

Since 2017, land with solar panels is eligible for Capital Acquisitions Tax Agricultural Relief on the condition that the area of land occupied by solar panels and ancillary equipment occupies no more than 50% of the holding.

In May 2022, Deputy Brian Leddin proposed to the Joint Committee on Agriculture, Food, and the Marine that they should write to the Minister of Finance on the issue of the 50% cap of solar panel coverage for agricultural tax relief.

This is now being examined by Department of Finance in consultation with other relevant Departments and Agencies, including DECC and Department of Agriculture, Food, and the Marine.

In the context of solar farms on agricultural land, biodiversity enhancements around solar farms could possibly be incorporated as part of overall solar policy.

For example, one possibility in that regard might be to maintain the current 50% limit unless demonstrable actions have been taken to encourage biodiversity onsite. A practical example of how that might work might be, rather than just having sheep grazing around panels, an increased focus on managing the land for biodiversity could be encouraged.

Research from Solar Energy UK in May 2022 showed that solar farms can actually help reverse Britain’s declining wildlife through animal habitat enhancements, providing previously arable land with a break from intensive cultivation and ultimately boosting biodiversity, soil health and regeneration.

This built on research from Lancaster University released at the end of 2021 that found changes to how solar PV land in the UK is managed could see sites support four times as many bumble bees.

Therefore, we ask that the Department of Housing Local Government and Heritage liaises with DECC on opportunities for incorporating biodiversity into onshore renewables policy.



Submission to the Public Consultation on Ireland's 4th National Biodiversity Action Plan

Introduction

This submission is made on behalf of the Nature Forum. The Nature Forum is a recently established coalition of concerned parties in Cork that advocates for the conservation, enhancement, and addition of blue and green spaces and their associated biodiversity in Cork City and further afield and is working to promote long-term ecological sustainability and the realisation of the UN 2030 Sustainable Development Goals.

We welcome the opportunity to participate in the Public Consultation on Ireland's 4th National Biodiversity Action Plan. Biodiversity loss is having devastating impacts on the island of Ireland and in countless countries around the world. Despite the fact that the Republic of Ireland declared a climate and biodiversity emergency in May 2019, populations of flora and fauna are rapidly declining and our ecosystems are deteriorating at alarming rates as a result. The National Biodiversity Action Plan must contain clear and measurable targets with associated budgets and clearly defined outcomes. The target and outcomes need to have both short and medium-term goals. For instance, an immediate national rollout of rewilding edges of sports fields, leftover green spaces, and all public green spaces to regenerate native vegetation, which an immediate ban on chemical spraying by all public bodies but critically in the vicinity of schools, hospitals, playgrounds, and watercourses.

Priorisation of Biodiversity

We support the holistic 'whole of government' approach outlined in the draft Biodiversity Action Plan. Resources and capacity-building are integral to the protection, enhancement, and restoration of biodiversity in Ireland. The continuous failure to prioritise environmental groups is a disservice to our nation's biodiversity. All biodiversity bodies including the NPWS, NGOs, and local organisations must be

supported with adequate financial and human resources to ensure that urgent biodiversity action initiatives can be fully implemented to maximise positive impacts.

The life-threatening and urgent nature of biodiversity loss needs to be fully understood and channeled throughout this Action Plan. Climate change and biodiversity are nationally declared emergencies and both are intrinsically interlinked. Local and national action for biodiversity needs to be on the same scale as climate action efforts. Lists of species of conservation concern, species that are threatened and severely endangered should be prepared in order to map and understand the status of Ireland's biodiversity species. Furthermore, more policy coherence is required and cross-sectoral collaboration with communities, the business sector, and NGOs needs to be embedded as a core component of the Plan.

Accountability must be attached to the implementation of this Plan and the root causes of biodiversity loss need to be addressed. The agricultural sector is putting biodiversity under extreme pressure, and sustainable agricultural and marine practices must become widespread across Ireland. Farmers must be provided with the necessary financial support, incentives, and information that will allow them to rewild their land if they choose to do so. Nature-based solutions and the conservation of biodiversity on farmlands are critical to biodiversity protection. We must work closely with farmers and rural communities to design and implement effective farming and rewilding initiatives. Transparency, collaboration, and open communication must be central to these initiatives if they are to be successful.

Climate Change

We are in a period with acute pressures, including climate change, and some biodiversity species are vulnerable to even the slightest ecosystem change. New species that are not necessarily invasive can now be found in Ireland and are changing the dynamic of ecosystems in ways that we don't yet fully understand. Healthy soil, wetlands, trees, and properly functioning ecosystems act as carbon sinks and provide clean air, water, and reduce the climate impacts of storms. Greater emphasis must be put on nature-based solutions that benefit both humans and biodiversity populations. With regard to flooding, we need to rapidly embrace more natural flood management practices and work within a catchment management approach.

We would like to see greater consideration given to the carbon sequestration potential of a healthy ocean and the protection of our kelp forests and seagrass beds. It should be made more apparent that planning applications for activities that will increase emissions or damage terrestrial/marine environments will not be approved. In the area of shipping and any craft, cruise, or leisure boats, the carbon emissions and associated air, noise, and light pollution whilst in our waters should be considered. Stricter guidelines and a more robust policy are required in this area.

Invasive Species

Invasive alien species have devastated our native ecosystems and must be urgently controlled and reduced. Invasive species such as *Rhododendron ponticum*, *Heracleum mantegazzianum*, *Fallopia japonica*, *Neovison vison*, and *Sciurus carolinensis* can be found across Ireland and are detrimental to our native species. We welcome the development of strategic initiatives to protect our native species. Furthermore, non-native tree forestry activities such as Sitka spruce plantations do not effectively support biodiversity or tackle rising carbon emissions. Our natural carbon sinks such as native forests and peatlands are much more effective carbon sequesters and support an array of biodiversity, in comparison to the ecological desert these monocultures of non-native trees create. Only 1% of Ireland is covered by native woodlands and we must allow our woodlands to naturally regenerate, which has been shown to work effectively in harmony with existing species.

Restoration

Ireland only has 6 national parks, many of which have been severely overgrazed. The continued systemic failure to take adequate measures to prevent and reverse this damage is a national biodiversity failure. Overgrazing prevents the natural restoration of native plants and makes our landscapes more vulnerable to the impacts of climate change, which accelerates environmental degradation and erosion. Immediate and long-lasting measures must be taken to tackle overgrazing and farmers must be supported throughout these processes of revitalising our precious ecosystems. Mismanagement of land and the absence of natural large predator species have allowed this issue to spread rapidly across the island of Ireland. The reintroduction of large predators such as wolves and lynx would help control overgrazers and allow the balance of our ecosystems to be restored. Restoration activities that support carbon sequestration such as restoring permanent native forests, grasslands, and wetlands are critical for climate mitigation and adaptation and extensive action must be taken to ensure that these carbon sinks are protected and enhanced.

Trees

Despite being internationally renowned for its 'green' image, Ireland has one of the lowest levels of ecological integrity and forestry coverage in Europe. We need a target of 30% tree coverage of our land footprint for wildlife, including neighbourhood woodlands. The preservation of tree density must be of utmost importance due to their role as critical ecosystems and carbon sinks. Trees, particularly in urban settings, play a central role in temperature regulation and this will only become more important as the impacts of climate change continue to increase. The Forestry Act 2014 does not require a licence to fell a tree in an urban area and accompanying

legislative protections are needed to prevent the needless and reckless destruction of trees. To strongly link with cultural heritage in Ireland, there is potential to look to our past and examine the approach taken by Brehon law towards trees, which gave far greater connection and recognition to the value of trees.

Wildlife Crime

Wildlife crime is not mentioned in the draft Action Plan. Wildlife crime has been historically under-reported and under-prosecuted in Ireland. This type of criminal activity has significant negative impacts on ecological systems and must be a national priority. There is currently very little comprehensive data available on the rates and species targeted by wildlife crime in Ireland. A legislative obligation on the Irish Government to publish an annual wildlife crime would help address the existing wildlife crime information gap. Proportionate punishments for wildlife crime must be enshrined in legislation to deter wildlife offenders and the development of sentencing guidelines would help build transparency and coordination for wildlife crime prosecutions. Undoubtedly, enforcement and prosecution bodies must be adequately resourced to tackle this severe biodiversity issue.

Marine Protected Areas

In 2015, the Irish Government stated its intention to establish a network of coherent, representative Marine Protected Areas and it has failed to follow up on this commitment. Ireland has also failed to meet the 10% target for Marine Protected Areas by the end of 2020 and the situation remains unchanged at the end of 2022, with a mere 2.3% designated often without proper management plans. This Plan needs to facilitate and ensure that every effort is made to deliver the 30% target as a priority by 2030. The Nature Forum recommends that the National Marine Planning Framework should include a target of 50% Marine Protected Areas by 2030, a target supported by E.O. Wilson. This target takes cognisance of the IUCN target from 2016, which focuses on highly protected Marine Protected Areas. The IUCN called for 30% of each marine habitat to be set aside by 2030 in highly protected Marine Protected Areas and other effective area-based conservation measures, aiming to cover at least 30% of the global ocean, with no extractive activities permitted. This figure has been accepted by most in the scientific community with an additional 20% that operate with slightly more flexible criteria. This is the only viable way we can ensure a healthy and sustainable marine environment with rich resources that can continue to provide essential provisioning for our benefit and continue to vitally act as a carbon sink.

Prof Callum Roberts of the University of York is a team member of the international review 'Rebuilding Marine Life' who has said: 'Overfishing and climate change are tightening their grip, but there is hope in the science of restoration'. One of the overarching messages of the review is if we stop devastating sea life and protect it,

then these ecosystems and marine biodiversity can recover. We can restore and protect our oceans, which makes sense economically, for human well-being and, of course, for the environment. The only way to do this is to protect much of our oceans so that this essential restoration can occur. We believe the preferable way of designating Marine Protected Areas in Ireland is through a combination of collaboration with the scientific and coastal communities, and the management plans of these Marine Protected Areas must be adequately resourced. Marine Protected Areas can provide a framework to underpin active involvement by the community in the management of valued marine, coastal, and island seascapes and the natural habitats, flora, and fauna as well as the cultural heritage that they contain. Marine Protected Areas have the potential to deliver exponential social, economic, and environmental benefits and help address the existential crises of our times.

Natural & Built Heritage

Ireland has a diversity and richness of species. However, we do not fully know about the richness of what we have and how much we have already lost. The landscape simplification wrought by land use decisions over decades has had a devastating impact on nature. We need to focus on how both cultural and natural heritage can be incorporated better into humanmade developments. This means prioritising the use of existing buildings as far as possible, rather than demolishing them, and in the case of natural heritage retaining as much of existing habitats as possible.

Buildings are often preserved for architectural and historical value, but what of the value of old buildings to nature? Shouldn't that be part of the preservation criteria given the importance of these buildings for countless mammals and insects? The incorporation of measures that support biodiversity should be considered for all new builds and buildings being renovated. Every aspect of planning and development needs to not just consider nature and biodiversity but actively included it.

Citizen Science

Citizen science initiatives are key to unlocking biodiversity potential at a community level, especially in the protection of natural heritage. Many excellent programmes are already being run through the National Biodiversity Data Centre, Coastwatch, and the Botanical Society of Britain and Ireland, amongst many others. Citizen science could be deployed more with essential audits of a range of species, whether it be tree audits or surveys for birds or butterflies. We believe that citizen science should play a much more prominent role in Ireland, whether it be in relation to species surveys or contributing input to national biodiversity records. These projects are impactful methods of engaging a wide range of people to build an understanding of and a relationship with nature.

Conclusion

Ireland can build back nature, but this is something that we need to do collaboratively with a willingness to put nature first. This Plan has the potential to move us from a biologically vulnerable country to one where we value and support nature to thrive and renew our affiliation with nature, which is vital for our own well-being and is literally our life support system.

Edward O'Wilson outlines biophilia as 'the innate tendency to be attracted to other life forms and to affiliate with natural living systems' so a life for us with more nature improves our own well-being. We can restore and protect our biodiversity, it makes sense economically, for human well-being, to address climate change, and, of course, for the environment. This Plan needs alignment with a budget that front-loads resources and action to make immediate progress. We need to halt further loss, protect what we have, and restore much of what we have annihilated.



Consultation on the 4th National Biodiversity Action Plan

On behalf of Green Foundation Ireland

Thank you for the opportunity to comment and input our thoughts and ideas on the 4th NBAP. We were delighted to attend the initial consultation meeting organised with the Irish Environmental Network in March and are heartened to see that some of our recommendations given at that point have been incorporated into this revised document.

To add to this, we would have a few additional points.

(1) Legislation – One goal of the NBAP is to strengthen compliance and enforcement of existing legislation. However, we would go a step further than that, by asking for new legislation to be enacted.

We feel that Constitutional protection of nature and our environment would give ownership of nature to the Irish people, would enhance legal protection, would ensure that nature is given the status it deserves, and would ensure that the protection of nature is enshrined in all future plans and policies.

See our video by Colin Stafford Johnson on the reasons why it is important - <https://www.youtube.com/watch?v=rldVgD5faF8>

See our legal seminar on Constitutional Protection of the Environment-

<https://www.youtube.com/watch?v=rldVgD5faF8>

New legislation may also be required to fulfil the goal in the NBAP which is the need to pursue a legal basis for the NBAP. This objective is very important to implement and would give the NBAP the legal standing it requires.

In addition, fines and prison sentences must be increased for wildlife crime. Far too often, it is easier for large companies to pay fines (for example for polluting rivers) than to clean up their waste discharges. Fines should be proportionate to damage caused – farmers, businesses and wastewater treatment plants should be fined a large amount if their actions cause a fish kill, and there is a need to measure successful prosecutions across a range of wildlife crimes.

(2) National Biodiversity Forum .We would like to see the recommendations of the National Biodiversity Forum implemented in full.

(3) Supports for NGO's working on biodiversity. We were sorry to see that there was little mention of supporting N.G.Os in this document. Support should be given in many ways, financial and otherwise. Access should also be granted to N.G.Os to meetings with government, civil and public servants – such meetings could be organised through the IEN. We have noticed that many of our request for meetings



have been turned down in recent years, and much progress was made when we could have face to face discussions with officials from government departments. Dublin Zoo has been mentioned throughout this document, but we also need to include WRI, and their proposed Wildlife Hospital which is currently under construction, as a source of data and research opportunities for native wildlife. This also requires state funding. N.G.Os have been the people who have protected and spoken up for our wildlife for many generations. Along with businesses and farmers, they need a specific mention in this document, and support and funding to enhance and achieve their goals.

(4)Business for Biodiversity – The Business for Biodiversity Platform is an excellent idea. Funding for businesses to carry out biodiversity actions is essential and could be funded in the way that SEAI provides business grants for energy efficiency.

Conclusion – It is important that the value of nature is not monetised. Some animals – such as the Kerry Slug, will never have a commercial value. However, all individual pieces of nature have their own intrinsic worth, and their own small lives.

Many thanks to you all for your hard work on this document.



National Associations submission to the National Biodiversity Action Plan.

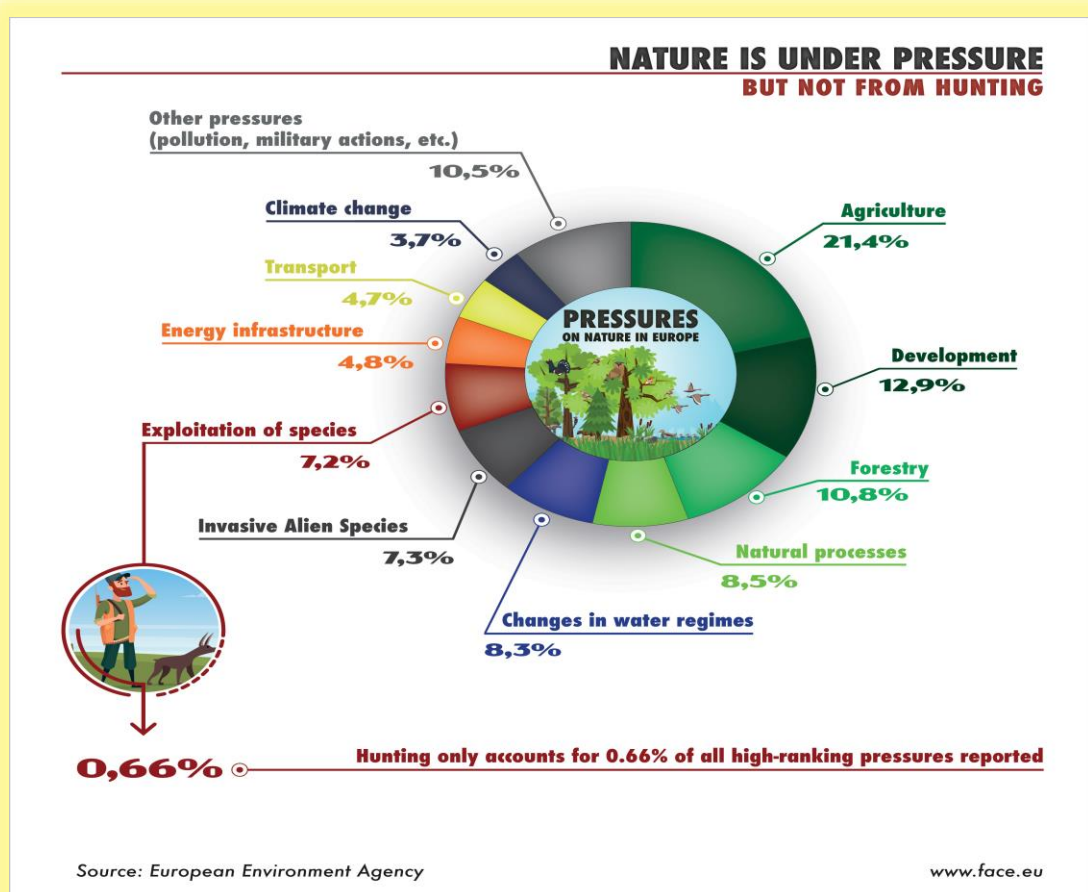
This is a submission on behalf of the National Association of Regional Game Councils (NARGC) in response to the call for submissions to the National Biodiversity Action Plan, on biodiversity loss.

The National Association of Regional Game Councils (NARGC) represents 25,500 members and is the largest game conservation organisation in Ireland. The NARGC is governed by twenty-eight county bodies (Regional Game Councils) with no less than 1,050 affiliated Game Conservation Clubs, all operated by volunteers in the local community, mainly at parish level. The main activities of Clubs affiliated to the NARGC are game propagation, habitat conservation, target shooting, hunting, fishing and archery. Club members' work together locally for these common purposes. The Association works to foster and protect its members' rights and traditions, the conservation of Irish wildlife and to prevent further destruction of wild habitats. Which have been damaged by many years of intense peat harvesting and agricultural intensification. Shooting and hunting is conducted in co-operation with the many small farmers and landowners in Ireland who are often key members of our local Game and Conservation Clubs. Hunting is part of our Clubs' activities and events such as "Game Meat Tasting Nights" are special. After more than fifty years in existence, one of the NARGC's key strengths is its ability to bring local people together for the betterment of hunting and conservation.

The NARGC is of the view that biodiversity loss is not given the attention it deserves. Despite several Government commitments, targets, and timelines, we see little action taken. The same time we see, read and hear that hunting, shooting and fishing are mistakenly scapegoated as the causes for this loss of biodiversity. Sustainable hunting is not responsible for any species loss. Repeatedly when species are taken off the Open Seasons Order, we still see a massive decline in numbers. In 2012, the Curlew was removed from the Open Seasons Order, but this did not halt the decline of this species. It was not until NARGC projects, such as the re-introduction of Red Grouse in Ballydangan Bog, in Co. Roscommon, and with appropriate habitat and active predator control management, that we saw an increase in the Curlew population in this area, with breeding pairs now very much evident in the Spring.



One of the myths we need to address is the role hunting plays in the demise of any species or any loss of biodiversity. A recent survey carried out by our European partners and the EEA showed clearly where the problems lie in relation to the decline of our species. (see below)



Also at the most recent General Assembly of FACE EU we listened from MEP's from across the Parliament speak on how best to tackle our biodiversity crisis and how it was affecting our wildlife.

(See below extracts from their speeches.)

*, **MEP Álvaro Amaro**, President of the European Parliament's "Biodiversity, Hunting, Countryside" Intergroup said: "The EC's proposal on EU Nature restoration Law can play an essential role ensuring that degraded habitats are restored. Restored habitats will greatly benefit bird species affected by habitat loss and fragmentation. If we want to ensure that this idea translates into several successful initiatives on the ground, we must involve all relevant rural stakeholders and put in place the right incentives."*

MEP Alex Agius Saliba, Vice-President of the Intergroup stressed that: *"In Europe, at this very moment, we have a group of 7 million hunters who are key partners and whose contribution to conservation cannot be overstated, especially in light of the different initiatives adopted under the EU Biodiversity Strategy for 2030. I believe the new nature restoration proposal represents a good opportunity to support conservation actions by Europe's hunters. It's important to support conservation actions by hunters and that community-based conservation and active stakeholder engagement are promoted at all levels."*



It is clear and obvious that the scale of the Biodiversity crisis facing us is huge, how we handle that crisis will determine the future for most species of wildlife. We seem to be inundated with report after report with very little being done by way of getting hands and boots dirty. This will be the only way we can reverse the trend. We must start by protecting what we have left. Our hedgerows must be given national monument status. Native trees and forest must be protected. The removal and reclamation of bogs and flood plains, scrub and coppice must be stopped. Farmers are forced to remove scrub and ineligible features due to pressures exerted on them by EU requirements. Government must act in addressing the anomalies that exist in policy. We want good environmental practices that enhance and protect our land however; we are offering incentives to farmers to destroy them.



Significant loss of habitat through drainage of wetlands and ponds and the removal of hedgerows, continues to occur. Without habitat, where wildlife can feed and breed, we will continue to see declines in flora and fauna. The best action we can take is to avoid any further loss. The NARGC has funded significant development in the creation and development of suitable pond and woodland habitats. Through the NARGC's Habitat Trust Fund, founded way back in the 1990's, a pool of approximately €150,000 is available to our Clubs and members to assist them in this work. At a local level, a Club can apply for funding for habitat creation to a maximum of 50% funding per project. Our members have created many wetlands and copses with their own money. This provides benefits to many species not just those harvested by our members. While this is excellent, it needs to be ramped up significantly by the provision of State funding as well. A proper share out of funding for biodiversity projects and works is required. Considerable funding is going to core ENGO's but others are left without funding. Our volunteers have been making efforts to remove North American mink for some considerable length of time; we need support from NPWS in delivering these outcomes. Currently we have to deal with regulation as part of the wildlife act that makes trapping and trap design difficult. A system where members of the public are trained in the control of American mink and supervised by members of the hunting community would be advantageous in this regard.

The involvement of all stakeholders and NGO's is going to be critical in delivering an answer to our current crisis. How this is done will determine the outcome and only by a whole of society approach with respect for all interest will there be a positive outcome. Already we have witnessed signs of self-interest at play in relation to the problem. Calls for banning of hunting, removal of species from the Open Season Order and the curtailing of legitimate hunting practices have all too often be proffered as solutions to the problem by groups with different agendas at heart. This without a shred of scientific evidence to back up their demands. This has to be called out for what it is and needs to be addressed by the people of authority.

The practice of introducing apex predators to the biosphere without consultation with the stakeholders on the ground must stop. Accountability for the introduction of these species must be visible to the public. A plan must be in place for the management of any species introduced and how a population will be maintained at sustainable levels. An environmental impact assessment must be done prior to any release and the concerns of local communities must be considered.

Wildlife crime must be tackled, however it must also be realised that prevention is better than conviction. Some of the "wildlife crimes" are merely a symptom of a lack of understanding of the impact of some predators on local flora and fauna. ENGO's cannot translocate Pine Martin, Buzzard and other species throughout the country without consultation with local communities. A lack of consultation is leading to resentment and forcing individuals into illegal action when faced with no other management alternative.

Financial Response

Money needs to be invested and targeted at actual Habitats at ground level The EU and the Irish Government give big grants for biodiversity / water quality and other environmental projects, but invariably less than 20% of the huge grant amount is used on actual projects on the ground. This must change to where it becomes mandatory that at least 80% of the grant amount is used for the actual stated purpose of the grants. Until the money is directed to make a differences on the ground, these grants will largely be meaningless to environmental and habitat recovery. If this money was properly directed, we would see some real tangible changes and biodiversity gain at ground level, relatively quickly. If there was an audit done over the last 20 years, on the 'purpose' Grant money was allocated to achieve, and what it actually did achieve on the ground, we think it would quickly become obvious, that there was little or no value got for the intended purpose.

What we are saying is, the money need to be properly targeted, with proper oversight and checks and balances in place to ensure that a positive outcome is achieved and only then should the grant be fully paid out.

The principal habitat for our migratory species is their breeding ground. The NARGC has invested in purchasing and restoring key nesting habitats across northern Europe through its co-operation with its European partners in the Waterfowlers Network.



Figure 5: Game cover

The NARGC additionally subsidises bird cover seed for crops every year to a cost more than €30,000. This provides the equivalent of 600 acres of pollinating plant cover for the benefit of wildlife. This is for the benefit of game species but the contribution this plays to seed eating passerines like Twite, Yellowhammer, Finches, etc., must also be acknowledged.

PREDATION AND SPECIES MANAGEMENT

The membership of the NARGC is the largest body of persons in the State dealing with predation on wildlife. As already indicated, our members present in 1,050 parishes in the State and spend considerable man-hours controlling both mammalian and avian predators. A targeted predator control program aims to create a predator vacuum for the breeding season, giving vulnerable species a chance to increase in number. In a utopian world this would be unnecessary, but man has changed the environment and skewed the balance in favour of the predator. For species like curlew, grey partridge and other farmland birds already facing habitat loss, lack of predator control will be the final nail in their coffin. All parties must address the need for greater control of serious destructive species such as the American Mink. NARGC members have culled significant numbers of this predator, but more work required. We need assistance from the NPWS rather than the current hindering efforts. Areas of Ireland have significant numbers of wild deer at present. This resource can provide a healthy meat for hunters and their families. The hunting of these deer species gives significant benefits to biodiversity. Too many deer will have an enormous impact on the under story and regeneration of woodlands. A policy of management must take place rather than the current situation whereby deer are classed as vermin. Our noble deer species deserve better. A proper deer management plan with the correct targeted population controls is required. We must encourage more recreational deer hunters by changing current rules and opening more lands to proper deer management. This is all part of the management of our wildlife and biodiversity and are all interlinked. Our research programs are equally as important in the management of our biodiversity in Ireland. Please see below some of our research to date which must be supported by government.

RESEARCH AND FLYWAY MANAGEMENT

The NARGC has a long-standing interest in research into our quarry species. We have a long history in operating a program of wing surveying of woodcock, the emblem of our Association. The Woodcock is a species held in great regard by our members. Many of these species, hunted by Ireland's hunters, are migratory and a very small percentage actually breed in Ireland. To this end, NARGC's main aim since 2019 has been to improve

- (i) Collaboration with our European partners in the Waterfowlers Network by instigating a pan European wing return survey.
- (ii) The organisation of a national census of Waterfowl, held annually at the end of the Hunting season.
- (iii) The protection of the breeding grounds of our migratory species by shared funding their improvement and protection through the Waterfowlers Network.
- (iv)

2.4.16 of the Birds Directive states;

"Furthermore, there is a need for sound, scientifically based monitoring mechanisms to ensure that any use is maintained at levels which can be sustained by the wild populations without adversely affecting the species' role in the ecosystem or the ecosystem itself. This should include information on bag statistics, which is at present lacking or poorly developed for most species throughout the European Union."

The decisions on harvesting waterfowl and mammals must be based on accurate data and not sentiment or personal stake.

BIRD RINGING

Bird ringing is a key component of waterfowl management across many flyways and is used to regulate harvest quotas across the American waterfowl range. We are unaware of any ringing programs on key huntable species. Our wish is to see this instigated through collaboration with our members immediately. Ringing returns are used to set harvest quotas in North America since 1930's using the Lincoln estimates. Ringing, on a European basis, is key to how waterfowl populations can be measured. NARGC and our European partners stand ready to fill this void.

WING SURVEYS

The NARGC, together with seven partner-hunting organisations, has started to collaborate on wing survey data across the European flyways. This is a vital step forward in protecting our water birds and their overall trends of male/female and juvenile/adult ratios to be assessed and compared. This allows action to protect each species and provides a stable platform to assess hunting decisions. Wing and bag return data works in tandem; age and sex ratio are especially important when assessing populations. Such data is difficult to obtain other than by sustainable hunting. The results gathered across the range of countries now involved, will be able to reveal large-scale geographical patterns and analyse changes and productivity at an international scale rather than nationally. This will give us more data to ensure the sustainability of waterfowl hunting across the flyway.

BAG RETURN DATA

Key to harvest management is accurate reporting of bag return data. This information must be used to protect huntable species through informed management. The NARGC is improving our bag recording systems and has instigated a Harvest Information Program (HIP) to estimate annual harvests. We have increased member count records by 100% through the education of our members since 2020. Returns are submitted through the members log in on our website page and by paper copy also, if required.



CONCLUSION

Hunters are invested in the long-term improvement of biodiversity and species restoration. We are part of the solution to many of the problems that wildlife now suffers. We are willing to play our part to save the natural world upon which we all rely. However, we will not sit by and see hunting scapegoated, set against the damage cause to our environment by failed Government policies in agriculture and forestry. We would respectfully caution the government to listen to all voices in the quest to rebuild the damaged biosphere. Rewilding has been touted, as a panacea for all ills. We are of the opinion that *rewinding* is a more appropriate plan. Stepping back from intensive farming and forestry models to a situation where wildlife can co-exist with man will be more successful. We have an environment that is home to people and biodiversity, and it should remain so. The key is to find a working balance.



What we would like to see once more back in Ireland. Hedgerows, small coppice`s, scrub and bog all playing their part in the biodiversity of our countryside. Family farms with sustainable incomes for their families and still providing food to feed our country.

We suppose that maybe a key starting point would be to ask ourselves what happened to the once beautiful picture above and where did it all go wrong. Why were the ditches ripped out, the scrub removed, the bogs drained and our wildlife left to perish. In finding the answer we may well find the solution to many of today's problems.

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I would like to see the topic of Solar Farms addressed in the National Biodiversity Action Plan.

There are a number of proposals being discussed around the country for Solar Farms. While Solar Farms themselves are not an issue, the proposed locations of some of these Farms is very much an issue. Landowners are apparently being canvassed to lease land out to commercial enterprises to install these Solar Farms. These proposals, if effected, will take valuable, productive land out of the food chain at a time when food prices are soaring and food sources are becoming scarcer. There is also the serious negative impact on biodiversity.

An example of one of the possible proposals is for part of the Burren Lowlands in south Galway. The land there is fertile and very productive. The Turloughs in particular provide wetlands environments of varying extents with the local frogs breeding in them in the spring, wading birds throughout the winter, swans moorhens, and wild ducks foraging. All of these then serve as prey to stoats, mink, foxes, Buzzards, Harriers and Peregrines.

This proposal will affect a large area of the Burren and will impact severely on the biodiversity of the area. This specific proposal is for 127 hectares of prime farmland, in three parcels, to be covered with hundreds of solar panels. This will have a very large impact on the flora and fauna of the surrounding areas as well as in the immediately affected areas.

Part of the proposal is to place concrete supports in these areas, including in Turloughs, to support these panels. There will also be drainage gutters to collect the runoff rainwater from the panels and deposit it somewhere else - who knows where? The area is prone to flooding already. This added disruption to the water courses and water table will be catastrophic for property owners.

There will be 'secure fencing' around the areas with cameras and one would suppose lighting. In effect, the area with the panels will grow nothing but poorly nourished grass, if even that. Apart from the waste of food productive land, it will create a biodiversity desert in an area rich in species.

This area has a wide range of flora and fauna. There are Frogs, Pygmy Shrews, Field Mice, Common Lizards, Rabbits, stoats, pine martens, Hares, Fox, Pheasant, Hen Harriers, Buzzards, Sparrowhawks, peregrines as well as the usual Crow, Magpies, Sparrows, etc. It has a resident flock of Starlings - a bird that seems to be endangered elsewhere. Every year the cuckoo's return is celebrated, a local festival "fleadh an Chuach" is held in honour. Houses in the area host nesting pairs of house Martins and their offspring.

There are swarms of Native Irish Black Bees, among other insects, which are studied in the wild by scientists from NUIG. As well as Deer in the area, seen and heard calling in the rutting season, we have several species of bats - a protected animal - including Pipistrelle, Lesser Horseshoe, Brown Long-eared and some other species yet to be identified.

The range of wild flowers is very large. One particular plant, *Gymnadenia conopsea*, has migrated from the high Burren, where it is a protected species, to the Lowlands. These flowers feed the wild bees and the cultivated bees and myriads of other insects.

While new green technologies must be embraced and assimilated into our lives and countryside, areas of abundance need to be protected from "being thrown out with the

bathwater". It can be assumed that any similar location in Ireland where Solar Farms are allowed will experience the same negative environmental impact that will be experienced in the Burren. So selection the of alternative sites should focus on areas such as deploled bogs (where Bord Na Mona are actively looking for collaboration) and not biodiverse areas. All of this should be taken into account within the National Biodiversity Action Plan.

LEE Forum Submission to the 4th National Biodiversity Action Plan.

The Lee Engineering and Environment Forum was set up to research flood protection schemes for our towns and cities, with a particular focus on Cork.

We are a group comprised of architects and engineers, a geologist, environmentalist and quantity surveyor.

The proposals we would like to submit are as follows;

1. Repeal & Replace the Arterial Drainage Act

The Arterial Drainage Act is a barbaric piece of legislation in relation to the environment and biodiversity. It was born of an era when Ireland was a poor agrarian economy and all that mattered was draining land for agriculture. This is how the legislation is framed.

It was then used to transpose the Floods Directive (SI 122 of 2010) which could be considered to be an egregious misrepresentation of the directive.

The Act (attached) for example, section 37 includes the following;

- (d) to interfere substantially with any land proposed in the scheme to be so interfered with including the flooding of land and, if the Commissioners so think fit, to enter on and so interfere with such land before any ascertainment of compensation in respect thereof,
- (e) to restrict, terminate, or otherwise interfere with any easements, fisheries, water-rights, navigation-rights, or other rights proposed in the scheme to be compulsorily restricted, terminated, or interfered with, and to divert, remove, or otherwise interfere with any roads or bridges proposed in the scheme to be diverted, removed, or interfered with, and, if the Commissioners so think fit, to do any of the things aforesaid before any ascertainment of compensation in respect thereof,
- (f) for the purpose of the due carrying out of the scheme to do all or any of the following things:
 - (i) take from any land all sods and other material required for the said purpose,
 - (ii) deposit on any land all spoil or other material produced in the course of such carrying out,
 - (iii) utilise for the said purpose all or any spoil, gravel, stone, rock, or other matter removed in the course of such carrying out,
- (g) to do all such other acts and things as shall, in the opinion of the Commissioners, be necessary or proper for or incidental to the due carrying out of the flood risk management scheme and are not specifically provided for by these Regulations, and

While section 38 states that;

Nothing shall impede the progress of the works including fisheries protections;

Protection of fisheries.

38. (1) It shall not be obligatory on the Commissioners, when constructing flood risk management works pursuant to a flood risk management scheme, to comply with the Fisheries Acts, 1842 to 1944.

(2) Notwithstanding the exemption conferred by the foregoing subsection of this section, the Commissioners shall, when constructing flood risk management works pursuant to a flood risk management scheme, take such precautions and make such provisions as the Minister for Agriculture, Fisheries and Food may consider adequate for the protection of and avoidance of injury to fisheries during or in consequence of the construction of such flood risk management works, provided that the said Minister shall, in consultation with the Commissioners, satisfy himself that taking such precautions and making such provisions will not cause substantial detriment to such flood risk management works or substantial hindrance to their construction.

It states that the OPW can ignore fisheries legislation, but that the Minister for Agriculture (!?!) can make provisions for the protection of fisheries as he / she deems adequate.

This is certainly not a standard that is acceptable in 2022. The Minister has no competence in this area and even so, the total disregard for all other environmental law built into this legislation makes it obsolete and highly environmentally damaging.

The results of the OPW's work in the destruction of many of our rivers is plain to see. Some rivers will never recover and yet. The OPW's approach to flood relief is expensive, heavy engineering that mostly consists of walls, culverts and dredging. All of this is to provide 'conveyance enhancements' ie, to speed up the flow of the rivers.

The Floods directive says that the flow should be slowed and to 'make room for rivers'.

This is the polar opposite of SI 122.

Here are some images of the works to the River Bandon



This is what the river bandon looks like today. It is a sterile channel. There was certainly no involvement from the Minster for Agriculture here. The OPW have been brought to court on several occasions here for damage to fisheries and are getting off with minor fines.



Here is the now infamous 'fish pass' that does not work while it was being constructed. Emergency works were carried out this after a storm in 2020 when the boulders were swept away. Replacements were provided at cost of €80,000



It replaced a small, but perfectly functional, fish pass on the old weir that can just be made out in this photo;



Other rivers have suffered a similar fate. Skibbereen received the same treatment.

This is it before and after the OPW wrecked it.

The OPW are doing the same the length and breadth of the country.



RPS

River Ilen (Skibbereen) Drainage Scheme
Viewpoint 11 : Existing View



The River Bride, Blackpool, Cork City.

The OPW also plan to culvert a 350m stretch of the River Bride which flows through Blackpool. This is a lively nature corridor in an otherwise built up and nature depleted area.

This stretch of the Bride is also a busy otter nursery for the urban otter population of Cork city. Otters are an Annex IV protected species under EU law. The OPW knew this before preparing plans for this option, which is estimated to cost €22m (but by other projects of this nature will cost at least €40m).

Another option for upstream storage which would not have involved covering over this stretch of river and would have cost at most €10.5m (but more likely to be €5m) was not considered as the difference in costs was assessed by the OPW as 'not that great'. The costs for this option have increased from €12m to €22m before the recent construction inflation.

Some members of our group are also members of the Save Our Bride Otters (SOBO) which took a judicial review on this project.

The OPW plan knew from their own EIAR that the scheme would result in 'Permanent Significant Negative Impact' on fisheries and otters.

The river and surrounding vegetation provide Otter and Kingfisher foraging habitat. Kingfisher was recorded on the Glenamought River, whereas Otter was recorded along the Bride (north). All bat species are protected under Annex IV of the EU Habitats Directive and some are likely to use the area for foraging.

The impact of the works on habitats, flora and fauna is considered slight for most species. However, the impact on aquatic species and their habitat namely brown trout, lamprey and eel is significant due to the permanent loss of instream habitat as a result of culverting, sediment traps and maintenance regiments. Impact on otters is also considered very significant as the culverting of an extensive length of river potentially results in loss of foraging habitat and increased severance between the Bride and the River Lee.

Mitigation measures will minimise the impact on fisheries from the construction phase, however the permanent loss of habitat cannot be mitigated in the context of this assessment. Compensatory measures will be carried out in agreement with IFI with regard to salmonid habitat. However, impact on Fisheries within the Bride (North) catchment remains a Permanent Significant Negative Impact. It is considered that the otter population on the Bride and Glenamought do not cross over with the River Lee otter populations. Nevertheless impact on otters will require mitigation to minimise the risk of severance due to culverting by the provision of otter passes and artificial holts. Compensatory measures for fisheries will also serve to benefit otter foraging on the Bride. Despite the proposed mitigation the impact on otters is Permanent Significant Negative Impact.

Excerpt from River Bride (Blackpool) Certified Drainage Scheme
Environmental Impact Assessment Report
Non-Technical Summary May 2018

The OPW conceded the case, but still plan to proceed with their destructive and expensive scheme despite everything.

The OPW scheme was also in direct contravention of the Cork City development plan's objective

10.9

Objective 10.9 River and Waterway Corridors

To protect and maintain the integrity and maximise the potential of the natural heritage and biodiversity value of the River Lee and its associated watercourses.

To promote an integrated approach to the future development of the River Lee so that it includes all aspects of use e.g. recreation, maritime history and economic factors

Development proposals in river corridors shall:

- a. Dedicate a minimum of 10m from the waters edge in channelized rivers for amenity, biodiversity and walkway purposes;
- b. Dedicate a minimum of 15m from the top of the bank in non- channelized rivers for amenity, biodiversity and walkway purposes;
- c. Preserve the biodiversity value of the site subject to Ecological Assessment by a suitably qualified Ecologist;
- d. Shall not involve landfilling, diverting, culverting or realignment of river and stream corridors;
- e. Shall not have a negative effect on the distinctive character and appearance of the waterway corridor and the specific characteristics and landscape elements of the individual site and its context.

The Arterial Drainage Act means that none of this now applies as they can do whatever they want.

The River Bride was supposed to be a linear park due to its rich biodiversity, however this has been removed from the most recent Cork City Development Plan.

2. Prioritise Nature Based Solutions and upstream storage for flood relief.

Irish flood relief projects cost on average €30m each or about €300,000 per property protected. This is far more than the original business cases put forward. We discovered through AIE that engineers are paid as a percentage of the final cost, there is an incentive to make the works as expensive as possible. We have found that in the original options reports that more economic alternatives have their prices inflated and the more expensive options have their costs suppressed only for them to increase by 200% to 300% during construction.

Nature based solutions for flooding are cheap and do not require the kind of destructive practices employed by the OPW and their engineers.

By attenuating flows higher up in the catchment areas of rivers, flows can be slowed at a very low cost. This would also help to boost the local biodiversity by providing wetland habitat.

This is from a trial in the River Severn catchment in England

The Gloucestershire Frome Rural SuDS project (continued)

In 2014/15, working with local community flood action groups and key landowners including the National Trust and Gloucestershire Wildlife Trust the project officer has implemented a range of projects including:

- Dillay / Slad Brook:
20 in stream large woody debris structures to slow flows
Stock fencing and spring fed cattle drinks to reduce erosion and sediment in stream.
- Sheepscombe Brook:
16 in stream large woody debris structures to slow flows.
4 track culverts and soakaways to reduce sediment and surface flows.
- Toadsmoor Valley:
18 in stream large woody debris structures to slow flows.

Project funding during 2014/15 was £60k, comprising Stroud DC £5k, Gloucestershire CC £30k, Environment Agency £20k and National Trust//Glos Wildlife Trust £5k (In Kind).

*RSuDS is one of the titles under which projects of this type have been developed in recent years. The national R&D project has adopted the title Working with Natural Processes (WWNP) and Natural Flood Management (NFM) is also widely used



Dillay Brook: Large Woody Debris



Dillay Brook: LWD attenuating flows.

3. Remove responsibility for flood protection from the OPW

We have found that the OPW are extremely hostile to anyone questioning their methods or challenging their schemes.

This hostility and their disregard for public consultation and the environment, their singular focus on heavy engineering, walls, and culverts even when there are cheaper & less destructive methods available means that they are not competent to manage these schemes in the midst of a climate and biodiversity emergency.

Overarching responsibility for flood protection should be given to the EPA as is done in other jurisdictions, with the OPW as a subordinate role.

4. Introduce 'Keystone Species'

4.1. Beavers

As Ireland is the most nature depleted country in Europe and perhaps the world, some beneficial keystone species should be introduced / re-introduced.

The beaver was extinct in England for 400 years until there was a family discovered living on the River Otter in Devon. They were going to be exterminated as they were thought to be damaging nearby farmland until there was a local public outcry. It was decided that a 5 year study would be commenced overseen by academics from the nearby University of Exeter.

<https://www.theguardian.com/environment/2020/aug/06/englands-first-wild-beavers-for-400-years-allowed-to-live-on-river-otter>

<https://www.devonwildlifetrust.org/what-we-do/our-projects/river-otter-beaver-trial>

It found that Beavers provided a net benefit in providing habitat, filtering water and providing flood protection by slowing the flow.

Many more benefits have been discovered since then, including that beavers provide excellent drought resistance as their dams surcharge ground water and moisture for struggling flora and fauna.

In essence they make the landscape resilient to extremes of floods and droughts.

The plan is to introduce beavers to many more rivers across Britain.

An equivalent study should be undertaken in Ireland to assess the effects of introducing beavers here.

4.2. Apex Carnivores

As our uplands and national parks have been grazed bare, there is no longer any natural regeneration of forests as saplings are being eaten as soon as they grow. The severe imbalance in the predator / prey relationship has destroyed the landscape and it is now being swallowed whole by an invasion of rhododendron ponticum and laurel, the very plants that the browsers do not eat as they are toxic.

Sitka deer are out of control and should be eradicated as they are invasive. Attempts by people to cull them are expensive and are unlikely to succeed,

At a minimum, the Lynx should be reintroduced.

Wolves should be too on a limited trial basis with rigorous scientific monitoring to assess their impact on herbivores and livestock.

Other jurisdictions have compensation schemes for farmers who lose stock to wolves, which should also be considered.

5. Temperate Rainforests.

Temperate rainforests should be allowed to rewild all our uplands. This would have multiple immediate benefits including;

- Control of flooding
- Storing carbon
- Contiguous habitat along the western seaboard

Trees provide a vast root system that absorb water and guide water downwards. Otherwise it runs off hills and mountains rapidly causing flooding.

Temperate rainforests have also been found to sequester 1500 tonnes of carbon per hectare.

In Ireland, we have 427,800 hectares of commonage alone. That give the potential to sequester 642m tonnes of carbon.

There is a total of 1.4 million hectares of upland in Ireland, of which there is 0.5 million hectares of peat, so there is the potential to sequester 1.35 billion tonnes of carbon if all uplands were rewilded with temperate rain forests.

This vast and contiguous habitat would be an amazing habitat for also for thousands of species of native flora and fauna

6. Control of sheep and goats.

The reason we don't have this habitat now is because of sheep and feral goats roaming on our uplands. There are a total of 5.5m sheep in the country across 35,000 farms. Many of these farms are subsistence with 51% being the western and northern regions.

There are now thousands of feral goats roaming the Burren due to the absence of natural predators. This is a very sensitive ecological site with much unique flora. Goats eat everything in their path

Farmers should be incentivised to remove their sheep from roaming on uplands and should be encouraged to change to Nature Based Farming practices that promote biodiversity and rewilding.

The benefits are societal and so society should share the cost of this. It should be more attractive for farmers to do this than to continue along the current destructive path.

7. Rewet all Bogs.

All bogs should be legally protected from all extraction and drainage. Bogs are vital stores of carbon and rain waters. By rewetting and restoring them, they can become carbon sinks and flood water storage again, as well as vital habitats as seen when the first cranes bred successfully here in 400 years just last year on a recently rewetted bog.

8. Building and Planning Regulations

Building regulations should include for measures to assist biodiversity such as the inclusion of bee and bird nesting features in new buildings.

Planning regulations should include for biodiversity measures in new developments such as appropriate biodiversity measures including bat & bird boxes and wetland features.

There should be the option to include storm water attenuation ponds on developments instead of tanks.

9. Support Sustainable Farming

Intensive dairy and livestock farming is not sustainable, leading to huge reductions in water quality in our rivers and lakes. It is also very vulnerable to climate and geopolitical shocks due to the vast amounts of inputs and costs associated with it, much of the feed and fertiliser used in intensive agriculture is imported.

Support for a move towards more sustainable agriculture is required including

- regenerative agriculture,
- Agro-forestry
- Permaculture
- Organic farming
- Growers co-operatives.

Of all of these, supporting growers co-operatives is the most important as it gives a route away from the big co-ops and supermarkets so that farmers have greater control over their products and markets.

Where I grew up in the 1980s and 1990s on the Sheeps Head peninsula in West Cork, there was a thriving growers co-op that was set up in the 1960s. Here, there was rarely any frost as the gulf stream kept temperatures often 10 degrees higher over places inland. This meant that early potatoes could be sown earlier and be ready for May when there was a pent up demand for this product.

It was the same for out door daffodils. My family had several acres of both, as did many other families. This meant that emigration was not as much of an option as other areas.

By identifying a unique advantage and a product to suit it, the community survived and thrived.

10. The Gearagh

The Gearagh is an inland delta forest on the River Lee. It was mostly cut down to facilitate the building of the Inniscarra dam in the 1950s.

Inland deltas are an extremely rare type of habitat. There are only 6 globally and the Gearagh is just one of 2 in Europe.

In 2020, in UCC Vs ESB, the Supreme Court ruled that the ESB have a duty of care towards the residents of Cork with regard to protection of flooding. As such, the dams are being used primarily for flood prevention during peak flooding risk, notably in autumn and winter.

The turbines at Inniscarra generate a max output of 8MW. This is about the maximum rated output of an onshore windturbine and about half the rating of an offshore wind turbine.

Inniscarra provides very little by way of the baseload power to the network.

The levels at Inniscarra should be dropped to allowing the re-establishment of the Gearagh forest and thus maintain additional flood water storage capacity for protection of Cork City.

November 8th 2022



To whom it may concern,

I welcome this opportunity to submit some comments and recommendations to help address the current Biodiversity Emergency.

Ireland, like the rest of the world, is experiencing dual biodiversity and climate emergencies. Given that both crises are inextricably interlinked it is essential that responses to both be integrated.

Furthermore the global Biodiversity Emergency must be treated with the same **urgency** as the Climate Emergency. Biodiversity policy must be on a par with Climate policy and its implementation must be delivered based on a whole government approach with transparency and accountability. We need joined up thinking and development plans for agriculture, forestry, the marine and infrastructure to be fully aligned with biodiversity objectives.

The following is my list of recommendations:

1. BIODIVERSITY ACT

A **Biodiversity Act** with the same legal standing as the Climate Act putting the **National Biodiversity Action Plan on a statutory footing**, with clear lines of government, responsibility and accountability.

2. BIODIVERSITY FORUM

A **stronger independent Biodiversity Forum** with the same authority as the existing Climate Change Advisory Council to hold the government to account for the implementation its Biodiversity commitments.

3. AMEND OUR CONSTITUTION.

Amend our Constitution to grant '**Rights of Nature**' to declare protection of the environment as a core and fundamental value to Irish society as well as rights for people to a healthy natural environment, as Ecuador, Colombia and New Zealand have done. I was shocked to learn that our Constitution has no reference at all to nature or biodiversity - such a move would represent a dramatic and in my opinion long overdue shift in our relationship with the non-human world.

4. SOCIETAL & ECOLOGICAL WELLBEING AS GOVERNMENT POLICY

Irish government should advocate for a shift in emphasis in EU and international economic policy **away from GDP expansion** as a goal in itself to incorporate the goals of **societal and ecological wellbeing in shaping policy and budgeting**, as is the case in New Zealand. This would align with the aforementioned “ Rights of Nature” recommendation.

5. IMPLEMENT ENVIRONMENTAL LAW AND POLICY COMMITMENTS

Ireland must fully implement national and EU environmental laws and ensure that they are properly enforced. Of particular importance are the objectives of the **EU Biodiversity Strategy for 2030**, which will include the adoption of imminent **EU Nature Restoration Law** in 2023. This law, which is to come with a 100 billion Euro budget, will present an amazing opportunity for every county in Ireland to fully embrace ecological restoration and restore, as well as conserve, our many degraded habitats.

6.COMMIT TO NATURE RESTORATION

Ireland must commit to **protecting 30% of land by 2030** as part of the ‘Global Deal for Nature’ which is due to be agreed in December of this year.

While climate change directly affects 20 percent of endangered species, habitat loss and degradation threaten more than 80 per cent. Therefore it has never been more timely and urgent to protect, conserve and restore our degraded habitats. Restoring natural landscapes is one of the most effective and efficient ways to combat the climate crisis while also boosting biodiversity. Furthermore **ecosystem restoration provides sustainable long term economic opportunities** while boosting amenity value, with employment creation through ecotourism, sustainable forestry management and **Nature Based Solutions** for mitigating climate change.

7. FUNDING

There is an urgent need to bring funding in line with Ireland’s international and national commitments to protect and restore biodiversity. Biodiversity conservation funding should be increased to €1.5 billion per annum up to 2030.

8.NATIONAL BASELINE BIODIVERSITY AUDITS.

The Government should better resource biodiversity research, data collection and monitoring. While some - unfortunately not all - protected Special Areas of Conservation (SACs) are monitored under the Habitats Directive there is no **auditing of non legally protected areas**. No **national ecological monitoring scheme** exists - the absence of such an information

management system means there is no mechanism to gauge the success or failure of a given biodiversity management plan - a major obstacle to appropriate conservation. This is a policy blind spot which needs to be addressed.

Hopefully the newly resourced NPWS, in conjunction with the NBDC, will focus on these non legally protected areas and will collect data on habitats as well as species. There is **very little data on our invertebrate population** and this critical knowledge gap needs to be filled. The important role of Citizen Science in documenting species was also discussed.

A greater emphasis needs to be placed on our **marine environment** where there are serious gaps in our understanding of the distribution of threatened habitats and species.

The Government and relevant departments should do more to encourage the participation of the public in data collection through **citizen science initiatives**. Data when available should be integrated into appropriate databases to facilitate conservation and made available when appropriate.

9.NPWS

The recommendations of the **Strategic Action Plan for the renewal of the National Parks and Wildlife Service (NPWS) 2022 – 2024**, should be fully implemented.

10.MANAGEMENT PLAN FOR SACs and NHAs

Even though our SACs and NHAs are designated, no actual management plan exists for them.

11.REFORM COILLTE, BORD na MONA & OPW.

Key state agencies, including Coillte, Bord na Móna and the Office of Public Works, whose activities have a significant impact on biodiversity must be reformed in order to tackle the climate and biodiversity crisis so that they are mandated to support the aims of biodiversity restoration.

12.STRENGTHEN AND ENFORCE WILDLIFE CRIME ACT

There are many areas where legislation is not strong enough, with lack of accountability for perpetrators of Wildlife Crime. There is no monitoring of **out of season hedge cutting**, for example, and therefore no consequences. The same applies to **Upland fires and water pollution**.

13. EDUCATION

There is a huge lack of public awareness of and engagement with nature. The Government must support initiatives that facilitate education and engagement with Nature. We need to develop an 'ecological literacy' so that people know why we have a biodiversity crisis and are aware of what we need to do about it.

While this needs to start at **pre school level** it also needs to be specifically **targeted at politicians and county councillors** if they are to effect meaningful change. Most have minimal knowledge and little interest unless votes are involved.

14. ROLE OF MEDIA

The media have a huge role to play in educating the general public but generally fall far short in this regard. The Biodiversity Emergency is not given the same coverage as the Climate Crisis nor is the link between the two sufficiently highlighted. A **sense of urgency** is lacking. This has to change.

15. HEDGEROW PROTECTION AND MANAGEMENT

Need to restore native species rich hedgerow.

Need to stop and penalise out of season hedge cutting.

Need to **stop landowners cutting their hedges to the quick in September** through an on- the- ground education programme. This ecologically destructive practice destroys the structure and function of the hedgerow as a barrier and an ecological corridor. It also deprives wildlife of a badly needed food source.

16. ROADSIDE VERGE PROTECTION AND MANAGEMENT

The same principle applies to grass verges in the Summer months - many of these verges are filled with species rich grasses and wild flowers which are needlessly mulched, which eventually destroys everything but the surviving ryegrass. These verges are a great source of food for our pollinating insects. They should be protected throughout the county through the The All Ireland Pollinator Plan.

17. COLLECTIVE COMMUNITY ACTION

An enormous amount of work is being done at local level which is effectively being **driven by poor national policy**. Too many obstacles exist for community groups alone to effect meaningful change and communities often feel excluded from the decision making process. While the "bottom up" approach has benefits it cannot work without **adequate support** from the top

down. We need a shift in national policy - a collaborative approach is essential and community groups need a platform to engage with policy makers in order to inform policy changes and practice which would help deliver long-term goals and shared visions. They also need to be provided with adequate support, not limited to funding but also to include assistance with administration in order to side step the red tape and bureaucracy which is a huge stumbling block for such groups.

There needs to be full and **meaningful community consultation for county biodiversity plans** - county councils need to engage with and listen to local communities.

18.CHANGE IN FARMING POLICY

- Ensure that Agriculture Delivers its Fair Contribution of the **51% Reductions in Greenhouse Gas Emissions by 2030** Committed to in the Programme for Government.
- Protect and Restore Biodiversity on Farmland
- Protect and Restore Peatlands and Woodlands on Farms
- Halt and Reverse Water Quality Decline
- Support Sustainable Livelihoods and Incentivise Farm Diversification
- Facilitate Inclusive Dialogue and Participation for an Alternative Model for Agriculture in Ireland, such as in the Uplands as discussed below.
- Ireland should support the European Commission in the re- initiation of a European Soil Framework Directive to **protect soils and soil biodiversity** across Europe.

19. UPLAND MANAGEMENT

Agricultural policy does not serve our uplands well. Current policy is homogeneous - a one size fits all approach - which does not differentiate between upland and lowland areas. A massive policy shift is needed - one which is tailored to specific habitats and which targets local landscape needs.

Our Upland habitats are a precious resource for **biodiversity, carbon storage, clean water, flood control, hill farming, cultural heritage and recreation** - **crucial ecosystem services** which cannot be taken for

granted. These ecosystem services needs to be recognised, harnessed and protected. Nature, water and climate need to be put at the heart of policy.

The biggest issues facing our uplands are **water pollution, over grazing, under grazing, gorse fires, land abandonment and inappropriate monoculture coniferous afforestation.**

Agri-environmental initiatives such as Burren Beo demonstrate the importance of local adaptation and the benefits of moving away from a rules-based to an results-based approach. These collaborative schemes, which aim to improve local habitats and biodiversity and deliver for local environments, represent the best future for the management for our uplands. Change needs to be incentivised - farmers need to be recompensed for protecting biodiversity just as they receive grant aid for food production.

20.FOOD PRODUCTION

We also need to see policies and plans from across the Government, most notably our food strategy, to acknowledge the finite boundaries of pollution and biodiversity loss, something which is not currently the case. The most recent FoodSmart 2030 Plan does not aim to meet minimum legal compliance with environmental laws.

21.REFORM AND REPURPOSE COILLTE & IRISH FORESTRY BOARD.

Forestry in Ireland is at a crossroads - decisions made today will significantly shape the future. We are living with a hundred year old legacy of poor forestry policy and practices with the wrong tree in the wrong place and little debate or public consultation. It is welcome news that a new draft National Forestry Programme is currently out for public consultation.

22. CHANGE EXISTING FORESTRY MANAGEMENT PRACTICES

- **Joined up thinking needed** so that new woodlands and forestry plantations are sited in an ecologically sound way, with the **right tree in the right place**, utilising the existing River Basin management plans combined with existing satellite digital data mapping systems as an overarching framework for planning the siting of trees
- Establish a broad **multi stakeholder forestry-land-water-soil management use Forum**, with cross departmental inputs to oversee all new afforestation and guide the forestry strategy implementation, to develop tools such as **sensitivity mapping and implement species**

specific guidelines to support ecological assessment of applications for afforestation and felling.

- Ensure that licensing requires **site-by- site ecological assessments plus a monitoring system** to ensure that afforestation is not negatively impacting on biodiversity both within or outside site.
-
- Embrace a **broad-based agroforestry model** that includes sustainable hedgerow management and conservation with less onerous rules for establishing small groves of native and useful broadleaves/ rivers native conifer.
- **Reward farmers** for measured ecosystem, Water, Soil protection, and Carbon sequestration services.
- Introduce **Community Woodland legislation** to allow public and community co-operatives access to funding and support to buy unproductive Coillte and other public lands to develop long term native community woodlands. A Forestry Commission model for this exists in the UK, developed for Scotland who have approximately 200 Community woodlands, some on ex Forestry.

23. CONTINUOUS COVER MIXED NATIVE BROADLEAF/ CONIFER FORESTRY

Move to a close to nature, continuous cover management model with a focus on **native broadleaves** - aspen, birch, oak, cherry, holly, and other valuable high-end broadleaves, plus more use of our **native conifers** such as Scots pine to grow better quality softwoods, and non-native conifers such as cedar, douglas fir, european larch. Promote **natural regeneration** and traditional **coppice management** of suitable native species.

Broadleaves should be planted along Riparian Buffer Zones and walkway/ road edges. All of these measures would work as **vital wildlife corridors**.

24.ECOLOGICAL CORRIDORS/ STEPPING STONES

Coillte Nature should have lots of **small scale native broadleaf afforestation projects in every county** rather than a very small number of large scale projects which is currently Coillte Nature's policy. This would be a much more biodiversity friendly approach **providing ecological stepping stones** throughout the whole country.

25. STOP PLANTING CONIFERS MONOCULTURES ON UPLANDS

Coillte should not be allowed plant coniferous monocultures on the Uplands.

26.STOP CLEAR FELLING

Phase out the damaging practices of clear felling as a forest management tool.

27.BAN TREE FELLING DURING BIRD NESTING SEASON

All wildlife should be protected from afforestation and forestry management in line with the requirements of Irish and EU law. Specifically Coillte should not be allowed to clear fell during the bird nesting season - this is a **barbaric and inhumane practice** and should be classified and treated as the Wildlife Crime that it is.

28. BAN THE USE OF ACETAMIPRID BY COILLTE

Acetamiprid is a highly toxic chemical - in the neonicotinoid class of pesticides - used for pine weevil control by Coillte. It poses a serious threat to wild bees and honeybees, as well as a wide range of other insects, all of which can be affected by feeding on (contaminated) honeydew, a sugary substance secreted by these aphids.

Professor Jane Stout of the All- Ireland Pollinator Plan and Professor of Botany at TCD has stated that acetamiprid is “toxic to a wide range of insects, not just the target pests, and so pose a risk to ecosystems”, while acetamiprid can cause “sub-lethal impacts on honeybees”. She also says that bees are “more at risk if acetameprid is sprayed” (as is Coillte’s practice) rather than if applied to the soil or injected directly into the trees. Coillte’s conifer saplings are pre - treated with acetamiprid in a nursery, followed by top-up spraying to prevent infestation over the ensuing three years.

The Federation of Irish Beekeepers Associations has joined an EU-wide beekeepers’ campaign for a ban on acetamiprid, which is also licensed for use in horticulture and agriculture. Three related neonicotinoid pesticides have already been banned in the EU since 2013.

29.PROTECT OUR SEAS

- **Designate and manage at least 30% of Irish waters as a Marine Protected Area.**
- Implement ambitious **marine conservation measures** to ensure ‘Good Environmental Status’ of Ireland’s seas.
- Invest in **restoration programmes** to recover our most vulnerable and biodiverse coastal habitats and endangered species.

- Review and **amend the National Marine Planning Framework** to ensure planning decisions are considerate of whole ecosystems.
- Pursue the full implementation of the Common Fisheries Policy to **ensure fishing is sustainable and that MPAs are effectively managed.**
- **Ban bottom trawling.**

Yours sincerely,

A solid black rectangular box used to redact a signature.

The Northern Ireland Marine Task Force (NIMTF) is a coalition of 10 eNGOs, comprised of Friends of the Earth, Irish Whale and Dolphin Group, Keep Northern Ireland Beautiful, Marine Conservation Society, National Trust, Northern Ireland Environment Link, RSPB, Ulster Wildlife, WWF & Wildfowl and Wetlands Trust. Since its establishment in 2007, NIMTF has advocated for policies which protect and guarantee the restoration of marine biodiversity in NI seas.

NIMTF welcomes the opportunity to comment on the Department of Housing, Local Government and Heritage consultation for Ireland's 4th National Biodiversity Action Plan.

We appreciate the importance of this public consultation to deliver the transformative changes required to protect and restore Irish nature, including within the marine environment.

This National Biodiversity Action Plan should align with and reflect the '30x30' target which aims to protect 30% of Ireland's land and sea for nature conservation by 2030. Ireland has already committed to this 30x30 target and so it should be included in this NBAP as an overarching, strategic target.

To truly halt the decline in nature and promote habitat and species recovery *along* and *across* borders, as well as within them, greater levels of engagement between Ireland and Northern Ireland are necessary. The island of Ireland is a single biogeographic unit, and a single unit for plant and animal health, requiring policy alignment and active cooperation between both sides of the island.

An array of marine species found in ROI waters migrate into NI waters and vice versa annually. Examples include the Basking Shark (*Cetorhinus maximus*)^{1 2}, which migrates northwardly through ROI³ waters into NI waters annually between May and August. Commercially important species such as Atlantic mackerel (*Scomber scombrus*) also migrate during in the summer months from ROI waters, North through feeding⁴, then migrate south overwinter to spawning grounds in the Celtic Sea.

Management efforts for migratory species in ROI and NI waters impacts species ability to thrive throughout the waters around the island of Ireland. Without aligning targets for species protection and recovery in Northern and Southern waters, it is futile to expect conservation objectives set for marine biodiversity within this action plan to be fully met. With DAERA currently developing a biodiversity strategy for NI, there is a real opportunity to co-ordinate objectives, targets and actions for marine biodiversity throughout Irish waters.

Establishing a North-South marine biodiversity forum can provide a platform for transboundary communication, knowledge sharing and the development of complementary management efforts for marine species and habitats. There are several areas within the proposed Biodiversity Action Plan that could be supported through the formation of such a forum, ensuring higher levels of species and habitat protection and recovery.

¹ <https://www.baskingshark.ie/legal-status>

² <https://www.legislation.gov.uk/nisi/1985/171/article/10>

³ <https://www.baskingshark.ie/distribution#:~:text=The%20current%20accepted%20migratory%20theory,deeper%20waters%20to%20the%20west.>

⁴ <https://shiny.marine.ie/speciesdash/>

- **Development of the ROI MPA network**

Under objective 2, outcome 2F, it is promising to see DHLGH will enact and implement comprehensive legislation enabling the designation and management of Marine Protected Areas (MPAs). A North-South marine biodiversity forum would facilitate government officials, eNGOs, sea users and other stakeholders contributing to this process to capture transboundary considerations to MPA network development in the ROI.

The experiences of developing the Northern Ireland MPA network could be applied to ensure greater success of the ROI MPA network. For example, The NI MPA network currently covers 38% in NI inshore region⁵. However, according to a DAERA environmental assessment, only 4% of the MPA network is actively managed. Actionable management plans will therefore be required for each MPA, and these should be implemented immediately to enable the MPA conservation objectives to be met. A successful MPA network that meets the objectives of species protection and recovery will also require adequate resources for long-term monitoring and enforcement.

North-South collaboration will also help identify features that require designations to improve the ecological coherence of both NI and ROI MPA networks, acting further to meet the objectives of the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, and marine biodiversity throughout the region.

- **Identify partnerships for Blue Carbon habitat restoration programmes**

We welcome to inclusion of promoting marine nature-based solutions, including restoration and restoring 'blue carbon' ecosystems, as outlined in objective 4, outcome 4c. In NI, DAERA are currently co-designing a Blue Carbon action plan, in tandem with updating the NI MPA Strategy.

As blue carbon protection and restoration is a priority in both ROI and NI, it is a key area of engagement that could be developed further within a North-South marine biodiversity forum. Priorities will include identifying wider research gaps, exploring the options for developing partnerships and securing funding for blue carbon restoration programmes in the North and South.

- **Improving island wide data collection through citizen science programmes**

Citizen science is a key method in supporting data collection within the marine environment, and currently projects within Northern Ireland and ROI are gathering data on the same species. The NIMTF therefore welcomes the target to ensure by 2026, that Ireland has mainstreamed the inclusion of Citizen Science in marine environmental policy implementation and actions contributing to the conservation of marine biodiversity.

⁵ <https://www.daera-ni.gov.uk/articles/marine-protected-areas>

Elasmobranch conservation projects such as Ulster Wildlife's Sea Deep project⁶ encourage members of the general public to submit shark egg case records. In ROI similar projects like the Ray Project⁷, are also receiving egg case data. It is important to ensure the methodologies for gathering records are the same by both projects, so data can be combined and analyzed together. Through north- south engagement, tools can be developed to create citizen science programmes, which ensure the standardization of data and aligns methodologies throughout the ROI and NI. These programmes will also assist data sharing North and South, providing crucial data on species presence and distribution that would otherwise not be being received and utilized by relevant conservation projects, is available throughout the island of Ireland.

Closing gaps in NBAP proposals that may permit illegal activity

Target 2F7 says "As soon as possible and no later than 2026, commercial fisheries and aquaculture in Ireland are carried out without causing significant adverse effects on EU Natura 2000 sites or their qualifying marine habitats and species". Similarly target 2F8 says "As soon as possible and no later than 2026, ensure that all commercial fishing in Irish waters is carried out in full compliance with the EU Common Fisheries Policy, with national and EU conservation legislation, and all associated regulations". However, if national and EU conservation legislation is currently appropriately applied, then no plan or project or operation (such as fishing) could be permitted to go ahead if it was going to break national or EU legislation for example, by causing significant adverse effects on EU Natura 2000 sites or their qualifying marine habitats and species, as that would be illegal. As such, it seems totally inappropriate that, based on the wording of 2F7 and 2F8, between now and 2026 national and EU conservation legislation could be broken. This is a potentially serious loophole and the NI MTF would recommend that the starting date for policy 2F7 and 2F8 should be 1st January 2023 or whenever the NBAP is approved, whichever is earlier. Otherwise, if the proposed target is implemented as written, that could facilitate the approval of certain operations including and/or aquaculture developments that could be illegal under national and EU law. It is essential and a bare minimum that the Irish government ensures compliance with all existing national and EU laws at all times.

Furthermore, NIMTF support the recommendations outlined in the Fair Seas response to this consultation including the following statements:

- **Suggested addition to objective 1:** By 2026, measures for sustainability and biodiversity implemented under the Common Fisheries Policy are delivering positive outcomes for biodiversity.
- **Suggested addition to objective 1:** DHLGH will publish detailed site-specific management plans for all SACs and SPAs and details of the funding that will be made available to ensure the achievement of the targets in those plans.
- **Suggested addition to objective 1:** DHLGH and other relevant organizations will support projects focused on restoring marine habitats and species including native oysters, seagrass and saltmarsh.

⁶ <https://www.seadeepni.org/>

⁷ <https://www.therayproject.org/>

- **Suggested addition to objective 2:** *Number and spatial coverage of designated MPAs within Ireland's maritime area reaches 30% by 2030* and achieves 'fully' protected status for 10% of Irish waters.
- **Suggested addition to objective 4:** Avoiding, mitigating and minimizing biodiversity loss and decline will be central to the development of the revised Offshore Renewable Energy Development Plan (OREDPII) process by 2023, which will include biodiversity representatives.

For any further questions please contact Erin McKeown (erin.mckeown@nimtf.org), NIMTF Officer.



Fair Seas Ireland's response to:

**Ireland's 4th National Biodiversity Action Plan Draft for
Public Consultation**

Fair Seas is a group of Ireland's leading environmental non-governmental organisations and networks seeking to protect, conserve and restore Ireland's unique marine environment.

Fair Seas partners: BirdWatch Ireland, Coastwatch, Coomhola Salmon Trust,, Irish Environment Network, Irish Whale and Dolphin Group, Irish Wildlife Trust, Sustainable Water Network.

Submitted 09/11/2022

Fair Seas welcomes the opportunity to respond to the latest National Biodiversity Action Plan (NBAP), and agree that a successful plan '*will set the national biodiversity agenda for the period 2023-2027 and aims to deliver the transformative changes required to the ways in which we value and protect nature*'.

Though the timeframe of the NBAP is short (2023-2027), it is encouraging that the bigger picture vision for Ireland's biodiversity is also stated '*Ireland in 2050 – A Vision for Biodiversity Biodiversity in Ireland is valued, conserved, restored and sustainably used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people*'.

Not forgetting the many 'quick wins' that the Government may proceed with immediately to the direct and instantaneous benefit of biodiversity in Ireland, recognition that restoring Ireland's biodiversity is a long term project, is necessary among all stakeholders and society if we are to be successful in our goal.

However, we are concerned that the Actions stated in the Plan lack sufficient ambition or detail to drive and deliver a reversal of biodiversity loss and decline in Ireland. There is an overly 'process' heavy focus of the Targets and Actions, whereas, what is needed are specific 'SMART'¹ commitments to legal, policy, technical, project and resource changes that will benefit biodiversity in a real, direct and timely manner.

Below is a list of 16 changes which Fair Seas believes would strengthen the marine biodiversity aspects of the NBAP, and increase the effectiveness of Actions taken to help Ireland's marine biodiversity not only survive, but thrive.

¹ SMART: Specific, Measurable, Achievable, Relevant, Time Bound

OBJECTIVE 1: Adopt a Whole of Government, Whole of Society Approach to Biodiversity

(i) Suggested addition to Objective 1

New Target (1B)	Action	Indicator
By 2026, one billion euros additional funding for the lifetime of this NBAP will be allocated to relevant departments, state agencies, local authorities and institutions to ensure local, regional and national level biodiversity conservation and restoration projects are progressed in a timely manner to halt and reverse biodiversity loss and decline on land and in the sea as soon as possible.	Develop a granting process through which to allocate an additional one billion euros to departments, state agencies, institutions, local authorities and projects, based on the recommendations of the cross departmental review and other information gathering 1A Action and Targets.	The proportion of the one billion euros funding allocated to halt and reverse biodiversity loss and decline.

Rationale: The proper financing and resourcing of biodiversity protection and conservation across Government departments is critical to the successful implementation of the NBAP. Therefore, it is encouraging that the first Outcomes (1a & 1b) of the plan are focused on capacity, resourcing and financing conservation and restoration in Ireland. However, it is not clear how the Actions detailed for Outcome 1A or 1B will address the most important aspect of addressing biodiversity loss, that is - from where and how much additional funding this Government ambition will be receiving on a yearly basis and for what departments/state agencies/organisations? **If the NBAP is to be successful, the Targets and Actions outlined in Outcome 1A & 1B must be more specific regarding how much, from where and when the necessary additional financial funding will be administered and what those funds will deliver for biodiversity.** One billion euros over a four year period to restore biodiversity in Ireland to past, more natural baselines is a significant but still relatively small financial support package to protect the biodiversity and ecosystems on which the health and prosperity of our society heavily relies.

(ii) Suggested change to Objective 1

Target 1B1	Action	Indicator
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By 2023, the Government has introduced a statutory requirement for National Biodiversity Action Plans.	DHLGH will place the National Biodiversity Action Plan on a statutory footing	A NBAP bill is passed into law.
<p>Rationale: Putting the NBAP on a statutory footing is critical to its short term (2027) and long term (2050) success. A legislative grounding for the NBAP will help ensure that the Actions and Targets detailed within it are adhered to, and importantly, it will exponentially increase the degree to which the Government can be held accountable for its delivery. In passing the Climate Action and Low Carbon Development (Amendment) Act (2021), the Government has recognised the importance of using the primary legislative approach in tackling the global climate emergency. On the same basis, the Government must provide the same legislative foundation for tackling the global biodiversity emergency.</p>		

(iii) Suggested addition to Objective 1		
New Target 1C	Action	Indicator
<p>By 2026, measures for sustainability and biodiversity implemented under the Common Fisheries Policy are delivering positive outcomes for biodiversity.</p>	<p>Government Ministers will engage proactively with the EU to ensure measures for sustainability and biodiversity implemented under the Common Fisheries Policy are delivering positive outcomes for biodiversity.</p> <p>Government Ministers will engage proactively with the EU to ensure the poor implementation of the CFP is not a barrier to delivering positive outcomes for biodiversity. (e.g., progressing MPA conservation management measures in Ireland's offshore region).</p>	<p>Proportion of Irish fish stocks managed sustainably and within scientific advice limits increases.</p> <p>Number of fisheries conservation measures introduced into Ireland's offshore MPAs.</p>
<p>Rationale: There is no mention in Outcomes 1C of the root causes and key drivers of marine biodiversity loss or how they will be tackled by each responsible department. Accepting that issues regarding marine biodiversity loss are addressed later in the NBAP in Objective 2, this remains a glaring omission from this section considering much of Ireland's biodiversity occurs in</p>		

the marine environment. Ireland's own MSFD assessment² states that fishing is the predominant pressure and threat on the marine environment including biodiversity. Therefore, **Outcome 1B should include a Target regarding the performance of the Common Fisheries Policy with a clear Action to improve the efficacy and implementation of the sustainability and biodiversity elements of the EU Directive.** The rigorous and full implementation of the Common Fisheries Policy (CFP) is essential to achieve the sustainable management of all commercially exploited species, thereby putting an end to overfishing and driving the recovery of fish stocks. The CFP should also contribute to the protection of the marine environment, and in particular to the achievement of good environmental status (GES) of wider seas.

The CFP provides the mechanisms for implementing conservation measures within offshore and inshore MPAs, including fisheries management. **Ireland must pursue and implement all aspects of the CFP to help secure well-managed protected areas, healthy seas, and a strong, sustainable fishing industry.**

(iv) Suggested change to Objective 1		
Target 1E1	Action	Indicator
By 2026, new legislation (including amendments to current law) arising from a review of Ireland's current Wildlife legislation is in place	<p>DHLGH will complete a review of Wildlife legislation that exists in Ireland and recommend new laws or amendments to ensure Ireland has the relevant and necessary legislative foundation to halt and reverse biodiversity loss in Ireland.</p> <p>Review of Ireland's Wildlife Act (1976) to widen the scope and strengthen the level of protection species receive under this legislation.</p>	<p>Publication of review, recommendations and subsequent associated new legislation or amendments.</p> <p>Number of recommendations implemented from the Wildlife Act (1976) review.</p>
<p>Rationale: A review of Irish Wildlife legislation (Target 1E1) is welcome and necessary. However, this Target and Action must explicitly state the remit and scope of such a review process and include a list of current legislation which will be reviewed. This Target should also reference the specific review of the Irish Wildlife Act (1976) which the Government has already committed.</p>		

² [Marine Strategy Framework Directive. Update to Ireland's Marine Strategy Part 1: Assessment, Determination of Good Environmental Status, and Environmental Targets.](#)

OBJECTIVE 2: Meet Urgent Conservation Restoration Needs

(v) Suggested addition to Objective 2

New Target 2A	Action	Indicator
Enhanced implementation of the Habitats and Birds Directives by 2024	DHLGH will publish detailed site specific management plans for all SACs and SPAs.	Number of sites in respect of which site specific management plans are published

Rationale: Fair Seas welcomes Outcome 2A ‘*The protection of existing designated areas and species is strengthened and conservation and restoration within the existing protected area network are enhanced*’. More specifically, enhanced implementation of the Habitats and Birds Directives is a critically important piece of the puzzle in tackling biodiversity loss and decline in Ireland, as well as doing our part in the EU and global efforts to protect and conserve wildlife. Furthermore, the publication of detailed site-specific conservation objectives for all SACs and SPAs is also welcome and long overdue. However, these Actions do not address the key issue regarding the effectiveness of the Natura 200 network, which is their current lack of effective management. **Site-Specific Conservation Objectives can’t be realised without the development and implementation of evidence driven management plans which are effective in protecting the features for which they were designated.**

(vi) Suggested change to Objective 2

Target 2A5	Action	Indicator
In line with the EU Biodiversity Strategy, habitats and species under the Habitats and Birds Directives show no deterioration in conservation trends and status by 2030, and at least 30% of those not in favourable status will reach that status or show a positive trend	DHLGH and other relevant organisations will support species and habitat-specific conservation and restoration programmes	Trends in the status of the protected habitats and species under the Directives are improving in line with achieving the 30% target by 2030

Rationale: Species and habitat-specific conservation programmes are fundamental to not only halting biodiversity loss and decline, but allowing and enabling it to recover from decades of overexploitation and poor management. **Therefore, the delivery of these conservation programmes must explicitly state their remit to pursue species and habitats restoration as well as conservation.** Furthermore, this Target and Action must explicitly state the inclusion of marine based conservation and restoration programmes upon which the future health of some marine habitats and species acutely rely such as the recovery of native oysters and seagrasses. The importance of restoration as well as conservation in tackling biodiversity loss is highlighted later by the new EU Nature Restoration Law referenced later in the NBAP.

(vii) Suggested addition to Objective 2

New Target 2E	Action	Indicator
Adherence to statutory targets under the EU Biodiversity Strategy and EU Nature Restoration Law.	DHLGH and other relevant organisations will support projects focused on restoring marine habitats and species including native oysters, seagrass and saltmarsh.	Number of marine restoration projects supported.
Rationale: A National Restoration Plan to meet EU Biodiversity Strategy 2030 and EU Nature Restoration Law targets must include a diverse range of suitable marine species and habitats which are prioritised for restoration (e.g., native oyster, seagrass meadows, saltmarsh, macro-algae).		

(viii) Suggested addition to Objective 2

New Target 2F1	Action	Indicator
By 2026, Ireland is meeting all requirements for its transitional, coastal, and marine environment under the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), thereby achieving and maintaining High or Good	DHLGH will achieve High or Good Ecological Status, and Good Environmental Status under all descriptors and criteria within transitional, coastal, and marine waters by implementing ambitious and effective programmes of measures , acting further to	Percentage of Ireland's transitional, coastal, and marine environment reported to be in High or Good Ecological Status under the WFD and Good Environmental Status under the MSFD; Percentage of species and habitats newly achieving Good

Ecological Status and Good Environmental Status, respectively.	support OSPAR Decisions, Recommendations and Other Agreements, and to bolster marine biodiversity throughout the NorthEast Atlantic region.	Environmental Status, while maintaining existing good status results for marine flora, fauna, and habitats
<p>Rationale: The Marine Strategy Framework Directive (MSFD) is an important EU legislative driver for obtaining ‘<i>ecologically diverse, dynamic oceans and seas which are clean, healthy and productive</i>’. Unfortunately, Ireland failed to achieve this aim or meet Good Environmental Status criteria (GES) for over half (6 out of 11) of the descriptors in the latest 2020 assessment³.</p> <p>Ireland needs an ambitious and effective Programme of Measures that will deliver GES including new projects and initiatives to address current gaps and failures identified in the MSFD reporting process. Without this, there is a real risk that Ireland’s marine environment and GES status will be in much the same position, if not worse, by the next assessment in 2026. Given the intertwined biodiversity and climate emergencies; there is no time to waste, strong and effective action to protect and restore our seas is urgently needed.</p> <p>To be successful, development of the new programme of MSFD measures to bring about GES across all descriptors should be based on an effectiveness evaluation of current measures, and address shortcomings which led to GES not being achieved when assessed in 2020.</p>		

(ix) Suggested addition to Objective 2		
New Target 2F2	Action	Indicator
By 2026, Ireland is meeting all requirements for its transitional, coastal, and marine environment under the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), thereby achieving and maintaining High or Good Ecological Status and Good Environmental Status, respectively.	DHLGH will adopt and complete the integration of Ireland's marine environmental targets established under the MSFD, and Water Framework Directive Status Objectives, into the planning, consenting and operational systems for human activities in Ireland's maritime area by reviewing and amending the National Marine Planning Framework (NMPF) ensuring it is spatially prescriptive and employs an	Attainment of all of Ireland’s environmental targets under the MSFD, including through the implementation of an updated National Marine Planning Framework; Further establishment of new environmental targets under MSFD Descriptors 1 to 11, as required to achieve and maintain Good Environmental Status; No degradation of transitional and coastal water

³ [Marine Strategy Framework Directive. Update to Ireland’s Marine Strategy Part 1: Assessment, Determination of Good Environmental Status, and Environmental Targets.](#)

	ecosystem-based approach as required under by the EU Marine Spatial Planning (MSP) Directive. This will ensure the sustainable use of resources and the conservation of marine biodiversity and ecosystem services in Ireland.	status under the WFD as a result of human activities
<p>Rationale: According to the EU Directive on Maritime Spatial Planning⁴ Member State's marine spatial plans are legally required to implement an ecosystem-based approach and to contribute to the achievement and maintenance of Good Environmental Status, as defined by the MSFD. However, a recent independent report⁵ showed how Ireland's National Marine Planning Framework (NMPF) fails to employ the ecosystem-based approach to planning, or integrate a spatial element or prioritisation of activities, thereby failing to meet a number of the planning requirements in the EU Marine Spatial Planning (MSP) Directive. Without an ecosystem-based approach to consenting and regulating activities and developments at sea, it is impossible for the NMPF to <i>'integrate MSFD or WFD targets into planning, consenting and operational systems for human activities in Ireland's maritime area or ensure the sustainable use of resources and the conservation of marine biodiversity and ecosystems services'</i> as outlined in this NBAP Action. The NMPF needs to be reviewed and amended to explicitly address these concerns.</p>		

(x) Suggested change to Objective 2		
Target 2F3	Action	Indicator
By 2026, not only is Ireland meeting all requirements for its transitional, coastal, and marine environment under the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), (thereby achieving and maintaining High or Good Ecological Status and Good Environmental Status, respectively), but goes further than other European and	DHLGH will enact and implement comprehensive legislation enabling the designation and management of Marine Protected Areas (MPAs) and the expansion of Ireland's network of area-based conservation measures in the coastal and marine environment. This legislation will cover species and habitats beyond those listed in EU Directives and also	<p>Number and spatial coverage of designated MPAs within Ireland's maritime area reaching 30% by 2030 and achieving 'fully' protected status for 10% of Irish waters;</p> <p>Number of species, habitats and other features beyond those listed under the Wildlife Acts and the Birds and Habitats Directives, for which MPAs have been designated;</p>

⁴ [EU Maritime Spatial Planning Directive Directive 2014/89/EU](#)

⁵ [Walsh, C. \(2022\) 'An Evaluation of Ireland's Marine Spatial Plan – The National Marine Planning Framework'. Sustainable Water Network \(SWAN\). May 2022.](#)

<p>International biodiversity by not only protecting 30% of Irish waters by 2030, but achieving 10% of Irish waters as ‘fully’ protected.</p>	<p>features providing ecosystem services including climate change mitigation and adaptation, and capturing transboundary considerations where possible, thereby acting further to support MSFD requirements, the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, and marine biodiversity throughout the region.</p>	<p>Associated substantive contribution of Irish MPA sites to the OSPAR MPA network.</p> <p>No. of new conservation measures in Natura 2000 marine sites.</p>
<p>Rationale: Fair Seas welcomes inclusion of this Target and Action. The expansion of Ireland’s current small MPA network (approx. 2.1% of Irish waters) under new national legislation is one of the biggest opportunities to properly protect, conserve and restore marine biodiversity around this Island.</p> <p>However, the timeframes for delivery of new national MPA legislation, upon which the subsequent process of site selection, designation and management implementation relies, are clearly lagging compared to progress on other Government commitments such as tackling climate change, or increasing Ireland’s marine renewable energy generation. Therefore, it is essential that the Irish Government expedite the MPA legislative, designation and management processes as soon as possible so that this Action has a positive impact on Ireland’s marine biodiversity within the span and scope of the NBAP.</p> <p>Increasingly more research is confirming that it is only when designated areas <i>are</i> effectively managed for nature and achieving their conservation objectives, that they can positively benefit nature and contribute to GES⁶. This flow of ecosystem benefits from effectively managed MPAs can take time to appear as natural habitats, species and ecosystem functioning recovers. Therefore, Fair Seas believes the current Programme for Government commitments on MPAs⁷ should also include a commitment to 10% ‘fully’ protected to ensure MPA network is successful in delivering not only site specific conservation outcomes, but the many other ecosystem and societal co-benefits (e.g., climate change mitigation and adaptation, coastal protection, sustainable food source) of having a well-managed and ecologically coherent network of MPAs also.</p>		

⁶ [Jacquemont, Juliette, et al. "Ocean conservation boosts climate change mitigation and adaptation." One Earth 5.10 \(2022\): 1126-1138.](#)

⁷ [Programme for Government \(2020\)](#) MPA commitments; ‘to develop comprehensive legislation for the identification, designation, and management of Marine Protected Areas (MPAs) in Irish territorial waters.’ ‘We will realise our outstanding target of 10% under the Marine Strategy Framework Directive as soon as is practical and aim for 30% of marine protected areas by 2030’

Furthermore, conservation management measures for Ireland's marine Natura 2000 sites are also critical in ensuring that there are no significant adverse effects from marine fisheries and aquaculture in and adjacent to EU Natura 2000 sites'. **Therefore, the development and implementation of conservation measures for marine Natura 2000 sites must become an organisational priority for NPWS.**

(xi) Suggested change to Objective 2		
Target 2F5	Action	Indicator
<p>Commercial fish and shellfish stock levels are maintained or restored to levels that can produce maximum sustainable yield as soon as possible, and no later than 2026.</p> <p>Ireland will always pursue and distribute commercial fish and shellfish fishing quotas in line with the scientific advice and will not fish above these advised limits.</p>	<p>DAFM and other relevant stakeholders will continue to implement the EU's Common Fisheries Policy in order to provide for the long-term conservation and survivability of fish and shellfish stocks and marine biodiversity. Ensure the ongoing implementation of both Multiannual Plans and remedial measures for vulnerable stocks, which aim to ensure that the exploitation of living marine biological resources restores and maintains populations of harvested species above levels that can produce maximum sustainable yield.</p>	<p>Number of fish and shellfish stocks that are being fished sustainably and in accordance with scientific advice. Number of fish and shellfish stocks newly achieving or maintaining Good Environmental Status under the MSFD.</p>
<p>Rationale: The rigorous and full implementation of the Common Fisheries Policy (CFP) is essential to achieve the sustainable management of all commercially exploited species, thereby putting an end to overfishing and driving the recovery of fish stocks. Accordingly, Ireland must always pursue and distribute commercial fish and shellfish fishing quotas in line with the scientific advice and will not fish above these advised limits. The CFP should also contribute to the protection of the marine environment, and in particular to the achievement of good environmental status (GES) of wider seas.</p> <p>The Irish Government has committed to fully implementing the CFP, as well as expanding Ireland's network of Marine Protected Areas (MPAs). Fisheries management in current and future MPAs (offshore and inshore) is crucial to secure an ecologically coherent and well-managed network of MPAs, as well as the broader long term health and resilience of our marine environment.</p>		

The CFP provides the mechanisms for implementing conservation measures within offshore and inshore MPAs, including fisheries management. **Ireland must pursue and implement all aspects of the CFP to help secure well-managed protected areas, healthy seas, and a strong, sustainable fishing industry.**

(xii) Suggested change to Objective 2		
Target 2F7	Action	Indicator
As soon as possible and no later than 2026, commercial fisheries and aquaculture in Ireland are carried out without causing significant adverse effects on EU Natura 2000 sites or their qualifying marine habitats and species	DAFM, DHLGH and other relevant stakeholders will not only implement measures to ensure that there are no significant adverse effects from marine fisheries and aquaculture in and adjacent to EU Natura 2000 sites, but implement conservation management measures to ensure all Natura 2000 sites achieve their site specific conservation objectives.	Percentage of marine Natura 2000 sites in Ireland for which all site specific conservation objectives (SSCOs) continue to be met; Number of Natura 2000 qualifying marine habitats and species found to be in favourable conservation status through cyclical monitoring and assessment No. of new conservation measures in Natura 2000 marine sites.
<p>Rationale: Please see Rationale outlined in '(v) Suggested addition to Objective 2' above.</p> <p>Conservation management measures for Ireland's marine Natura 2000 sites are also critical in ensuring that there are no significant adverse effects from marine fisheries and aquaculture in and adjacent to EU Natura 2000 sites'. Therefore, the development and implementation of conservation measures for marine Natura 2000 sites must become an organisational priority for NPWS.</p> <p>It is also worth noting that under current EU law, commercial fisheries and aquaculture in Ireland should already not be having a significant adverse effect on EU Natura 2000 sites or their qualifying marine habitats and species.</p>		

OBJECTIVE 4: Embed Biodiversity at the Heart of Climate Action

(xiii) Suggested change to Objective 4

Target 4B2	Action	Indicator
Avoiding, mitigating and minimising biodiversity loss and decline will be central to the development of the revised Offshore Renewable Energy Development Plan (OREDPII) process by 2023, which will include biodiversity representatives.	DECC will ensure that the governance framework established as part of the work on a revised Offshore Renewable Energy Development Plan (OREDPII) will include biodiversity at the forefront of all decision making and objectives of the plan , and as part of the updated cycle for the Plan.	Number and quality of recommendations in the OREDP II which aim to halt and reverse biodiversity loss or promote marine conservation. A range of biodiversity representatives sit on the Data and Scientific Group and the Steering Group for the OREDP II.
<p>Rationale: It is correct to recognise that biodiversity objectives must be fully integrated into all marine planning and decision making, especially as they concern offshore renewable development and the OREDP II plan currently being drafted. However, to ensure this happens, it is imperative that the focus of the Action is changed to require the OREDP II to fully consider biodiversity at all levels, rather than simply mandate a biodiversity representative to join the advisory group.</p>		

(xiv) Support of Objective 4 Target 4C2

Rationale: Fair Seas supports the Target and Action identified in 4C2. The importance of marine species, habitats and ecosystem restoration can't be overstated when considering biodiversity loss and decline in Ireland. However, the Target and Actions and outcomes here should be detailed within the SMART framework (i.e., Specific, Measurable, Achievable, Relevant, Timebound)

OBJECTIVE 5: Enhance the Evidence Base for Action on Biodiversity

(xv) Suggested addition to Objective 5

Target 5B	Action	Indicator
By the end of 2024, all environmental assessment and monitoring data associated with offshore renewables energy and other developments at sea, are publicly available and accessible.	The Government will make it a condition of the MAC and planning application process for developers to publicly publish all their environmental and monitoring data, and create a centralised repository for such datasets.	Number of datasets available within the centralised repository.
Rationale: To aid marine management and marine planning decision making, Objective 5 should include a new Target and Action making it a requirement of relevant stakeholders (e.g., developers) to make all environmental data collected during the MAC and planning application process required under the MAP Act (2021), to be publicly published and available for use by other state agencies and the general public.		

(xvi) Suggested change to Objective 6

Target 6A4	Action	Indicator
By 2027, the AICBRN is advancing climate and biodiversity research with the support of government	The Government will work with NIEA and DAERA to support the work of the All-Island Climate and Biodiversity Research Network to aid transboundary and all-Island nature conservation management	€ in annual funding to AICBRN

Rationale: The AICBRN North-South platform must not only direct and support all Island scientific research but must also focus on delivering marine transboundary and all-Island nature conservation management recommendations.

Contacts:

[REDACTED] Fair Seas Ireland Marine Policy Officer
[REDACTED]

For more information on Fair Seas Ireland visit: www.fairseas.ie

DRAFT

4th National Biodiversity Action Plan Consultation
Biodiversity Policy,
National Parks and Wildlife Service,
Department of Housing, Local Government and Heritage,
90 North King Street,
Dublin 7, D07 N7CV

9 November 2022

RE: 4th National Biodiversity Action Plan Consultation

To whom it may concern,

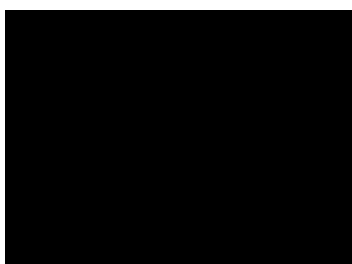
Cork Chamber represents 1,200 members together employing 100,000 people throughout the city, metropolitan area and county. Our vision is to be a world-leading Chamber of Commerce, delivering on a progressive economic, social and sustainability agenda at the heart of a vibrant business community. Our direction is guided by our formal pledge to uphold the United Nations Sustainable Development Goals.

Biodiversity has intrinsic value that cannot be easily quantified yet its presence is felt in every sector of society. From a Cork point of view, the richness and diversity of its biodiversity is the lifeblood of the City and fundamental to the quality of life of all citizens. With the current biodiversity crisis, every action must be taken to enhance and protect this natural fabric that increases the resilience of our communities, the appeal and attractiveness of Cork to investment, and the reputation of Cork in attracting and retaining skills and talent. The promotion and enhancement of heritage and biodiversity is essential to the DNA of Cork.

Biodiversity will look after us as long as we look after biodiversity. With the window for action narrowing, only the highest level of ambition in targets and implementation, in an integrated manner, will give us the chance to stop and reverse biodiversity loss and ultimately live in harmony with nature.

With this in mind, we would like to thank the department for the opportunity to feed into this significant action plan and we wish to offer a series of observations, comments, and advice as this monumental task of forming Ireland's next NBAP comes to a close.

Yours Sincerely,



CEO

Biodiversity in our cities, town centres, and public realms

Biodiversity enhancements should be considered essential to the appeal and character of our cities, towns and public realms, and be protected and enhanced at every opportunity. Green infrastructure and nature-based solutions such as green roofs and living walls offer potential to enhance biodiversity, absorb noise and water, and provide cleaner air and recreational sanctuary.

The provision of guidance for integrating biodiversity and blue and green infrastructure into planning and development is welcome and will help in promoting such developments. This plan should introduce ambitious targets and measures for retrofitting greenery throughout urban areas, town centres and public realms. The plan should also support the adaptation of buildings and property that can be retrofitted and promote and incentivise biodiversity integration into new build developments and public projects.

Water Framework Directive

It is welcome that this NBAP seeks to realise the restoration of Irish rivers and lakes to 'good ecological status' under the Water Framework Directive (WFD) by 2027. Overcoming the barriers to achieving this status must be of critical importance. We cannot fail to meet this final extension deadline in 2027, to which we are legally bound.

The WFD emphasises public involvement and access to information. Communities and local groups have a key role to play in the management of water resources at local and catchment levels. Currently, there is a lack of transparency around structures and implementation. Local groups integration into the decision-making process must be facilitated and resourced. At a minimum the WFD and water governance must be compliant with the Aarhus Convention.

Further, with over 84,000km of river channels running through the country, monitoring them presents logistical challenges. While the support for citizen science shown throughout this NBAP is positive, there must be a clear action and role for citizen science in achieving the WFD targets.

Informing Enterprise

To make real progress in improving Ireland's biodiversity and natural ecosystems all communities and sectors of society need to understand their impact and role. Enterprise, both FDI and indigenous, must contribute positively towards biodiversity. Through this NBAP, communication campaigns must inform the business community that they have a role to play in biodiversity, why it is important that they contribute towards enhancing natural ecosystems, and how they can get involved. The newly established Business for Biodiversity platform is very welcome to guide the biodiversity agenda in the business community. We advise that the Climate Toolkit 4 Business be transformed into a framework to address biodiversity in supply chains.

Agriculture & Farmer Integration

This action plan presents an opportunity to fundamentally change the role of farmers from producers of food to producers of biodiversity. There is clear recognition regarding the role of

agriculture and support for farmers to contribute to enhancing biodiversity within this NBAP, though agri-environmental results-based schemes. If farmers are to become producers of biodiversity, they must be compensated for the maintenance and production of this highly valuable product.

Further, the design of these schemes must ensure they are accessible to all farmers, especially small holders. The extensive debate that occurred during the design stage of the ACRES scheme ensured that the scheme was inclusive of all farmers. However, before this consensus was reached there was plentiful negative media attention regarding the scheme. Now as the deadline for the scheme is approaching, achieving the target of 30,000 places is proving difficult. Adequate stakeholder engagement is needed before releasing the design of such schemes to not create any negative perceptions regarding the view of farmers and these schemes. Instilling trust and creating dialogue among producers and stakeholders is central towards ensuring take-up of schemes.

Increasing agricultural land under organic farming to 7.5% and achieving the target of at least 4% of agricultural land biodiversity rich by 2030 is welcome. We advise that specific targets be set, with support from Teagasc and DAFM, to assist farmers in transitioning their agricultural land and practices to align with regenerative agriculture.

Regenerative agriculture, which goes a step beyond sustainability and reducing emissions, takes a holistic approach focusing on strengthening the health of the ecological system with the principles of improving soil health, increasing biodiversity, carbon sequestration, humane treatment of livestock and farmworkers, and improving the overall ecosystem. By focusing on soil health, biodiversity, and incorporating a polyculture in agricultural practices, fewer inputs including fertiliser are required.

A common barrier to transitioning to regenerative practices amongst farmers is the perceived financial costs and lower yields. While regenerative agriculture may produce lower yields, the reduced inputs required results in similar and sometimes higher profits. Informal networks should be utilised to overcome barriers around misconceptions, creating dialogue and instilling trust among producers.

Further research is needed regarding the Irish food system's impacts on biodiversity, with particular regard to international trade agreements and sustainable production and consumption, discussed further below.

International Trade

The potential impacts from current and future international trade agreements must also be considered and accounted for within this plan. Unsustainable trade, often overlooked in biodiversity policy, has been fuelling the global biodiversity crisis. Ireland must take a strong policy stance against deals that threaten biodiversity and climate action both in Ireland and in trade partner countries. We must lead by example in promoting economic development that can co-exist with ecological progress and is in line with climate, biodiversity and overall sustainability objectives.

Policy must also acknowledge the role of consumers in relation to international trade and sustainable production and consumption. This is particularly relevant as we are making little to no progress on the United Nations SDG 12 'Responsible Production & Consumption'¹. Sustainability standards & labelling should be introduced, based on a product's full biodiversity, environmental

¹ https://www.socialjustice.ie/system/files/file-uploads/2022-02/2022-02-16-sustainable-progress-index-2022-web-final_0.pdf

and social footprint to mitigate impacts of consumption. With hundreds of global voluntary sustainability standards in use for imports and exports, greater collaboration, transparency and communication particularly for SMEs is required.

Irish Ports

Irish ports are of strategic significance for driving economic growth, international connectivity, the green energy transition, and protecting biodiversity. As port activities expand in some cases the shorelines they operate on transform to accommodate increased capacity and activity. A better understanding on the effects of this marine urbanisation is needed regarding the overall impact on ecosystem, biodiversity and water quality. This action plan should incorporate port activity, prioritise research into port activities potential impacts, both positive and negative, on biodiversity and set clear targets and supports for ports to protect and enhance biodiversity and the marine ecosystems which their operations inhabit through facilitating research and innovation.

Compact growth

Compact urban development is key to Ireland's sustainability objectives and can minimise the loss of biodiversity and fragmentation of peri urban habitats. It is also integral to achieving the ambitions sets out in Ireland 2040 of up to 380,000 additional people in the Southern Region, with Cork City and County home to 60% of this. To deliver more compact and sustainable spatial patterns that leaves room for nature requires brownfield development to be viable. City centre brownfield sites, such as those at the docklands in Cork, should be designated for accelerated tax reliefs over a time-limited period to unlock high density development. Cork Chamber's reports cover the viability and affordability of apartment development in our cities extensively^{2 3}.

² <https://www.corkchamber.ie/wp-content/uploads/2022/03/Viability-and-Affordability-of-Apartment-Building-in-Cork-City.pdf>

³ <https://www.corkchamber.ie/wp-content/uploads/2022/03/Apartment-Viability-Report-FINAL-13-July-2021.pdf>

Ref: Submission on Ireland's 4th National Biodiversity Action Plan

To whom this may concern,

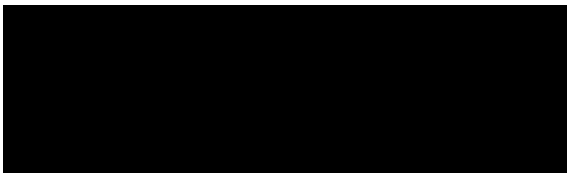
RWE are pleased to have the opportunity to have our consultation response submission considered in respect of Ireland's 4th National Biodiversity Action Plan.

RWE Renewables Ireland is operating and developing a number of renewable projects in Ireland, across a range of renewable energy technologies including onshore wind, offshore wind, solar and battery storage. RWE is now one of the world's leading producers of renewable energy and stands as the world's second largest offshore wind developer and third largest provider of renewable electricity across Europe, with a wealth of experience.

RWE fully support the feedback, comments and recommendations outlined in the Wind Energy Ireland (WEI) submission to this consultation process. RWE have reviewed the various sections of Ireland's 4th National Biodiversity Action Plan and associated documents. This submission contains a number of observations and recommendations for the 4th National Biodiversity Action Plan in its current draft form.

If you have any questions regarding our response, please do not hesitate to contact me.

Yours faithfully,

A large black rectangular box used to redact the signature of the sender.

*Online submission bears no signature

Observations and recommendations

RWE strongly support the protection and enhancement of Irelands biodiversity. RWE Renewables Ireland have made the following observations and recommendations to Irelands 4th Biodiversity Action Plan:

- RWE Renewables Ireland aim to put biodiversity at the forefront of its developments where possible and so would like to see sector specific actions and objectives in Irelands 4th Biodiversity Action Plan. RWE notes the lack of specific sectoral actions, whether for energy, infrastructure, industry, agriculture, or housing. All of these sectors are necessary for the well-being and economy of Ireland and will interact with the environment in their development, operation, and decommissioning. Each of these stages will impact the environment and possibly biodiversity. The action plan should be looking at how these impacts can be positive, while still enabling sectoral growth. Currently as read, the lack of real mention of these sectors in the Biodiversity Action Plan could be interpreted as suggesting exclusion from areas where biodiversity protection and improvement is being targeted, however co-habitation and even improvement is feasible and has been successful.
- The objective of the renewable energy sector is to supply zero carbon electricity and reduce climate change. Reducing climate change assists in the protection of Irelands biodiversity and biodiversity on a global scale. An IPCC Special Report on Global Warming notes that If the planet warms by 1.5 degrees Celsius, 6 percent of the insects, 8 percent of the plants and 4 percent of the vertebrates will see their climatically determined geographic range reduced by more than half. At 2 degrees Celsius warming, those numbers jump to 18 percent, 16 percent and 8 percent, respectively. This should be acknowledge in the National Biodiversity Action Plan, including actions to help enable development of sustainable energy generation.
- RWE Renewables commends the inclusion of offshore wind in The National Biodiversity Action Plan, although RWE notes that this does not reflect the current situation, as Irelands offshore wind industry is in early development. RWE would also like to bring attention to the requirements of the Climate Action Plan which requires the increase of onshore wind to 8 GW. The National Biodiversity Action Plan is silent on onshore wind, which is an area of required growth that is heavily constrained by the availability of suitable locations.
- RWE Renewables Ireland recommends greater collaboration and communication between nature conservation bodies and the renewable energy sector to identify suitable sites for wind development at an early stage. This is needed to ensure that renewable energy development does not contribute to net biodiversity loss and also ensures that renewable energy targets and the legal requirements of the Climate Action Plan are met within the required timeframe.
- RWE Renewables Ireland commend the appointment of biodiversity officers to advise local county councils. RWE Renewables Ireland look to work alongside local biodiversity officers in the development of our energy projects.

Conclusion

Ireland's 4th Biodiversity Action plan should bring forward progressive policies and objectives to ensure that Ireland's biodiversity is protected while also ensuring Ireland's targets for renewable energy development are met. RWE Renewables Ireland believe these objectives can be met in conjunction. Ireland's renewable energy targets outlined in the Climate Action Plan are in place to supply Ireland with carbon zero electricity. Reducing climate change is of huge importance to protecting Ireland's biodiversity. Renewable energy sector specific objectives and actions are recommended by RWE Renewables Ireland.

Dear sir, madam

Please consider more room / emphasis on developing new nature and on establishing a properly linked ecological framework. Ireland has done its duties with regards to the EU Bird and Habitat directive in designating SPCs and SPAs, but I believe it's lagging behind in actually establishing an ecologically linked NETWORK, which was the overall objective behind these designations.

I hope that Ireland will actively create ecological corridors between these designated areas, selecting 'target species' for these corridors and making sure the corridors enable these target species to move between the various SPCs and SPAs. Currently the SPAs and SPCs are like biodiversity islands in an unconnected wider landscape with intensive agriculture and infrastructure fragmenting the landscape. For a properly functioning 'Natura 2000' all the designated areas have to be linked ecologically, and this biodiversity action plan could do just that.

I also believe that the current system of protecting species or habitats as a 'qualifying interest' within SPCs is sometimes preventing protection of a vulnerable species. The Marsh Fritillary is a good example - there are currently populations outside SACs that are completely unprotected, like one near where I live, Dysert Marshes Lixnaw co Kerry. By limiting ourselves to only being able to protect those populations that happen to be within an SAC, we are giving up on many populations that really need and deserve protecting. Currently Marsh Fritillaries are mostly protected only when they happen to live in a designated SAC, often Molinia meadow. As it happens, their ideal habitat (75 % Devil's bit scabious cover) is not the same as a perfect Molinia meadow (much less Devil's bit scabious cover), so we have locked in a limitation to protect their populations only in less than ideal (from the species perspective) habitats. It is an internationally vulnerable species, for which Ireland still hosts a large percentage of its worldwide population, so we really should do better for them!

I would like to see more Irish insects added to a protection list, and to be given an Action Plan per vulnerable species similar to the UK BAPs. There is a massive decline in insect numbers going on worldwide and in Ireland, and we should really focus on at least attempting to halt this loss by at least giving more of them a protected status. National experts on the various insect groups should be involved in choosing the insects that need to be given priority status (the NBDC verifiers ie Brian Nelson, Stuart Dunlop, Hugh Feeley etc) followed by an action plan per species chosen.

I hope this submission is useful to you, I am sorry I didn't have the time to go through all the pages of the draft plan and reflect on specific pages, but I still just wanted to get my main points across:

1. More focus on Nature Development / realising potential nature values
2. Create Ecological corridors,
3. Action plans for vulnerable insects

Kind regards and thank you for allowing the public to give submissions,

Draft National Biodiversity Action Plan

Feedback from National Biodiversity Forum members Nov 2022

The National Biodiversity Forum welcomes the draft plan and also the recent positive changes in the biodiversity space, such as improved resourcing for NPWS and for local authorities and the undertaking of the Citizens' Assembly on Biodiversity Loss, which should provide greatly improved momentum to address the biodiversity emergency. Clear alignment with other national and international strategies is also welcome, including legal requirements (such as the CBD's Post-2020 Biodiversity Framework and the EU's Common Agricultural Policy).

However, the Forums' members had some concerns that the draft plan is currently failing to convey clear messaging around the urgency of the changes and actions required. In light of this urgency of action and to help improve the clarity and impact of the plan, some fairly substantive changes to the structure and framing of the draft plan are proposed. Whilst some of the comments may feel harsh we hope they will be taken in the spirit in which they have been developed, to produce the best plan possible which can have the strongest chance of successful impact.

Proposed restructuring:

- It is stated that "As far as possible" we must integrate biodiversity into other relevant sectoral plans. It is necessary to identify clearly in the NBAP where biodiversity will be integrated into other sectoral plans. This implies that a sectoral approach is needed. A sectoral/landscape approach was adopted by the Citizens' Assembly on Biodiversity Loss and could serve as a basis for this.
- Translation of the national plan into local action – boots on the ground across all sectors of society. Themes need to be divided more clearly. Local authorities have a role across themes and they are not suitable as a theme under a separate heading in a sectoral approach .
- Themes currently seem like key stakeholder groups and biodiversity rather than being based on a truly sectoral approach. The Forum agrees that the plan should have overarching themes, so the current six are ok but need some consolidation in a **governance section (regulation; planning; enforcement; monitoring)**.
- **Need a clearer sectoral approach. Suggested sectors/landscapes: Biodiversity in rural environments (agriculture, forestry, extraction, semi-natural ecosystems); Biodiversity in built environments (urban, infrastructure e.g. roads, ports); Biodiversity in aquatic environments (from mountains to sea – freshwater (rivers, ponds and lakes), wetlands, marine)**

The stakeholders in these sectors need more precise direction to help them understand the important actions needed. The draft NBAP is currently too vague in its wording in many places which is not helpful where sectors need clarity on their actions. The plan would benefit significantly from a clean and clear approach to actions supported by stronger wording. The Climate Action Plan is more direct and clear. It is understood that it has more defined quantifiable carbon targets but overall

it is more about action and urgency than this NBAP and the NBAP could really benefit from such an approach.

- **Suggested cross cutting themes: Biodiversity and Climate Action; Biodiversity-Knowledge Building (research), Education and Awareness; Biodiversity and Business (including Tourism); Biodiversity and Nature Conservation Areas, Biodiversity outside Nature Conservation Areas (particularly in important or threatened ecosystems, habitats and species); Biodiversity and Communities; International Biodiversity**
- We suggest that the first set of themes should be **governance** related (securing contribution to people, whole of government- whole of society approach; monitoring and enforcement; biodiversity and climate); followed by **sectoral themes** and then additional **cross-cutting themes**.
- Monitoring and evaluation proposals need to take a broader approach to biodiversity monitoring; monitoring the delivery of the plan is just a subset of overall biodiversity monitoring needed. The plan should at least capture what is going on and have actions related to streamlining-better coordination etc.

Other general comments

A legal basis for the plan is necessary in order to progress the actions, in the same way the Climate Action and Low Carbon Development Act underpins the Climate Action Plan 2021. Government Ministers are responsible for achieving targets for their own sectorial area with each minister accounting for their performance for sectoral targets and actions before the Oireachtas Committee each year. The Biodiversity Crisis needs to be addressed with the same level of urgency and support from Government as the Climate Crisis through; legislation, defined responsibilities, resources and funding. These points should be strongly articulated in the Introduction to the plan.

Local Authority Development Plans should be aligned with their County Biodiversity Action Plans.

The Biodiversity Tracker is tracking actions not outcomes. It is good that an individual action owner is nominated for each action, with a listing of other contributors as well. However without any real and true commitment within a legal framework there is no impetus to achieve the actions for biodiversity.

Concern was raised about the soft and sometimes vague language that is used about actions and timelines (e.g. “as soon as possible”). The urgency of the implementation of measures should be reflected in stated timelines.

A review of Local Authority funding under Section 48 of the Planning and Development Act would be beneficial to examine how some of this funding can contribute to and fund Biodiversity initiatives and projects at local level. These funds arise from conditions of a planning permission where a contribution is required from a developer. This funding applies to *public infrastructure and facilities that will benefit the development in the area e.g. cycleways, parks*. Biodiversity, Green Infrastructure and Natural Capital are all elements that can often form part of public infrastructure that will benefit a development including nature based solutions, therefore it should be included as part of allocation of funds by the LA to their public projects. At the Citizens’ Assembly, a speaker from Utrecht indicated that they now have 15 staff dedicated to biodiversity initiatives and an annual budget of €6

million, with an ambition to spend €80 million, which they are seeking from regional, national and EU sources. Fingal County Council's biodiversity strategy also lays out a substantial funding gap for halting biodiversity loss.

A significant omission from the Draft NBAP is a commitment to developing a biodiversity net gain policy and approach for Ireland (see Objective 3 below for further detail).

Much of the current draft plan includes material that is already legally binding.

The Plan would benefit from strengthening on implementation. Things that we have already been committed to need to be given much stronger emphasis – they have to be done.

Interim monitoring and evaluation of the plan is currently allocated entirely to the Biodiversity Working Group. NBF will also be providing independent evaluations, commentaries and recommendations throughout the cycle (it is a core part of its TOR), but this is not specified –an end of plan review is all that is currently included.

The BWG has important roles throughout. Is it considered to be working effectively in its current configuration to meet those roles? Should its authority and operation be reviewed to ensure that it can? The Forum suggests that this be considered.

Reviews of progress towards individual actions should involve a level of authority to ensure that they do get done and provide support to enable that if necessary. Corrective measures and remedies need to be identified as part of the interim monitoring to assist with ensuring that actions are progressed in the appropriate timelines and are not left to run over into the next Plan. If actions are not being progressed there should be an obligation on the BWG to find out why and to determine what corrective measures are needed to assist with progressing the action within the required timelines.

Pages 19-20: It would be very beneficial to provide an overview of all objectives, etc. at the outset before going into detail on each one.

It may be helpful to find ways to improve communication with each sector of key implications, obligations and opportunities for each and provide guidance (as is done for the All Ireland Pollinator Plan). This would be aided by the sector/landscape-based restructuring proposed below. In addition, relevant text could be extracted and combined in a supplementary volume for each sector, with some explanatory notes and points of contact.

There are clear synergies between this draft NBAP and Dublin Zoo's and Fota's overall mission and vision, and the zoo teams could engage with NPWS and other stakeholders moving forward, building capacity to help conserve Ireland's biodiversity.

There was also a general comment to adopt some of the points made in the NBF review of the last plan (<https://www.biodiversityimpactplan.ie/>). Some key points have been proposed among comments under each of the Objectives below.

Comments on the Introduction

Great preamble from Minister Noonan and great introduction to biodiversity and relevant policy. The introduction should include mention of the EU Biodiversity Strategy and/or other EU instruments that are central to driving biodiversity policy and action in Ireland – especially the Birds and Habitats Directives that are referred to subsequently, but also perhaps MSFD and others. It is important to also include the EU Restoration Law in here now that it has been announced by the EU, and the development of National Restoration Plans.

Great barrier reef example on page 3 should use an Irish example for ecosystem. For example, the continued erosion of river water quality in Ireland and the fact that freshwater biodiversity is reducing faster than terrestrial and marine systems globally could be cited. Concern has been expressed that if populations reach a point of being too small and fragmented, capacity for degraded streams to and rivers to be repopulated could be irreversibly damaged.

More fundamental need for NBAP besides international commitments in CBD, we are in biodiversity crisis as declared by government during last plan so should put new impetus and emphasis on this one. The link between biodiversity and ecosystem services could be restated.

Stakeholder consultation: who was consulted? A list of them should be provided. Coillte made four recommendations and they don't appear anywhere and with no mention of policy. It is not clear how the comments are being handled and who makes the decisions on what is adopted and what is not.

Comments on vision and objectives

As a general comment, the objectives should be aligned with proposed structure (above) if the new structure is agreed to be appropriate:

- Objective 1 should really be a strong governance one (currently diluted with awareness raising and education which should have its own objective – essentially following proposed thematic structure in comment above). Some good things in here but a bit hidden among multiple objectives and targets (e.g. objective 1E) . We need *less jargon in terms and demonstrate clearly that everyone needs to be involved at every level of society from government to communities and individuals and that we all can make a difference.*
- Biodiversity Governance and Government oversight is a key section (currently divided over three somewhat woolly themes - transparency and plain English wording required) - Whole of Government Approach, enabling implementation and ongoing monitoring section is weak on strengthening governance. Need for a government coordinated and funded national countryside survey – long term commitment of resources on 3-5 year intervals.
- Currently a lot of objectives are rather weak – e.g. by 2024 government should have improved understanding of current biodiversity expenditure. It should be implicit that a government knows what it is spending on! Whole governance, financial and monitoring sections need to be much stronger and more direct.

- Objective 2 appears to be a prioritisation exercise - should have this under each theme not as a separate objective - see point on restructuring themes above. Here there are currently actions related to themes/sub-themes proposed above (freshwater, marine, agriculture and forestry). These could easily be translated into priorities under each of the proposed themes. At the moment some are urgent priorities and some are easy options that are substantially already under way. This section also should be more about feasible prioritised actions. Title could be more succinct and specific e.g. **Action for conservation and restoration**
- Objective 3 seems to be an attempt at cross cutting but at the moment appears like a catch-all-miscellaneous collection of actions. That theme would be better captured in sectoral approach/specific objectives proposed rather than as a stand-alone very broad objective. There is the opportunity here to highlight that we are all linked to the health of nature at home and abroad.
- Objective 4: needs to be a real focus here on ensuring right measure in right place when it comes to climate action and biodiversity interaction. Glaring omission is proposed increases in forestry biodiversity/climate implications (trade-offs, synergies). Title also could be more specific also e.g. **Building our sustainable future**
- Objective 5 there is a mix of monitoring and research actions - should be split under governance and cross cutting themes proposed. Part of a much clearer structure to the plan.
- Objective 6 ok but a glaring omission on international biodiversity footprint. Nothing in this current version of the plan addresses Ireland's international biodiversity footprint e.g. huge footprint in terms of goods consumed. In food 75% of food consumed imported from some areas suffering significant biodiversity losses as a result of meeting international demand for food products.

Objective 1

Overall Objective 1 really needs to be stronger in terms of a focused coordinating process (e.g. via Dept of Taoiseach) and improved accountability, ideally with greater legal underpinning.

Comments on this have been made in the Citizens' Assembly on Biodiversity Loss. It has also been highlighted that the current frameworks and structures are complex and serve as bureaucratic barriers to local action, e.g. by community groups and farmers. A need has been identified for clarity, simplification and advice rooted in close community engagement (as exemplified by Burrenbeo).

The new role of a Biodiversity Officer in each LA is welcome and will help to assist with community engagement (however it is just one of many tasks outlined in their role), in order to achieve greater community engagement it requires a Biodiversity Team with resources and secure budgets for funding i.e. not grants that change from year to year.

Legislation to require biodiversity considerations in all government activity has previously been debated, but is not mentioned here.

It would be good to find a way to bring a longer term perspective to initiatives and incentives than is currently the norm. E.g. farmers are expected to change their operations and make significant investments in relation to biodiversity on the basis of schemes that will only run for 5 years. Much greater incentive would be provided by a longer term vision/commitment from government, though it is recognised that this is challenging given the political process. Constitutional change and rights of nature have also been discussed at the Citizens' Assembly and would send a strong signal that moves towards change for biodiversity will be required and supported into the future.

Outcome 1B. Need to stress in the preamble that leadership and coordination is needed with responsibilities given to different departments with subsequent oversight and reporting. BWG (or similar) needs to have a clear mandate and that they are empowered to mainstream biodiversity across all sectors and that sectors are not determining how biodiversity is addressed.

1B Prioritise placing the NBAP on a legal footing.

Outcome 1D. The target here is set very low. i.e. "By 2027, public awareness on biodiversity is increased by 20% against a 2023 baseline". When already in 2019 from Ireland's 6th report to CBD on page 120 [NPWS Biological Diversity web.pdf](#) that 60-70% of people already have heard of the term biodiversity. It should be more about public awareness of what they can do to support biodiversity.

1B2. Not just expanded membership is needed, but also more teeth. The BWG currently seems to work essentially as a discussion forum rather than a decisive executive body, reaching agreements for action, assigning responsibility for those actions and following up on their implementation.

1B3. Not just new articles of association are needed but also confirmation of status and commitment of resources.

Suggested new Action - Regional Coastal and Marine (or just Marine) Biodiversity Officers for the following areas - North East and East, South East and South, South West and West, North West. Given the vast marine biodiversity resource and the MPAs it is really necessary to address this area of specialist officers.

1D4 on increasing support for community initiatives is particularly valuable.

1D6 Indicator is 'number of local authorities supported' but should really be in monetary terms instead/as well. All supported with a small amount of money would not be much of a step forward. The currently stated approach leaves scope for the budget to remain the same and just be more thinly spread which would be counter-productive. Admittedly this phrasing is appropriate to the target as phrased. Consider rephrasing the target 'properly supported'? Or having an additional target that captures resourcing (as is the case for the business and biodiversity platform targets 1D7 and 1D8). We do not know what percentage of total Irish businesses are "900 businesses". The target here should indicate that business are aware of NBAP and involved in conserving and supporting biodiversity in all their actions e.g. timber from sustainable sources, cardboard and packaging from renewable materials, recycling at all states of production etc.

1E1 - glaring gaps already exist with our wildlife act and we should focus on enacting our current regulations especially surrounding invasive species where the reg 49 and 50 are not enforced even

though the laws are written and are clear with regard to third schedule species. These urgently need to be enacted. S.I.477/2011

The review of the previous NBAP by the National Biodiversity Forum gave clear recommendations under governance related to objective 1B. This review highlights the need for improved governance and stewardship of biodiversity including improved policy coordination; mainstreaming biodiversity into decision-making across all sectors; and ensuring accountability for the next National Biodiversity Action Plan and set SMART (Specific, Measurable, Achievable, Realistic & Timely) targets.

Proposed alternative wording for Action 1A6 in box on page 22:

The various actions included to address the skills and capacity shortage in relation to addressing the biodiversity crisis are welcomed i.e. 1A6, 1A7, 1B4, 3C7, 5A1 and 5A2. However given the scale of the skills and capacity shortage, in particular in public bodies, Action 1A6 should be expanded and strengthened. The focus of the wording currently is on upskilling and training of existing public servants. However this should be expanded to include other methods of increasing and expanding capacity and skills in the public sector.

Proposed alternative action text for 1A6:

“All Departments and Government Bodies will review their requirement for, and access to, biodiversity expertise. Gaps in expertise will be resolved by a combination of acquiring additional staff, developing panels of external ecological resources (e.g. consultants), and providing training to existing staff”.

Proposed alternative indicator text for 1A6:

“All Departments have sufficient access to biodiversity expertise via full-time staff and / or external resources”.

Three proposed new Actions to address the skills and capacity shortage:

The following three new actions are required to address the skills and capacity shortage:

- Expanding the range and availability of appropriate third level courses in biodiversity
- Creating apprenticeships in ecology
- Ensuring biodiversity is adequately incorporated into the primary and secondary national curriculum

This should be addressed by the inclusion of three new actions either under Objective 1 (or possibly under Objective 3 with reference to a modified version of Action 3C7 which is focused only on the green economy and not wider skills needs, or possibly under Objective 5A). The proposed phrasing of the new actions is as follows:

Proposed new Action to address the range and availability of appropriate third level courses in ecology, to address the skills and capacity shortage

“Review availability of existing third level courses which include biodiversity either as a core or non-core component and identify requirements for new dedicated biodiversity-focused third level programmes as well as addition of new biodiversity modules in existing programmes e.g. in

agriculture, planning, forestry. Develop micro-credentials and other CPD offerings, including through online delivery, to enable upskilling by current professionals.”

Proposed new Action to create biodiversity apprenticeships to address the skills and capacity shortage

“Develop and fund a range of biodiversity apprenticeships across the National Framework of Qualifications Level 5 to 9, supported and approved by Quality and Qualifications Ireland.”

Proposed new Action to ensure biodiversity is adequately incorporated into the primary and secondary national curriculum

“Review how biodiversity is covered in both the primary and secondary school curriculum and amend as required to ensure the curriculum is fit for purpose and focused on addressing the biodiversity crisis. In particular ensure that biodiversity is comprehensively covered in the forthcoming new Leaving Certificate subject on Climate Action and Sustainable Development.”

Objective 2

The preamble flags three topics in particular – restoration, invasive species, genetic diversity. It would be worth also highlighting red listed species, substantial and urgent effort is needed for species that are endangered in Ireland, particularly those that are rare elsewhere as well. Not all are on Birds and Habitats Directives, e.g. fish are particularly poorly represented. There are also many species and habitats on the OSPAR lists that are not on the Natura directive lists. Add Outcomes and Actions for them too?

2A1 and 2A2 could make reference to increased stakeholder engagement in the implementation process. It is provided for in the directive but has historically been limited (perhaps due primarily to the very limited resources of NPWS). This would make the implementation much more effective. Enforcement should also be commented on.

2A2 New Action Suggested - To develop Site Management Plans for European Sites and include for monitoring and reporting on an annual basis of the sites plans.

2A 8 & 9 there is the added huge potential for zoos, museums and botanic gardens to highlight biodiversity loss to the public and to link to active research in building species conservation and potential to restore species and habitats in the wild. Fota offers a great example of what can be done from Ireland on a global basis.

2B1 The indicator here just takes into account area under management commitments but there is no review to assess if the management in Ireland’s CSP is actually effective in terms of benefiting biodiversity and improving conservation status of target habitat and species. Area under management and effectiveness of management are very different things. In the results based AECM a large amount of data will be collected through the scoring system based on multi-criteria assessment of ecological quality. There should be a commitment to collate and analyse these data and track degree of improvement in the results based programmes.

2B3 Organic farming and landscape features on farms are lumped together. These need to be separated and at least have the percentage area under each that is within the CSP included in the

indicator column. In terms of organic farming the certification bodies have a significant role to play and private advisors, education and training institutes (ETBs, Agricultural Colleges, Universities and IoTs).

2B9 need to state tree planting where appropriate.

2B10 the nursery stock industry in Ireland needs to be involved and supported in helping to provide and grow native provenance as well as native named species.

2E very vague in relation to restoration – national restoration plan – due to uncertainty over what will be in the EU law. Will an addendum be produced once the law is in place? Can and should some preparation be done before the law is in place?

Under outcome 2A, 2B and 2C there needs to be a commitment that under the mid-term review of the CAP in 2025 that there will be an independent review of the effectiveness of the CAP strategic plan green architecture (baseline conditionality, eco-schemes agri-environment schemes, co-operation and AKIS). This review should examine the effectiveness of interventions in relation to protection of designated sites and species (2A); biodiversity and ecosystem services in wider countryside (2B) and contribution to improving ecological status of freshwater bodies (2C). Early identification of impact will ensure effective planning and implementation of improved interventions within the next policy cycle in 2027. This should be an independent review and feed into the overall mid-term review of the CAP which will be undertaken by DAFM.

Under 2G also need to highlight the need prioritise early eradication where species are known to be invasive elsewhere. Local communities and councils could be easily informed through country lists and maps developed in conjunction with the National Biodiversity Data Centre. All Regional authorities to employ an Invasive Alien Species Officer. All local authorities to develop IAS action Plan. All public lands and special areas of conservation should be free of invasive species by 2040 (a long time horizon is required due to the time taken for measures to be effective for invasives).

Objective 3

‘Contribution’ should be plural, as it is in IPBES – i.e. ‘Nature’s Contributions to People’.

Pre-ambles text on page 51 is strongly focussed on health and cultural benefits. While the rebalancing that this emphasis constitutes is very welcome, a bit more strength should be given to the statements about all of the other contributions, particularly regulating services/contributions (given that provisioning services/contributions are given emphasis elsewhere (eg fisheries under Objective 2), but that should be explained in the preamble text, in case a reader fails to appreciate the full range of contributions provided). The first line and a half ostensibly cover the tangible, but in fact this is only really stated in terms of our interactions with species and habitats, which arguably is what brings the intangible benefits referenced in the rest of the sentence. The text for Outcome 3C covers a broader range of contributions. There are a number of readily available pictorial representations of the range of ecosystem services that could be included.

Objectives under 3A & B there is a lot of scope for local action. Could be a lot more ambitious to say public planting schemes incorporate appropriate biodiversity and pollinator friendly plants in all schemes. Architects should be encouraged (or required) to incorporate space for planting and

biodiversity in all public funded designs. This is mandated in other parts of the world, e.g. Utrecht, Singapore.

3C objectives also linked to early ones on business and biodiversity and are also contradictory.

Outcome 3D preamble refers to actions_ (plural), but there is only one.

While the opening paragraphs of this section of the plan give strong statements about the recognition of the importance of biodiversity, there is then a lack of underpinning commitments to significant actions or targets that specifically deliver on this for biodiversity.

The contribution being sought from the planning and development sector is very under-ambitious, being limited to a single rather unambitious target under Outcome 3D.

While many additional commitments should be considered under this objective, two very significant omissions from the Draft NBAP which should be included in this section of the plan are commitments to developing policy approaches for Ireland for:

1. Biodiversity Net Gain;
2. Nature restoration/offsetting policy.

Both of these are of particular relevance given the EU's recent commitment to a Nature Restoration Law, and likely recommendations which will emerge in this area very shortly from both the Citizen's Assembly on Biodiversity and COP15.

Suggested Action: To develop a guidance tool for biodiversity net gain in relation to development (by OPR/EPA?) Timeline for completion: 2024

Objective 4

An additional sentence should be added at the end of the second paragraph on page 60. "Impacts on biodiversity will also diminish its essential contributions to mitigation and adaptation and so further intensify climate change and its impacts."

Outcome 4B. Coillte also own extensive peatlands. Can similar commitments to enhancing their biodiversity be incorporated?

Outcome 4C. There are community-based groups focussed on peatland and wetland conservation and restoration. An action could be to work with them/resource them? This is perhaps implied/intended under Action 4C2, but it could be made more explicit.

Objective 5

Indicator 5C2 – all reporting requirements should be met, without the need for the percentage of them to be an indicator.

Outcome 5E Biodiversity is mainstreamed across relevant research disciplines: only one target is stated – relating to EU Life Projects. Achieving this overall outcome requires engagement with the wider research community, particularly in third level institutions, e.g. via actions undertaken through AICBRN via its links with interdisciplinary third level research institutes and centres and also perhaps by Future Earth Ireland, to actively engage researchers from different disciplines in biodiversity research. An additional target should be added to reflect this kind of approach.

Objective 6

Note comment already made above: Objective 6 is ok but there is a glaring omission on Ireland's international biodiversity footprint e.g. huge footprint in terms of goods consumed. In food, 75% of food consumed here is imported, including from some areas suffering significant biodiversity losses as a result of meeting international demand for food products.

This warrants a separate outcome dealing with enhancing awareness among consumers of the international footprint of the products we consume. Needs to be a clear action on working with EU partners to ensure increased sustainability on traded products as part of the EU Green Deal and Farm to Fork strategy. As stated in the farm to fork strategy we need to promote a global transition: "Through its external policies, including international cooperation and trade policy, the EU will pursue the development of Green Alliances on sustainable food systems with all its partners in bilateral, regional and multilateral fora. This will include cooperation with Africa, neighbours and other partners and will have regard to distinct challenges in different parts of the world. To ensure a successful global transition, the EU will encourage and enable the development of comprehensive, integrated responses benefiting people, nature and economic growth."

No mention is made of the Convention on International Trade in Endangered species of wild fauna and flora. Ireland has a surprisingly very active export trade in rare species such as birds of prey and an import trade in tropical corals, alligators, tropical timbers, venom etc. Ireland also contributes to EU working groups working on ensuring sustainable trade of wildlife and wildlife products into Europe. Timber is becoming an increasing big issue, with observations that innocuous park benches are being made from rare tropical timbers. A lot more awareness of biodiversity impacts on international rare species in trade needs to be undertaken here.

Tackling wildlife crime and sustainable global trade in wild plants and animals a key role for Ireland locally and internationally. We are globally linked and international trade in Ireland links to biodiversity and some of the key issues facing the world such as tropical deforestation. Irish crime gangs are also linked to rhino trafficking etc. Dublin Zoo and Fota have very active international species conservation programmes which support biodiversity internationally. National Botanic Gardens also have important conservation collections on internationally rare and threatened species. UCD also provides capacity by acting in a scientific advisory role to CITES at home and abroad.

Implementation

Similar to previous NBAPs, concern centres around the implementation, monitoring and enforcement of the actions laid out in the plan. A clear criticism of the third NBAP was a lack of

accountability and enforcement. Although there is clear ownership of all actions in the current draft, there should be explicit statements (or actions), on how these actions will be enforced, and the consequences for action owners if they are not fulfilled. Although comprehensive and ambitious, this plan must be implemented in its entirety if it is to achieve its goal of halting the loss of biodiversity in Ireland.

Appendices

Page 96, change [REDACTED] affiliation to ATU

JCFJ submission on Ireland's 4th National Biodiversity Action Plan

Dia duit,

The Jesuit Centre for Faith and Justice is an agency of the Irish Jesuit Province, dedicated to undertaking social analysis and theological reflection in relation to issues of social justice, including housing and homelessness, penal policy, environmental justice, and economic ethics. We welcome this opportunity to give our input into this consultation process.

Overview

The first Biodiversity Action Plan was published in 2002.¹ 20 years later and the situation and outlook for Ireland's biodiversity has not improved in line with the objectives and proposed actions contained within that report and the subsequent ones published in 2011 and 2017. The State of the Environment report, published by the EPA in 2020, found that the current assessment of nature and biodiversity in Ireland is very poor. We are largely not on track to meet policy objectives. The report goes on to say that "the outlook for biodiversity is challenging unless there are fundamental changes."² The review of the National Parks and Wildlife Service reported similar poor biodiversity assessments and concluded "that in its current form, the NPWS is not aligned effectively to deliver on its current demands and future mandate."³ Furthermore the National Biodiversity Forum states that "the biggest transgressor of environmental law in Ireland is the State. Non-compliance is rife at all levels of society, from Government non-compliance with EU laws down to local wildlife crime by individuals."⁴ For the tide to turn on this deteriorating situation the 4th Action Plan will need to spell significant change displaying increased urgency to protect and enhance Ireland's biodiversity with increased accountability embedded within the plan as recommended by the National Biodiversity Forum.⁵ The Jesuit Centre for Faith and Justice believes that the current iteration of this plan does

¹ https://www.npws.ie/sites/default/files/publications/pdf/DAHGI_2002_NBP.pdf

² https://www.epa.ie/publications/monitoring--assessment/assessment/state-of-the-environment/EPA_Irelands_Environment_2020.pdf

³ Stout J.C., Ó Cinnéide, M. (2021). Review of the NPWS 2021: Key findings and recommendations. Report to the National Parks and Wildlife Service (NPWS), Department of Housing, Local Government and Heritage (DHLGH), Government of Ireland.

⁴ <https://www.biodiversityimpactplan.ie/3-restore>

⁵ <https://www.biodiversityimpactplan.ie/>

not represent this significant change in step that is needed. We also found it surprising that the responsibility for writing this was contracted outside of the government department / state bodies with the primary responsibility for implementing this action plan. While we understand that the NPWS is in a state of flux and in the process of expanding its workforce, we feel that the development of the Biodiversity Action Plan may have been better placed within the Biodiversity Data Centre or a similar body with environmental expertise.

The Jesuit Centre for Faith and Justice welcomes the commitment to include the recommendation of the Biodiversity Citizens Assembly. Increasing engagement and participation from the public around biodiversity, its importance as well as its threats, is a vital part of increasing ambition actions to deal with this biodiversity crisis. (Included below is JCFJs' submission to the Citizens Assembly process – see Appendix 1).

Ambition, scope and accountability

The commitment to treat the biodiversity crisis through a 'whole of Government, whole of society approach' is a welcome development considering the importance of biodiversity for our society. Ensuring that the overarching biodiversity objectives are integrated across other national policy areas is an important development of this Plan. The National Biodiversity Forum specifically recommended that this iteration of the Biodiversity Action Plan should be a 'whole of Government' plan and aim to boost engagement with grassroots communities.⁶ Ensuring that biodiversity is tackled on a whole of government approach several areas must be addressed. There needs to be policy alignment across the entire government, particularly ensuring one arm of the government is not actively working against the aims and objectives of another. This is a particular problem within the agricultural industry where Bord Bia and DAFM are mandated to continue the growth and productivity of primary industries within Ireland although we know the current agricultural model is a leading cause of the decline in Ireland's biodiversity. We acknowledge, however, that this action plan takes into account the severe impact of agriculture and sets out some important targets, specifically target 2B1 relating to Results Based Agri-Schemes, which if implemented will have a positive impact on biodiversity.

To ensure this whole of government approach can be implemented, dedicated biodiversity funding should be available for all Departments / State bodies. The National Biodiversity Forum also noted that "commercial semi-states such as Coillte and Bord na Móna still have economic dividend obligations. The Government should mandate non-economic biodiversity dividends which enable greater public health and wellbeing benefits, carbon sequestration and flood mitigation as well as biodiversity benefits from public lands, for example through a strong biodiversity duty for semi-states."⁷

It is positive to see that continuing engagement with grassroots and community groups is present within this plan as recommended by the National Biodiversity Forum⁸. However, while there are

⁶ <https://www.biodiversityimpactplan.ie/1-governance>

⁷ *ibid*

⁸ <https://www.biodiversityimpactplan.ie/5-engage>

plans to increase the funding available through LBAF, there is no mention in the plan of this increase. Strategic use of this funding, ensuring that it is used effectively to enhance biodiversity is critical. Funding applications for biodiversity projects should be both supported by the Biodiversity Officer in each Local Authority and appropriately screened by an ecologist in the funding body (NPWS) before being approved. Local biodiversity groups may not have all the expertise needed to design and implement appropriate biodiversity projects. Ensuring the most appropriate action is taken in a given ecosystem or location is important to ensure the best outcome for biodiversity as well as for the morale and engagement of the group. Funding for biodiversity should also include projects for increasing engagement and support from local communities. This plan's success hinges on tangible biodiversity improvements on the ground, including small and large scale actions, this cannot be achieved without buy in from local communities.

While it is welcome that Local Authorities will soon have dedicated Biodiversity Officers (Objective 1B4 – DHLGH will work with Local Authorities on establishing a Biodiversity Officer Programme with a dedicated Biodiversity Officer in each Local Authority and dedicated guidance on their role by 2026), this does not represent the scale of the challenge nor the level of ambition required within Local Authorities to begin tackling the biodiversity crisis. A Biodiversity Officer within a Local Authority would reasonably be expected to produce biodiversity material, organise engagement events with in communities, facilitate biodiversity project and even carry out biodiversity assessments for communities. This range of skills and the workload cannot be the responsibility of a single officer within a Local Authority. A biodiversity unit with numerous staff would be a more fitting with the expectations around biodiversity action by Local Authorities.

As well as recruiting biodiversity officers to Local Authorities there needs to be increased level of expertise across other central government and state agencies/organisations. This would include, at a minimum, recruiting a biodiversity officer, to An Bord Pleanála, OPW, Irish Water and Transport Infrastructure Ireland among other state organisations. This commitment to biodiversity, at a whole of government scale, also needs to be visible in other areas of the plan. Action 2A10 states that – Údarás na Gaeltachta will undertake a review of estates and lands within their operational zones, with a view to creating site specific management plans. Why is this action limited to only one department of the government? There should be a review of all publically owned lands to ensure that, where possible, land is managed with biodiversity in mind.

The commitment to reform the NPWS on the back of it's Strategic Review (Outcome 1A) is welcome. However, there should be an increased level of detail included within this plan of what this means. The indicator of the success of this objective is "Number of NPWS Strategic Action Plan actions implemented by 2025", this does not indicate an ambitious commitment to ensuring that the Strategic Plan, including all the recommendation of the NPWS review process, are implemented.

Implementation

The objectives and actions listed within this plan are in general quite vague and non-specific. The actions within this plan should be SMART (Specific, Measurable, Achievable, Realistic, Timely) targets as recommended by the National Biodiversity Forum.⁹ To facilitate the implementation of this plan and insure transparency detailed implementation plans should be published alongside this Action

⁹ <https://www.biodiversityimpactplan.ie/1-governance>

Plan for each of the overall objectives. As highlighted within this document this Action Plan does not have legal footing and lacks accountability. In objective 1B1 the plan states that “DHLGH will explore placing the National Biodiversity Action Plan on a statutory footing”. This action does not go far enough in ensuring that this plan eventually becomes legally binding. There is no urgency or recognition that the non-statutory standing has resulted in previous Biodiversity Action Plans failing to stem the destruction of Ireland’s biodiversity.

Even if this plan was fully implemented, it may not mean that tangible improvements would be visible on the ground. Much of this Action Plan indicates that the development of incentives (eg 1C2 and 1C3) is the aim and not the means to a measurable end. Targeted uptake of incentives or measurable improvements in biodiversity at local level are missing indicators within this plan (e.g number of farmers taking up farming with nature incentives or percentage increase in number of species found at a particular area). Another example of this is target 1B6 – All Local Authorities will have a Biodiversity Action Plan in place by end of 2026 – does not indicate what accountability will be in place to ensure that these Biodiversity Action Plans are implemented in a timely manner resulting in improvements in biodiversity.

While it is welcome that Marine Protected Areas¹⁰ are mentioned in the action plan there are no specifics mentioned about the level of protection that will be afforded these areas (MPAs range in protection from range from strict no-take zones (i.e. no fishing or other extractive activities) to multi-use sites that allow some extractive activities.¹¹ Ensuring that the level of protection allows biodiversity restoration within marine environments is important. Designating MPAs which do not lead to restoration of biodiversity will ultimately be a pointless endeavour. The level of ambition needs to be clarified within the Biodiversity Action Plan to ensure that the process of developing these MPAs are as positively impactful as possible.

Objective 2 aims to meet Urgent Conservation and Restoration Needs. Many of the targets and actions listed here seem to be mainly focusing on specific habitats and species rather than taking a more holistic ecosystem view to biodiversity restoration. While ensuring protected species are conserved as much as possible it should not be to the detriment of wider biodiversity restoration programmes (i.e. use of herbicides to manage invasive species can impact on pollinators).

Omissions from the plan

Reflecting on the Action Plan it is also surprising that key issues are completely absent. While invasive species are present in the plan as driver of biodiversity loss that needs to be tackled, overgrazing is not mentioned at all in this Action Plan. Overgrazing negatively impacts biodiversity across a range of ecosystems in Ireland (including upland blanket bog and woodland). Rewilding, a concept which is gaining recognition and popularity in its potential to enhance biodiversity and ecological function is similarly absent from this action plan as well as the similar concept of natural regeneration. Neglecting to commit to even assess the role these conservation and restoration processes can play in Irelands biodiversity leaves a substantial gap in this plan.


¹⁰ <https://www.iucn.org/resources/issues-brief/marine-protected-areas-and-climate-change>

¹¹ <https://portals.iucn.org/library/node/48887>

While education is mentioned regularly within the action plan (Objective 1D) there is no specific mention of either the primary or secondary school curriculum. While biodiversity is incorporated into school activity via the Green Schools¹² programme and other social enterprises¹³ and charities there is a clear need for it to be incorporated into the core curriculum across primary and secondary school level.¹⁴ Formal inclusion of biodiversity can be found in some subjects such as science and biology however this does not ensure an appropriate awareness of what biodiversity is or its importance within our schools. The emphasis to date has been on the climate crisis, and while obviously important, should not result in the relative neglect of this biodiversity crisis.

Conclusion

Overall there needs to be more urgency and ambition evident within the next iteration of the Biodiversity Action Plan. While there are some positive areas within the plan – particularly around the commitment for a whole of government, whole of society approach more evidence of the responsibility that will be placed on different arms of the government is needed. As alluded to several times within the submission there is not enough evidence that the recommendations of the National Biodiversity Forum have been fully taken on board specifically pertaining to SMART targets.¹⁵ The vague actions and targets listed within the plan will make it very difficult to assess the success of the implementation of this plan and the impact it will have on biodiversity within this country. It is hopeful that once the recommendation of the Citizens Assembly process has been included, as well as the greater incorporation of feedback from the consultation process, the 4th Biodiversity Action Plan has the potential to make a difference in restoring Irelands biodiversity.



Environmental Policy Advocate

¹² <https://greenschoolsireland.org/themes/biodiversity/>

¹³ <https://www.biodiversityinschools.com/our-aim.html>

¹⁴ <https://globalactionplan.ie/services/budding-biodiversity/>

¹⁵ <https://www.biodiversityimpactplan.ie/recommendations>

Appendix 1

We are delighted to have the chance to contribute to your discussions on biodiversity. In particular, JCFJ would like to bring to attention the social justice aspect of biodiversity including:

- I. Accessibility to green / biodiversity rich spaces
- II. The right to the benefit of biodiversity, both in terms of the good and services it provides and the physical and emotional benefit of experiencing biodiversity.

In addition to these points we also feel that the intrinsic value of biodiversity and our naturally occurring ecosystems, beyond what we can consume and use is central to the development of the National Biodiversity Action Plan and that it should not be overlooked.

The health and emotional benefits of biodiversity are widely acknowledged and the evidence for nature derived health benefits is widely accepted.¹⁶ Being immersed in nature reduces stress, improves mood and even boosts our immune system. Access to these areas requires consideration of several interconnected factors including:

- the existence of greenspace
- the existence of functioning ecosystems
- the location of biodiversity rich areas
- the accessibility of biodiversity rich places

Our Ecosystems are not intact

The integrity of Ireland's ecosystems is relatively poor. We have very little intact, healthy functioning ecosystems on this island. Ecosystems. There is a distinct paucity of land or water management plans that support the proper functioning of biodiversity rich ecosystems. Physical disturbance including drainage of land, clearance of trees, shrub land and canalisation of our water ways, for multiple reasons eg agriculture, mining of peat, development and flood relief, have all resulted in fewer areas in the country where biodiversity can flourish. Our diminished biodiversity including a near total absence of top predators and an overabundance of grazers, both wild and domestic, has resulted in a simplified landscape. These simplified landscapes are prone to malfunction under stress increasing the likelihood of landslides and soil erosion during heavy rainfall. While there are areas of the country which has rich assemblages of biodiversity, these are by no means common across the country. In Ireland grasslands, primarily for agricultural purposes, cover the majority of land in Ireland (58.4%),¹⁷ while forestry makes up 11% of land use. Only 2% is native forestry¹⁸. Peat bogs account for almost 14% of Irish land however much of this is used for agriculture, is harvested or is used for forestry growing. Protected areas in Ireland are also exposed to multiple forms of

¹⁶ <https://e360.yale.edu/features/ecopsychology-how-immersion-in-nature-benefits-your-health>

¹⁷ <https://www.cso.ie/en/releasesandpublications/ep/p-eii/environmentalindicatorsireland2020/landuse/>

¹⁸ <https://www.coillte.ie/a-brief-history-of-irelands-native-woodlands/>

environmental stress including the proliferation of invasive species, over grazing and unsustainable extraction.

Strong and widespread measures will be needed to reverse the damage that this situation has caused to our natural biodiversity and ecosystems. These will need to include changes in planning with stronger protection for existing habitats and ecosystems of importance;¹⁹ changes in how we manage publicly owned land,²⁰ increased recognition and compliance with environmental protection for state agencies and local authorities including OPW and Coillte.

A range of conservation methods will need to be deployed for different areas across the country ranging from restrictions on different toxic chemical use to landscape management plans. Limiting the use of herbicide and pesticides, which are highly detrimental to biodiversity, will necessitate the development of guidance around alternative sustainable management options. Reassessing the priorities in terms of managing for landscapes from 'neat and tidy' to high biodiversity will require enormous shifts in management practices and thus additional training. Utilizing the power of natural regeneration and rewilding for the biodiversity and climate crisis by creating the physical conditions to allow nature to restore itself rather than developing expensive plantation projects will be vital if we are to succeed in reversing the current trend of biodiversity degradation. This is not to say there will be no human intervention necessary in restoring our environment. Drained peat soil will need their hydrological conditions restored by blocking drains, straightened rivers will need their meanders and flood plains restored, invasive species will need to be removed and controlled to reduce their ecological impact. In some cases, missing species will need to be returned to restore their ecological function.

Biodiversity in Urban areas

Urban areas make up just under 3.5% of our land area but is home to nearly 64% of the population.²¹ Consequently a large proportion of our national population live in areas where rich biodiversity is limited. In some areas of inner city Dublin there is less than one tree for every ten residences. Density is an important aspect of sustainable urban living, helping to reduce urban sprawl. Where such tight competition for space exists in inner city areas policy decisions need to be made about the most appropriate use of land. Green space, alongside a reduction in the land used for traffic, needs to be a high priority to improve the living conditions of existing residents and increase the density of our urban centres.

Urban greening can also be used as nature based solution for environmental problems associated with urban spaces including, storm water management, urban heat effect and air pollution. Maximising this potential reduces the need for hard structure and engineering solutions while increasing biodiversity access in urban centres.

¹⁹ <https://www.dublinlive.ie/news/dublin-news/children-scream-distress-stop-killing-23060756>

²⁰ <https://greennews.ie/killarney-park-documentary-tackle-invasive-species/>

²¹ <https://www.statista.com/statistics/455844/urbanization-in-ireland/>

Accessibility of Biodiversity

Ensuring that good quality green areas outside of urban districts are accessible to everyone, including those without access to private cars, is an important environmental justice issue. Relying on private cars to access areas of natural beauty in Ireland is not sustainable as the surface area required to park all the cars damages the areas we are looking to conserve, while simultaneously making it inaccessible to those who aim to travel by active or public transport²². Ensuring there is accessible, flexible and affordable active and public transport to areas of high natural beauty would ensure that those who may not have the opportunity to visit these places normally would be facilitated to enjoy the benefits of being immersed in biodiversity.

Role of Public Bodies

We need public bodies to take the lead in the restoration of Ireland's biodiversity. Management of National Parks, public parks and all publically owned green spaces in city and town centres as well as in rural areas should be managed for biodiversity and accessible for the public. There are some projects, including the grounds of Castletown House, Celbridge, and their implementation of the pollinator plan, where this is taking place however it is unfortunately not as widespread as we need it to be. Killarney National Park is managed more as a tourist attraction rather than for its biodiversity. Large areas of the park have been allowed to become infected with the invasive species *Rhododendron* which if left without management will result in the loss of an ecological and culturally significant ecosystem. The Office of Public Works (OPW), with its responsibility of maintaining publicly owned properties and flood management, has an important role to play in this area. Protection and enhancing biodiversity would be included as an integral part of the OPW responsibilities. A striking example of how the current work of the OPW actively works against biodiversity and ecological health is their statutory duty to maintain the Arterial Drainage schemes which are carried out under the Arterial Drainage Act, 1945. The purpose of these schemes is to improve land for agriculture and to mitigate flooding with little consideration given for protecting biodiversity.²³

Publically owned land in urban centres have incredible potential to be biodiversity champions. The Department of Education and the green space around the Custom House in inner city Dublin are prime examples of green areas that could be opened more to the public and managed for biodiversity. This should include planting additional trees including understory plants and converting some of the lawn into wildflower meadows. In addition to increasing biodiversity this also gives rise to opportunities for more sustainable land management including natural management for Autumnal leaf fall.

Similarly, reassessing the space given to car parking spaces around Government buildings, particularly in urban areas well connected by public transport and creating more space for biodiversity would send a strong signal that this is important and the public sector are leading the

²² <https://www.irishtimes.com/news/environment/heritage-sites-our-tourism-industry-must-manage-the-congestion-1.3118239>

²³ <https://www.gov.ie/en/policy-information/dd855f-flood-risk-management/>

charge in the transition to a more sustainable way of living that values biodiversity and puts our natural environments and ecosystems at the centre of decision making.

Conclusion

Intact ecosystems and biodiversity is vital for the healthy functioning of our societies. We, either directly or indirectly, depend on them for everything we need to survive. The role biodiversity plays in our health and wellbeing need to be recognised as we consider how we plan our towns and cities, manage our green spaces and parks and develop our legislation and policies.

Social inequality in Ireland, including the housing and homelessness crisis and poverty and social deprivation, is a big issue. Recognising that access to biodiversity and the right to healthy functioning ecosystems is a vital part of dealing with this crisis.



9th November 2022

daa submission to Ireland's 4th National Biodiversity Action Plan Consultation

A chara,

daa is a state-owned company which owns and operates Dublin and Cork airports with subsidiaries ARI and daai involved in retail and airport management. daa welcomes the opportunity to provide input to the public consultation on Ireland's 4th National Biodiversity Action Plan (NBAP) and is supportive of the plan's *Vision* for biodiversity in Ireland.

daa understands that loss of biodiversity and ecological habitats is a serious challenge at local, regional and national level. In line with the EU Biodiversity Strategy for 2030 and as part of our own Environmental Sustainability Policy, daa aims to enhance our airport's surrounding ecosystems by 2030 and manage them sustainability. We plan to deliver benefits, by improving and preserving the surrounding ecosystem by increasing pollination, habitat protection and communicating our knowledge of ecosystems around the airport.

Included below are comments on selected actions from the NBAP.

Business For Biodiversity Platform (Actions 1D7, 1D8, 1D9, 3C10, 3C11)

daa is supportive of the development of the Business for Biodiversity Platform and its efforts to engage with the commercial sector on biodiversity action. The development of guidance for businesses as outlined in Outcome 3C is key to enabling the commercial sector to play its role in protecting biodiversity. Airports face unique challenges in balancing efforts to conserve biodiversity with wildlife hazard management for the mitigation of wildlife strike risk to aircraft. As such daa encourages the development of any materials or guidance targeted to the aviation and transport sectors.

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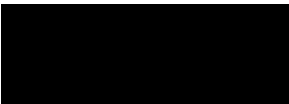
Supporting the All-Ireland Pollinator Plan (Actions 2B11, 6A5)

daa is a business supporter of the current All Ireland Pollinator Plan. Guidance on best practice and feedback from the National Biodiversity Data Centre on actions undertaken are key to improving and developing meaningful actions.

Management of Invasive Species (Actions 2G1, 2G2, 5C9, 6A2)

daa recognises that the introduction and spread of invasive species threatens biodiversity and welcomes the development of an invasive species management plan.

Le meas,



Group Environmental Manager
Sustainability



Cllr Pádraig McEvoy

Member of Kildare County Council

COISEANNA HILL, COLLEGE ROAD, CLANE, CO. KILDARE, W91 W2R0

m: 086 865 8262 e: padraigmcevoy@gmail.com

9 November 2022

A Chara,

I welcome the opportunity to make a submission to the 4th National Biodiversity Action Plan.

The appendix to this submission [1] is a separate submission that was made on the draft Development Contributions Scheme proposed by Kildare County Council. It seeks to lay out how cross-cutting policies for the protection of green infrastructure could be incorporated in a new approach to Development Contributions by Local Authorities.

It is suggested that the 4th National Biodiversity Action Plan consider how policies and public funding be used to prioritise the protection of existing green infrastructure. This could be given effect by the provision of funding for positive action and the withholding of funding for action that impacts negatively on biodiversity.

In addition, this submission calls on the 4th National Biodiversity Action Plan to be used to positively influence Local Authorities to appoint leadership through senior positions that can influence cross-cutting biodiversity action across the various functions of a local authority.

Yours faithfully,

(Submitted electronically, so bears no signature)

Pádraig McEvoy

¹ <https://consult.kildarecoco.ie/en/submission/kcc-c101-5#attachments>



Cllr Pádraig McEvoy

Member of Kildare County Council

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1 November 2022

Dear Executive,

I welcome the opportunity to engage with Kildare County Council regarding the Draft Development Contribution Scheme 2023-2029.

It is respectfully submitted that the adoption of a revised Development Contribution Scheme should actively consider of the triple planetary crisis of climate change, pollution and biodiversity loss.

Ireland continues to have obligations under international agreements and frameworks such as the Paris Agreement on Climate Change (2015), the U.N. Sustainable Development Goals (2015), and the European Green Deal (2019). The policies of the U.N., E.U., and Irish Government address emissions reductions and adaption challenges towards the years 2030, 2050 and 2100. For Ireland to make this transition, a society-wide collaborative effort is required by the Government, businesses, communities, and individuals.

The UN Environment Programme published the Emissions Gap Report 2022 [1], with a summary sub-headline that reads:

"The report finds that only an **urgent system-wide transformation can deliver the enormous cuts needed to limit greenhouse gas emissions by 2030**: 45 per cent compared with projections based on policies currently in place to get on track to 1.5°C and 30 per cent for 2°C. This report provides an in-depth exploration of how to deliver this transformation, looking at the required actions in the electricity supply,

¹ <https://www.unep.org/resources/emissions-gap-report-2022>, 27 October 2022

industry, transport and buildings sectors, and the food and financial systems.”

In short, the U.N. is highlighting the shortfalls in progress and calls for more accelerated changes to the mitigate the prospect of dangerous levels of atmospheric storage of carbon dioxide and methane.

Ireland’s Climate Council [2] advises the Government on overarching actions necessary to mitigate and adapt to climate change, and their website references:

“Carbon sequestration by hedgerows are recognised as an important carbon sink and have mitigation potential if the area of hedgerow is increased (Falloon et al., 2004; Black et al., 2014). Carbon sequestration by hedgerows is associated with either storage within soils or above ground woody biomass (Thiel et al., 2015).”

While this submission calls on Kildare County Council to approach the draft Development Contribution Scheme with a variation on previous schemes, the proposal is couched within the legislative and policy framework that calls for reasonable action within the local authority's function.

The submission sets out:

- A legislative basis for development contributions and the requirements of public bodies under the Climate Action and Low Carbon Development Act.
- The policy context for providing green infrastructure and protecting ecosystem services, including hedgerows, trees and bogland areas.
- Existing approaches to identifying the loss of green infrastructure (ecosystem services) and the costs associated with replacing and developing landcover as public infrastructure for improved air, soil and water conditions and for the adaption to and mitigation of climate change due to human activity.

² <https://www.climatecouncil.ie/aboutus>

- Possible measures and contributions to mitigate the loss of ecosystem services and partially fund the renewal of ecosystem services through land acquisition and the planting of mature and developing species in County Kildare. Note that any potential costs arising from the loss of green infrastructure only occur with the loss.

According to the European Commission, ecosystem services function as a complement to green infrastructure. European spatial planning practice defines **green infrastructure** as:

“a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation” [3].

Article 10 of the EU Habitats Directive states that the Member States shall endeavour in their land use planning and development policies, to encourage the management of features of the landscape, which are of major importance for wild flora and fauna. Such features are those which by virtue of their linear and continuous structures such as rivers and riverbanks or hedgerows or by virtue of their functions as “stepping-stones” such as ponds or small woods are essential for the migration, dispersal, and genetic exchange of wild species.

The Organisation for Economic Co-operation and Development (OECD) first introduced the Polluter Pays Principle (PPP) in 1972 [4]. It stated that the **polluter should bear the expenses of carrying out the pollution prevention and control measures** introduced by public authorities, to ensure that the environment is in an acceptable state. Policymakers can use this principle to curb pollution and restore the environment. By applying it, polluters are incentivised to avoid environmental damage and are held responsible for

³ European Commission (2013),
https://ec.europa.eu/environment/nature/ecosystems/index_en.htm

⁴ OECD, Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies.

the pollution that they cause. It is also the polluter, and not the taxpayer, who covers the costs created by pollution. In economic terms, this constitutes the “**internalisation**” of “**negative environmental externalities**”.

Legislation

Climate Action and Low Carbon Development Act, 2015 (as amended) [5]

15.(1) A relevant body shall, in so far as practicable, **perform its functions** in a manner **consistent with**—

- (a) the most recent approved climate action plan,
- (b) the most recent approved national long-term climate action strategy,
- (c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
- (d) the furtherance of the national climate objective, and
- (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

Climate Action Plan 2021 Securing Our Future

The National Development Plan 2021 - 2030 (NDP) sets out the investment priorities that will underpin the implementation of the **National Planning Framework**, through a total investment of approximately €165 billion. The NDP has been designed to ensure that it supports the government’s climate ambitions. For the first time in Ireland, climate, and environmental assessment of the NDP measures has been undertaken, along with an assessment of the alignment of the NDP as a whole with the principle of a **green recovery**. [6, p.17]

Local authorities, in particular, have a pivotal role to play in the decarbonisation transition, including through spatial planning, the provision of public housing and transport infrastructure, **and the maintenance of biodiversity**. [6, p.69]

⁵ <https://revisedacts.lawreform.ie/eli/2015/act/46/revised/en/html>

⁶ Climate Action Plan 2021, <https://www.gov.ie/en/publication/6223e-climate-action-plan-2021>

Carbon Pricing and Cross-Cutting Policies

While the evaluation of adopting different technologies has delivered a pathway to achieving a 51% reduction in greenhouse gas (GHG) emissions by 2030, the successful deployment of these technologies will require specific policies to remove barriers at sectoral level and a broad national policy framework designed to promote the transition. **Government policies on taxation, expenditure, sustainable finance, spatial planning, and research and development provide an important enabling framework for individual, household, community, and company-level climate action.** These policies also act as enablers for a wide range of other government policies and activities within individual sectors. [6, p.79]

Table 1 Extract from Climate Action Plan 2021 administered by Teagasc or DAFM

Action Number	Action
332	Promote ecosystem restoration and conservation through Payment for Ecosystem Services and investment in actions that increase carbon sinks while promoting biodiversity e.g., woodlands, bogs, soil management, hedgerows
390	Protect, enhance, and increase the number of hedgerows and trees on farms
391	Further refine hedgerow carbon sequestration

The **Wildlife Act**, 1976 (As amended) gives statutory recognition to the Government's responsibilities with regard to promoting the conservation of biological diversity, in light of Ireland's commitment to the Convention on Biological Diversity.

The **National Biodiversity Action Plan** 2017-2021 has **Objective 1** Mainstream biodiversity into decision-making across all sectors:

“Target 1.1. Shared responsibility for the conservation of biodiversity and the sustainable use of its components is fully recognised, and acted upon, by all sectors.

Target 1.2. Strengthened legislation in support of tackling biodiversity loss in Ireland.

Action 1.1.3. All Public Authorities and private sector bodies move towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure.

Action 1.1.15. Identify and take measures to minimise the impact of incentives and subsidies on biodiversity loss, and develop positive incentive measures, where necessary, to assist the conservation of biodiversity.

Action 2.1.12. Hedgerow surveys will be continued by Local Authorities”

The first strategic objective of this Plan is to strengthen the mainstreaming process. It is important that relevant sectors take biodiversity considerations into account **when developing policies** and **operational plans**.

Note: Public consultation on the 4th National Biodiversity Action Plan closes on 9 November 2022 [7].

Planning and Development Act, 2002 (As amended)

Section 48, (1) “A planning authority may, when granting a permission under section 34, include conditions for requiring the payment of a contribution in respect of **public infrastructure** and **facilities benefiting development** in the area of the planning authority and that is provided, or that it is intended will be provided, by or on behalf of a

⁷ <https://www.gov.ie/en/consultation/1566c-public-consultation-on-irelands-4th-national-biodiversity-action-plan/>

local authority (regardless of other sources of funding for the infrastructure and facilities)."

National Planning Framework

The National Planning Framework set out the basis for **Protecting, Conserving** and **Enhancing Our Natural Capital** in section 9.1. This includes **Green Infrastructure Planning** for protecting and valuing our important and vulnerable habitats, landscapes, **natural heritage**, and **green spaces**.

National Policy Objective 52 of the NPF is:

"The planning system will be **responsive** to our **national environmental challenges** and ensure that **development occurs within environmental limits, having regard** to the **requirements** of all relevant environmental legislation and the sustainable **management** of our **natural capital**."

Green infrastructure planning will inform the preparation of **regional** and metropolitan **strategies** and city and **county development plans** by [inter alia] "assisting in accommodating growth and expansion **while retaining** the **intrinsic value** of **natural places** and **natural assets**."

National Policy Objective 58 of the NPF is:

"**Integrated planning** for **Green Infrastructure** and **ecosystem services** will be incorporated into the preparation of statutory land use plans."

National Policy Objective 64 of the NPF is:

"Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy-efficient buildings and homes, heating systems with zero local emissions, **green infrastructure planning** and innovative design solutions."

Regional Planning

The Eastern and Midland Regional Assembly prepared a Regional Spatial and Economic Strategy in 2019. It includes sixteen Regional Strategic Outcomes (RSO). RSO 10 Enhanced Green Infrastructure states:

“Identify, protect and enhance Green Infrastructure and ecosystem services in the Region and promote the sustainable management of strategic natural assets such as our coastlines, farmlands, peatlands, uplands woodlands and wetlands. (NSO 8, 9)”

The RSES has identified a number of key Regional Strategic Outcomes which include:

- the need to **conserve** and **enhance** the **biodiversity** of our protected habitats and species **including landscape** and heritage protection
- to **identify, protect and enhance** our **Green Infrastructure** and **ecosystem services**
- to ensure the **sustainable management** of our **natural** resources
- to build climate resilience, to support the transition to a low carbon economy by 2050 and the **protection** of the **healthy natural environment** to ensure clean air and water for all.

Biodiversity and Climate Change

Biodiversity protection is core to the EU Birds and Habitats Directives but is also incorporated into the Marine Strategy Framework Directive, the Water Framework Directive (marine waters) the Nitrates Directive (agricultural run-off), the SEA Directive, EIA Directive and the Invasive Species Regulations.

Climate change poses a real threat to the functions of ecosystems, however high biodiversity habitats such as wetlands, woodlands and peatlands are key for both climate mitigation and adaptation measures, providing important carbon sinks, water attenuation and flooding protection. Careful land management is needed to ensure that land use changes do not impact the ability of the natural environment to absorb climate impacts. **Biodiversity** can

also be found on the **edges** and **right** in the **centre** of **high-density urban areas**, in **parks, hedgerows, graveyards, rivers** and **gardens**, allowing **urban populations** to **connect** with **nature** in our **cities** and **towns**. The Region's heritage assets include World Heritage Sites, built and natural conservation areas, protected structures, parks and gardens, monuments, archaeological remains, canals and waterways, **peatlands, hedgerows** and ancient woodlands. The protection of air quality requires cross-sectoral policy responses to address air pollution emissions, inter-alia, the **development of Green Infrastructure in urban areas**, as **trees, hedgerows** and **bushes can remove pollutants** from the **air**.

Flooding can be positive for the environment, such as when many wetland habitats and species depend on periodic flooding for their conservation. However, it can also pose a potential threat or flood hazard to people and property, and cause damage to the environment, such as pollution of habitats, and to our cultural heritage, such as monuments and historic buildings. Sustainable land use management and natural flood risk mitigation measures can slow down the water flow in catchments and rivers, for example by protecting and/or rewetting peatlands and bogs and by **planting hedgerows across hillsides**.

Draft Kildare County Development Plan

Many sites of biodiversity value within the County do not meet the criteria that would enable them to be designated at an international or national level. However, these sites are of immense importance at a regional, county and local level. To date, they have not been fully surveyed or recognised as such. In order to inform this process, the County Council has commissioned – and continues to commission – **surveys of** habitats such as **hedgerows**, wetlands and unimproved grassland.

Section 12.9 states:

“12.9.1 County Kildare's **hedgerow** network is a huge asset to the county, being valuable in terms of agriculture, landscape, wild flora and

fauna, water quality, carbon sequestration and employment. Hedgerows are also a valuable component of Ireland's cultural and natural heritage. Most Irish hedgerows were planted during the 18th and 19th centuries, following Acts of Parliament obliging landowners to erect permanent boundaries between their properties. Hedgerows along townland boundaries often date from medieval times or even earlier, with some boundaries dating back to the Bronze Age bank-and-ditch enclosures. Older hedges made up of native trees and shrubs, tend to have greater value in wildlife and heritage terms, having larger banks and ditches and being richer in species diversity.

A survey of Kildare hedgerows was conducted in 2006 (Foulkes, 2006) where the total length of hedgerows in County Kildare was estimated at 10,305 km. The average figure for hedgerow density is 5.92 km/km². It is estimated that 1.2% of the county was covered in hedgerows in 2006.

County **Kildare's hedgerows** show a **higher degree of fragmentation** than those of other counties, largely due to the high degree of development in rural areas. This coupled with the fact that two-thirds of hedges adjoin intensively managed farmland, means that there are implications for the overall biodiversity potential of the resource.

Trees, woodlands and hedgerows make a valuable contribution to the landscape and visual amenity of County Kildare and provide wider environmental benefits that include carbon storage. Trees, either individually, as specimen trees, or in groups, also make an important contribution to the landscape of many of the country house demesnes throughout the county. Trees, woodlands and hedgerows perform many functions such as shelter from wind, act as a natural barrier, absorb pollutants and provide a biodiversity function in terms of provision of habitat and food sources and are important producers of oxygen and act as carbon sinks.

In urban settings trees or groups of trees can contribute significantly to the local landscape or townscape and to the successful integration of new

buildings into the landscape. The planting or retention of mature trees can contribute to amenities and more attractive developments as well as providing important wildlife habitats. The retention of trees should be considered at the earliest possible design stage in any new or redevelopment proposal.

...

When planting hedgerows, species indigenous to the area should be used. The County Kildare Hedgerow Survey (2006) identified the predominant hedgerow species in Kildare.”

It is an objective of the Council to:

BI O13 Require all applications for new developments to **identify, protect** and **sensitively enhance** the most important ecological features and habitats, and incorporate these into the overall open space network, keeping free from development and to provide links to the wider Green Infrastructure network as an essential part of the design process and by making provision for local biodiversity (e.g. through the provision of swift boxes or towers, bat roost sites, hedgehog highways, green roofs, etc.).

It is the policy of the Council to:

BI P6 Recognise the important **contribution trees** and **hedgerows** make to the **county biodiversity** resource **climate mitigation, resilience, and adaptation.**

It is an objective of the Council to:

BI O15 Prevent, in the first instance, the removal of hedgerows to facilitate development. Where their removal is unavoidable, same must be clearly and satisfactorily demonstrated to the Planning Authority. In any event, **removal shall be kept to an absolute minimum** and there shall be a **requirement** for **mitigation planting comprising a hedge of similar length** and **species composition** to the **original**, established as **close** as is practicable **to the original** and where possible **linking to existing adjacent hedges**. Native plants of a local provenance should

be used for any such planting. **Removal** of **hedgerows** and **trees** prior to submitting a planning application will be viewed negatively by the planning authority and **may result** in an **outright refusal**.

BI O16 Promote the integration of boundary hedges within and along development sites into development design so as to avoid “trapped hedges” located to the boundary of houses within the development layout. **Encourage** the **planting** of **woodlands, trees, and hedgerows** as **part** of **new developments** and as **part** of the **Council’s own landscaping works** using **native plants** of **local provenance**.

BI O17 Require the undertaking of a comprehensive tree survey carried out by a suitably qualified arborist where development proposals require felling of mature trees; the tree survey shall assess the condition, ecological and amenity value of the tree stock proposed for removal as well as mitigation planting and a management scheme. It should be noted that rotting and decaying trees are an integral part of a woodland ecosystem and can host a range of fungi and invertebrates, important for biodiversity. While single or avenue trees that are decaying may be removed, others that are part of group or cluster may be subject to retention.

BI O18 Ensure a Tree Management Plan is provided to ensure that trees are adequately protected during development and incorporated into the design of new developments.

Section 12.14.9 Urban Green Infrastructure states:

“Green Infrastructure within urban areas provides valuable connections from the urban centres to the wider countryside thereby strengthening the Green Infrastructure Network. Urban Green Infrastructure potentially includes residential gardens, the parkland settings of enterprise parks and employment areas, street verges, open spaces and parks, woodlands, hedgerows, cemeteries, and allotments.

All of these areas collectively contribute to a strengthened Green Infrastructure network and to the benefits afforded to urban areas such as the greening of our urban areas, the creation of attractive open spaces, providing local distinctiveness and better health and human well-being. Biophilia is that innate love and genetically determined affinity of human beings with the natural world. The biophilia hypothesis proposes that we long for nature and without connecting to it, our health would suffer. Biophilic design is an applied solution to appease this desire for nature by integrating natural elements and processes into the built environment.”

It is the policy of the Council to:

BI P13 Recognise the importance of Urban Green Infrastructure in addressing a broad range of urban challenges, such as conserving biodiversity, adapting to climate change, supporting the green economy, and improving social cohesion and to seek to protect and enhance this resource.

It is an objective of the Council to:

BI O45 Ensure that the Green Infrastructure Strategy and Network identified in this County Development Plan and Local Area Plans is used to inform the development management process to ensure that new residential areas, business/ industrial development and other relevant projects contribute towards the protection, management and enhancement of the existing Green Infrastructure in terms of design, layout and landscaping.

BI O46 Identify existing Green Infrastructure at the initial stages of the planning process and to use this information to guide the overall design of an appropriate site layout which is reflected in the developments landscaping plan. The landscaping plan submitted with an application should clearly illustrate how existing Green Infrastructure, and opportunities to create more linkages, have informed and been

incorporated into the development, layout and, if appropriate, management proposals.

BI O47 Ensure that the design of new development does not cause fragmentation of the Green Infrastructure network.

BI O48 Encourage the use and incorporation of Biophilic design into all new development schemes, increasing proximity and/or views to nature, landscape and landscape features, in the interests of public health.

County Kildare Hedgerow Survey Report (2006)

The survey says:

"... that direct loss through removal for development purposes is likely to be an ongoing reason for a measure of hedgerow loss in years to come. Often, it involves short lengths to facilitate development within zoned lands in urban areas or for access and sight lines for new one-off houses. Loss rates are relatively small, but habitat fragmentation may become an issue. A report by the Department of Environment: "Urban and Rural Roles" (2001), **estimates** that **420 km of hedgerows** were **removed** in **Ireland** to **facilitate sight-line requirements** for **new dwellings in 1999 alone**. This rate of removal is inconsistent with the recommendation of the National Heritage Plan, which states that:

"For the future, the overall goal should be to have no net loss of the hedgerow resource" (paragraph 2.27).

Note: Once a linear length of hedge with a width which is greater than 4 metres becomes re-classified as a new habitat type.

Kildare County Council Capital Programme

The Council publishes the revised Capital Programme annually. This includes plans to develop environmental services, including parklands. There are indicative costs associated with the planned development of public infrastructure. 37% of the works are identified as Climate Action related projects reflecting the Council's commitment to the challenge of climate change.

Opportunity Loss and Replacement Costs

The loss of immature and mature ecosystem services, including hedgerows, trees, and bogland, represents an impact and cost to the global and local environment [8].

The development should take account of the root structure of planted species.

A quantity of loss can be calculated by area or volume dimensions for removal or extractive development.

A sub-threshold development may arise, where the measured area or volume should exceed a minimum area or volume to warrant a contribution.

Costs associated with replacing ecosystem services include the acquisition or use of land, the preparation of ground conditions, and planting and maintenance of the planted scheme until it matures to the point of sustainable growth.

Given the net losses of ecosystem services to general development, and the propensity for some planting to fail within two years of planting, an overhead of extra planting is required to achieve parity of replacement toward a net of public green infrastructure.

⁸ Green Infrastructure and Ecosystem Services Scoring at County Level Anne Murray, Biodiversity Officer Dún Laoghaire Rathdown County Council [[link](#)]

Possible Economic Models [9]

1. Linear length with implied corresponding width

$$\text{Loss (m}^2\text{)} = 3 \times [(\text{Length} \times \text{Width} \times \text{Factor_A}) + (\text{Length} \times \text{Width} \times \text{Factor_B}) + (\text{Length} \times \text{Width} \times \text{Factor_C})]$$

- Factor A = 1; for GI under 2 m height
- Factor B = 2; for GI over 2 m height
- Factor C = 3; for GI alongside surface water drainage channels

$$\text{Contribution (€)} = [\text{Loss} \times (\text{Cost Rate} + \text{Planting Rate})] + [\text{Loss} \times \text{Land Purchase Rate}]$$

- Cost Rate = €X per m²
- Land Purchase Rate = open space amenity value per m²
- Planting Rate = €Y per m²

This model may be vulnerable to inadvertently incentivising the inappropriate cutting back of hedgerows prior to submitting planning applications.

2. Biodiversity length

Having consulted an architect, the description of existing linear metres of hedgerow and net hedgerow, with a sample measure of diversity, can easily be submitted with planning application and give rise to an economic assessment of any impact on the hedgerows from the development.

The Copernicus dataset would support work in this area [10].

⁹ N.B. true costs to be assessed.

¹⁰ <https://land.copernicus.eu/pan-european/high-resolution-layers/small-woody-features>

Conclusion

It is recommended that the draft Development Contribution Scheme 2023-2029 be amended to respond to legislative requirements for public bodies to consider their functions through the lens of climate action.

This submission reflects a 'polluter pays' principle and some of the economic and environmental costs associated with the loss of green infrastructure within the layout of proposed developments. (Incidentally, the leading ecological economist and author Herman Daly [11] died over the Halloween weekend. Professor Daly was credited with defining a path of ecological economics that integrates the key elements of ethics, quality of life, environment and community.)

An appropriately selected pricing point on a linear metre length of hedgerow or square metre area of green infrastructure would signal the value for retention to support ecosystem services within a proposed scheme. This proposed amendment is set against the background threats from Climate Change and biodiversity loss and the Council's commitment to take corrective action.

It would also contribute to the replacement cost associated with developing green infrastructure, which is recognised in EU, National and County Development policies as public infrastructure that benefits local development, climate adaption and climate mitigation.

Yours sincerely,

Pádraig McEvoy

¹¹ https://en.wikipedia.org/wiki/Herman_Daly



**Chambers
Ireland**
Advancing business together



Chambers Ireland Submission to the Department of Housing, Local Government and Heritage on the 4th National Biodiversity Action Plan

November 2022

Chambers Ireland's Perspective:

Chambers Ireland, the voice of business throughout Ireland, is an all-island organisation with a unique geographical reach. Our 40 members are the Chambers of Commerce in the cities and towns throughout the country – active in every constituency. Each of our member Chambers is central to their local business community and all seek to promote thriving local economies that can support sustainable cities and communities.

Our Network has pledged since 2019 to advocate for and support the advancement of the Sustainable Development Goals. In doing so, we use the Goals as a framework to identify policy priorities and communicate our recommendations, and we have a particular focus on five of the goals encompassing decent work and economic growth (SDG 8), sustainable cities and communities (SDG 11), advancements in gender equality (SDG 5), viable industries, innovation, and infrastructure (SDG 9) and progress in climate action (SDG 13).¹

Even if we only consider biodiversity from the narrow perspective of the economy, sustaining the little biodiversity that exists on the island is in all of our interests. Our water supplies are dependent on improving the health of our land, the more our water quality disimproves the more costly it will be to supply potable water and the more difficult it will be to mitigate the impact of droughts. Narrowing our land use means that our land has become less effective at retaining water, this amplifies both the impact of droughts as waters that would have been retained in soils and the effects of flooding as rain runoff reaches rivers faster. With significant increased investment in capital infrastructure across several decades, the cost of flooding events has greatly increased – all our cities and major towns are built on rivers – as the frequency of extreme weather events rises this will increase the number of flooding incidents we experience, thereby multiplying the costs. Local flood defence solutions are frequently too reliant on over-engineered solutions that degrade the built heritage of our towns, debasing their

¹ The Chambers Ireland SDGs. Available at: <https://www.chambers.ie/policy/sustainable-development-goals/chambers-ireland-sdgs/>

tourism economy value, while simply speed floodwaters further downstream where they cause even greater damage. More than half of our rivers are polluted with agricultural run-off which threatens the viability of water-tourism offerings. Poor land management downgrades the quality of our waters through run off and erosion. Overreliance on a reduced set of food crops undermines our agriculture and our food supply as the hollowing out of our biodiversity leaves creates niches for invasive species that can target agricultural plants and animals. Just as large tracts of Britain burnt in 2022, it is likely that Ireland will experience wildfires with greater frequency in years to come. Resinous monocrop pine plantations on dry peat soils are likely to be especially vulnerable to fires and are will therefore be significant emitters of green-house gases as the accumulations of carbon as the thick fuel soils burn. Furthermore, given how they have been coupled with large electricity generation and transmission capacity, fires in Sitka spruce plantations are a threat to the stability of our power networks.

But biodiversity cannot simply be looked at from an economic perspective, biodiversity is not a target, it is an outcome; it is a consequence. Making our territories – at sea or by land – hostile to life is in none of our interests. Losing dragonflies is not just a ‘magic of childhood’ moment that future generations will lose, it is a signal that native insect life cannot thrive. This cascades through the food web leading other populations to collapse. Ireland shouldn’t need a lesson on concentrating our agriculture into a small number of valuable species makes our country poorer and vulnerable. Just as children today won’t have the memories of the richness that the land held forty years ago, we don’t have a recollection of the seas when they were bountiful and teeming with life. Each year we empty our lands and our waters of still more life, and with it each year we make our island less habitable for people. Even in our cities and towns this can be seen, we increasingly constrain or concrete-over the rare instances of plant and animal life that have survived, even though the trees that are planted today will be what is protecting people from the heat of 2040, the most efficient means of cooling our streets are trees and yet they are treated as costs not assets.

Questions

Do you think the Vision and Objectives capture the major themes/challenges that you see for biodiversity? In other words, if Ireland achieves these Objectives by 2027, would we have made significant progress towards addressing the biodiversity crisis?

Unfortunately, if the “whole of society” approach is what is needed to tackle the causes of our biodiversity collapse, we are starting from a very low base. There is little evidence to suggest that a “whole of government” approach exists as it seems as though a wide range of departments do not consider it as an issue of substantial importance. Should we achieve progress towards a whole of government approach that actually begins to mitigate the loss of biodiversity it will be significant progress.

There is little within the Objective 1 to section that suggests that we will have begun to affect the biodiversity crisis by 2027. There is an acceptance that action needs to be taken, but in effect that action will be delayed for at least another five years.

Regarding the meeting of “Urgent Conservation and Restoration Needs” there are many areas where the Department of Housing Local Government and Heritage, should it accomplish its objectives, will have made significant steps towards reducing biodiversity loss. The department is required to carry out a significant action plan if it is to meet the agenda of Objective 2. Should other departments not be wholly committed to the biodiversity plan it is likely that they will inevitably undermine the efforts of the department which is a fundamental weakness to this plan – it remains to be seen if other government bodies will have the dedication to deliver on this department’s action plan.

Objective 3's agenda is to be broadly welcomed, though how effective it will be in mitigating biodiversity loss is an open question. This section seems to be much more about promoting the concept of biodiversity than delivering tangible results. In keeping with this, the embedding biodiversity at the heart of climate action is useful but is not much more than a continuation of the "whole of government" approach in Objective 1. Similarly, enhancing the evidence base for action on biodiversity is also to be welcomed, but as the aim is to measure rather than act it is unlikely to have an effect on biodiversity loss by 2025.

Strengthening Ireland's contribution to international biodiversity initiatives is too a good thing but is at so far of a remove from action that it is unlikely to have an impact in the timeframe considered this question.

The Department of Housing, Local Government and Heritage's position on biodiversity is clear and welcome. But almost all of the objectives that are likely to have any kind of impact on the loss of biodiversity in the short run are being carried about by the department of bodies that are part of the department. Chambers Ireland has serious concerns about the seriousness with which other departments treat the issue of biodiversity loss. Where other departments are involved there is not a commitment to take action, but a commitment to consider, to plan, to incentivise action, but not a commitment to deliver action on biodiversity loss. It feels a lot like the issue of decarbonisation, where certain sectors are strategically delaying and deferring action.

Do you have any comments on the Outcomes included under each Objective in the Draft NBAP? Do you feel that these Outcomes adequately address the Objectives under which they are situated? Do any additional outcomes need to be added to meet the objective?

It will be interesting to see “organisational capacity and resources for biodiversity” increase across government; clear metrics will be useful when it comes to measuring our rate of biodiversity decline, however the path towards renewing our broader environment is likely to take decades to halt. Assessing our biodiversity decline will not be when progress towards “addressing the biodiversity crisis” occurs – progress will not be occurring until we can see these metrics improving.

In the absence of government introducing a statutory requirement for National Biodiversity Action Plans it is likely that many departments, organisations, and agencies will merely charge their newly appointed biodiversity officers with reporting on the rate of biodiversity decline rather than resourcing and empowering them to ensure that these bodies are not worsening the rate of biodiversity loss. It is hard to see how interests within government bodies will initiate the kinds of systemic change they need to accomplish if they are to address their role in biodiversity loss unless it is mandatory. The vision for Objective 1 is for the rest of government to merely consider whether they will make biodiversity action plans a legal necessity, this is very far from “addressing the biodiversity crisis”.

There will be significant tension between the Department of Agriculture, Food, and the Marine and any form of biodiversity plan. The strategy of the department seems to be to use increased mono-cropped non-native tree plantations to mitigate against the increased emissions output of the sector under the premise that this timber locks in embodied carbon, however of the 3.2m m³ of roundwood produced in 2018, only 1.01m m³ was converted into sawn wood. About 40% of

the wood biomass in Ireland is burnt and the vast majority of our forestry exports flow into wood-based panels, paper, and particle board which are not likely to act as long-term carbon sinks.

Even if the “the root causes and key drivers of biodiversity loss are tackled by each responsible department” objective is achieved it will not have done anything to mitigate biodiversity loss by 2027, it will merely have made an attempt to amend the incentives which farmers, and in particular the smaller farmers, operate under.

It seems as though the department believes that changing the behaviour of tens of thousands of small farmers will be a relatively trivial task, despite the slow pace of action to date. We will be pleasantly surprised if, in the review of the incentives which the Department of Farming, Agriculture and the Marine are to introduce, those incentives prove to be effective.

Business for Biodiversity needs to make rapid progress in delivering a “Payment for Ecosystem Services” scheme and should grant aid businesses that want to get biodiversity audits conducted so that these businesses can be helped to create effective biodiversity plans (in the way that SEAI offers grants to assist businesses in conducting energy audits). Though we welcome the proposed addition of biodiversity to the Climate Toolkit 4 Business, we argue that the businesses that are having the greatest impact on biodiversity are also likely to have a difficult transition to ameliorating that impact, and therefore should be supported in creating plans to reduce that effect.

Clearly the aim of ensuring that the “legislative framework for biodiversity conservation is robust, clear and enforceable” is useful, but as with many of the other vision elements within the biodiversity plan, it is merely setting the stage for later action to reduce biodiversity loss.

We strongly welcome the direction to the OPW to seek more ecologically sensitive flood mitigation efforts. We support the updating of Bord na Mona's Biodiversity Action Plan though it would be useful if there was clarity regarding whether they should be aiming for re-wetting peatlands or using their land for forestry. And the Departments planned resourcing of efforts to control invasive alien species are to be welcomed.

Significant efforts will be required of the Department of Farming, Agriculture and the Marine, and Teagasc, however it remains uncertain whether the poor delivery of effective policy to preserve biodiversity by those bodies is to change.

Chambers Ireland strongly supports the aims of Irish Water's Water Services Strategic Plan and its Biodiversity Action Plan which if accomplished by 2027 will have a great effect on biodiversity loss.

It is hard to see how biobanking is to have an effect on long term biodiversity on the island other than in areas of seed, there is a risk that this 'objective' will merely become a public-relations talking point which bodies will respond with when they are criticised for not doing enough on biodiversity.

Are there any Actions in the Plan that you feel require amendment? Or indeed, are there additional actions needed? If additional actions are needed, who should implement these actions?

Specific direction should be given to Bord na Móna regarding how they ought to treat their peatlands, the Business for Biodiversity programme should be much more ambitious in its agenda and should be resourced sufficiently such that it can support the biodiversity auditing of businesses, the creation of biodiversity plans, and the training and upskilling of employees to support such plans.

There is also an opportunity relating to the certification of carbon offset land use, and sustainable forestry certification. With the increase in ESG requirements many Irish subsidiaries are obliged by their parent firms to offset their current carbon outputs. While it is in the interest of all of our members to do so, there are limitations on how quickly businesses can adapt, for example until the energy networks are wholly decarbonised, all electricity that is used will have a carbon output associated with it, Combined Heat and Power units are not likely to be able to transition to Green Hydrogen until there is an adequate supply chain to service them, and that is not likely to occur until a significant investment in offshore wind turbines has commenced. Therefore, there are a pool of businesses that are seeking carbon offsetting services from sustainable forestry which can mitigate some of the impact of their businesses. This is an opportunity for wider society to ensure that adequate investment in forestry as a service that protects our water sources, supports biodiversity, and mitigates some of the impact of the damage which our carbon outputs are doing to our environment.

It is also notable that the biodiversity plan has a number of images of barren hillsides and overgrazed lands, and no mention of the damage that feral and farmed ruminants do to our peatlands and forests. While there is an acceptance that the National Parks and Wildlife Service will attempt to remove invasive alien species from the parks it is unclear as to whether this will extend to non-native

deer. The issue of sheep and goats overgrazing commonage, upland bogs and destroying hillside environments goes unmentioned.

Biodiversity is not the responsibility of any single body or sector but requires engagement and partnerships across government and communities. As such, the NBAP seeks to promote a 'Whole of Government, Whole of society' approach to biodiversity in Ireland. In your view, what can be done to further promote public and community engagement around biodiversity under the NBAP?

Government needs to lead before the public can know where to follow. For as long as separate arms of the state are acting against each other public engagement will be a poor substitute for taking real and effective action.

Are you (or your organisation) involved in any initiatives or work which could be relevant to the 4th NBAP (in terms of informing new actions, providing useful case studies, etc)? If so, please detail below.

Chambers Ireland has two initiatives in this area, the Climate Ready Initiative, and the Sustainable Development Goals (SDG) toolkit for businesses.

Climate Ready – Climate Ready is a five-year, national initiative developed to equip Irish businesses with the skills they need to respond to climate change. This is developed by Skillnet Ireland to support the government's Climate Action Plan and Climate Action and Low Carbon Development Bill.

This initiative supports businesses by helping them develop practical skills that will allow them to maximise the opportunities presented by the transition to a low-carbon economy. The core elements of this initiative are

1. Climate Ready Academy

A series of learning supports for businesses in the field of climate action and sustainability.

2. Climate Ready Cluster

A group of Skillnet Business Networks providing expertise for Irish Businesses in renewable energy, green technology; environment, water and energy management; and sustainable finance.

3. Climate Ready Insights

A centralised platform dedicated to helping businesses advance their thinking around sustainable practices.

More information on climate ready is available [here](#).

Sustainable Development Goals (SDG) Toolkit – Chambers Ireland's SDG Toolkit is a guide to help businesses implement the United Nation's Sustainable Development Goals and navigate how they can contribute to the achievement of these goals.

More Information on the Sustainable Development Goals and the SDG Toolkit can be found [here](#).

How can we ensure that the 4th NBAP delivers for biodiversity and is implemented successfully?

The ambition for the plan must be increased and Departments other than the Department of Housing, Local Government and Heritage need to commit to its aims.

ZERO WASTE ALLIANCE IRELAND

Towards Sustainable Resource Management



Submission to the Department of Housing, Local Government and Heritage in Response to the Public Consultation on Ireland's Fourth National Biodiversity Action Plan (NBAP)

09 November 2022

Zero Waste Alliance Ireland is a member of



and



**An Tinteán Nua, Ballymanus, Castlepollard, County Westmeath, Ireland
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Towards Sustainable Resource Management

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09 November 2022

4th National Biodiversity Action Plan Consultation,
Biodiversity Policy, National Parks and Wildlife Service,
Department of Housing, Local Government and Heritage,
90 North King Street,
Dublin , D07 N7CV..

BY EMAIL TO:
NBAPConsultation@housing.gov.ie

Dear Sir / Madam,

**Submission to the Department of Housing, Local Government and
Heritage in Response to the Public Consultation on Ireland's Fourth
National Biodiversity Action Plan (NBAP)**

Submission by Zero Waste Alliance Ireland

On behalf of Zero Waste Alliance Ireland (ZWAI), we attach our submission in response to the public consultation on Ireland's Fourth National Biodiversity Action Plan.

ZWAI is very pleased to have the opportunity to respond to this important public consultation, and the intention of our submission is to provide observations on biodiversity, ecosystems and wildlife issues, where we are especially concerned about the effects of waste on biodiversity. It is our considered view that we have four linked crises in Ireland: a climate crisis, biodiversity crisis, a critical raw materials crisis (including a waste management crisis), and an energy crisis; but the fact that they are linked (and are impacting the country at different rates and timescales) should not prevent the development and emergence of a strong coherent policy to address all of these concerns in a practical and integrated manner.

It is one of the key points of our submission that the more efficient use of materials, and the avoidance of waste at every stage, taking into account management of raw materials, critical resources, waste reduction, re-use, repairing, recycling and the circular economy, will benefit the environment as a

whole, and will especially benefit Ireland's biodiversity which is currently threatened and not in a sufficiently "good" state.

We look forward to your acknowledgement of the attached submission, and to seeing in due course the final version of the fourth Biodiversity Action Plan; while taking into consideration the over-arching importance of addressing climate change.

Yours sincerely,



On behalf of Zero Waste Alliance Ireland.

ZERO WASTE ALLIANCE IRELAND

Towards Sustainable Resource Management

Submission to the Department of Housing, Local Government and Heritage in Response to the Public Consultation on Ireland's Fourth National Biodiversity Action Plan (NBAP)

09 November 2022

1. INTRODUCTION

When the Minister of State for Heritage and Electoral Reform, Mr Malcolm Noonan, T.D., spoke at the launch of the public consultation on Ireland's fourth National Biodiversity Action Plan (NBAP), he stated that the consultation was being launched ...

“against a backdrop of unprecedented challenges for nature in Ireland and globally. How we collectively and collaboratively address these challenges will define not just our ability to halt biodiversity loss, but how we as a species will survive and thrive into the future”.¹

The Minister might also have reminded us that some 3.5 years ago, in May 2019, Dáil Éireann declared a climate and biodiversity emergency; yet it appears that this country continues to lack the urgency and commitment needed to respond effectively to these combined crises. Although public awareness of biodiversity appears to have increased, and the range of actions taken by Government departments and state agencies has much improved, the ecological status of a very large proportion of terrestrial and aquatic protected areas is in poor condition and continues to decline.

Also in May 2019, the Conference of the Parties to the Convention on Biological Diversity (CBD) issued a global assessment of status and trends of biodiversity and ecosystem services, the impact of these services on human well-being, and the effectiveness of global society's responses to biodiversity loss. This powerful, science-based and comprehensive report (over 1,000 pages) noted that during the previous 10-15 years, since the Millennium Ecosystem Assessment had been produced, human society's understanding of biodiversity and ecosystems has

¹ Public consultation on Ireland's Fourth National Biodiversity Action Plan (NBAP) launched by Minister Noonan; Department of Housing, Local Government and Heritage, 01 September 2022.

significantly improved, together with a much greater awareness of their vital importance to the quality of life of every person on the planet. There was also greater understanding about which policies, practices, technologies and behaviours could best lead to the conservation and sustainable use of biodiversity, and to the achievement of the relevant Sustainable Development Goals (UN SDGs), the Aichi Biodiversity Targets and the Paris Agreement on Climate Change.

Nevertheless, the assessment report concluded that biodiversity continued to be lost, ecosystems were still being degraded and many of nature's contributions to peoples' well-being were being compromised. A few of the many key messages were:

- ✓ Nature is essential for human existence and good quality of life; most of nature's contributions to people are not fully replaceable, and some are irreplaceable;
- ✓ Nature across most of the globe has now been significantly altered by multiple human drivers, with the great majority of indicators of ecosystems and biodiversity showing rapid decline;
- ✓ Human actions threaten more species with global extinction now than ever before; and,
- ✓ Human-induced changes are creating conditions for fast biological evolution – so rapid that its effects can be seen in only a few years or even more quickly; the consequences can be positive or negative for biodiversity and ecosystems, but can create uncertainty about the sustainability of species, ecosystem functions and the delivery of nature's contributions to people.²

A year later, in May 2020, the European Commission launched the EU Biodiversity Strategy for 2030, "*Bringing Nature Back into our Lives*"; and this key policy document stressed the need for urgent action to protect biodiversity and to restore damaged habitats and ecosystems:

"From the world's great rainforests to small parks and gardens, from the blue whale to microscopic fungi, biodiversity is the extraordinary variety of life on Earth. We humans are part of, and fully dependent on, this web of life: it gives us the food we eat, filters the water we drink, and supplies the air we breathe. Nature is as important for our mental and physical

² IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, et al., (eds.). IPBES secretariat, Bonn, Germany. ISBN: 978-3-947851-13-3.

*wellbeing as it is for our society's ability to cope with global change, health threats and disasters. **We need nature in our lives.***

*Healthy and resilient societies depend on giving nature the space it needs. The recent COVID-19 pandemic makes the need to protect and restore nature all the more urgent. The pandemic is raising awareness of the links between our own health and the health of ecosystems. It is demonstrating the need for sustainable supply chains and consumption patterns that do not exceed planetary boundaries. This reflects the fact that the risk of emergence and spread of infectious diseases increases as nature is destroyed. Protecting and restoring biodiversity and well-functioning ecosystems is therefore key to **boost our resilience and prevent the emergence and spread of future diseases**".³*

We see here already a connection between undamaged nature, protected and restored biodiversity, and the mental and physical well-being of people and societies. This connection has been thoroughly researched and examined in many published papers, including the most recent "2022 report of the *Lancet Countdown on health and climate change: health at the mercy of fossil fuels*".⁴

The Lancet report emphasised that ...

"Countries and health systems continue to contend with the health, social, and economic impacts of the COVID-19 pandemic, while Russia's invasion of Ukraine and a persistent fossil fuel overdependence has pushed the world into global energy and cost-of-living crises. As these crises unfold, climate change escalates unabated. Its worsening impacts are increasingly affecting the foundations of human health and wellbeing, exacerbating the vulnerability of the world's populations to concurrent health threats.

Through multiple and interconnected pathways, every dimension of food security is being affected by climate change, aggravating the impacts of other coexisting crises".

But as we will demonstrate later in our submission, what is happening to biodiversity (globally, in Europe and in Ireland) is deeply connected with our lifestyles, the food we eat, the production of that food, and the materials and

³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU Biodiversity Strategy for 2030 – "Bringing nature back into our lives". Brussels, 20.5.2020 COM(2020) 380 final.

⁴ The 2022 report of the *Lancet Countdown on health and climate change: health at the mercy of fossil fuels*. The Lancet, Published online, October 25, 2022 [https://doi.org/10.1016/S0140-6736\(22\)01540-9](https://doi.org/10.1016/S0140-6736(22)01540-9)

energy which we consume, including the materials and objects which we discard after using them.

When the Department of Housing, Local Government and Heritage announced a public consultation on Ireland's fourth National Biodiversity Action Plan, we saw this as an excellent opportunity to provide feedback on a topic in which Zero Waste Alliance Ireland has a long and continuing interest. While it may appear at first glance that:

- a) the quantities and types of materials which we discard as "waste";
- b) the need to protect biodiversity and habitats;
- c) the need to restore damaged areas and ecosystems; and,
- d) the need to develop a more caring attitude to the natural environment,

are not linked, it is our long-held belief that all of these areas are intimately and synergistically connected.

It has always been our policy that the wasting or discarding of substances, materials, manufactured objects and products of every description; and especially their end-of-life fate by incineration or landfilling, resulting in the continuing extraction and processing of yet more raw materials to replace them, have detrimental effects on the Earth's ecosystems; and, in many cases, on vulnerable habitats and species. Not only must discarded materials be replaced in the continuing cycle of production, but the processes of extraction, transformation, transport, processing, manufacturing and distribution require large continuing amounts of energy, the production of which has caused huge damage to the Earth's living and non-living systems.

Widespread failure to recover, re-use and recycle discarded substances, materials and products, is a symptom of our European-wide and Irish failure to implement the Circular Economy, with a resulting increase in greenhouse gas emissions, serious damage to ecosystems, major loss of biodiversity, changes in sea level, stronger and more frequent storm events, threats to the security of food supplies, damage to human health, and other adverse consequences.

The slow and insidious loss of species and vulnerable ecosystems (for example the decline in insect and bird numbers, and the destruction of wetlands) has been ongoing for decades; yet, with few exceptions, they have not aroused widespread public concern. In a manner very similar to our failure to prevent waste and to implement the Circular Economy, our failure as a nation to protect biodiversity has led to a national biodiversity crisis. Despite the level of concern expressed in the reports quoted above (and these are only a few of many such reports on

biodiversity loss), actions taken at global level to reverse the observed trends in biodiversity loss have been very slow.

For example, if we compare the global response to the Covid-19 pandemic, we can see the contrast more clearly. Following the identification of the SARS-CoV-2 virus, the global response to the emergency has been guided by international scientific and public health experts. Vaccines were developed, produced and delivered at a rate and scale not previously seen; the epidemiology of the virus was studied intensively, information was exchanged world-wide among scientists and medical experts; and, in Ireland, Government agencies provided advice about social distancing and hygiene, information about the virus was provided widely, public facilities and businesses were advised to close, large public gatherings were cancelled or postponed, and vaccines given freely to the population.

At the same time, funding was provided to mitigate the damaging effects that the Covid-19 pandemic and the measures to prevent its spread were having on the economy. These measures were considered to be necessary precautions, given the immediate threat of the virus; and, in most cases, the work done by Ireland's medical experts and personnel was widely praised, and (again with some exceptions) the Government was applauded for handling the crisis effectively.

In contrast, ecologists, nature conservation and wildlife experts, and even the epidemiologists who have guided our response to Covid-19 have spent decades trying to influence political and public authorities to recognise the dangers of rapidly accelerating biodiversity loss, by demonstrating that this crisis raises very significant human well-being, food security and public health concerns.

Zero Waste Alliance Ireland therefore fully supports the Minister's statement quoted above, that how we collectively address biodiversity loss *"will define ... how we as a species will survive and thrive into the future."*

2. ZERO WASTE ALLIANCE IRELAND (ZWAI)

Zero Waste Alliance Ireland is therefore pleased to have the opportunity to make this submission in response to the Department's public consultation on Ireland's fourth National Biodiversity Action Plan (NBAP); and at this point we consider that it is appropriate to describe briefly the background to our submission, especially the history, policy, strategy and activities of ZWAI.

2.1 Origin and Early Activities of ZWAI

Zero Waste Alliance Ireland (ZWAI), established in 1999, and registered as a company limited by guarantee in 2004, is a Non-Government Environmental Organisation (eNGO) and a registered charity.

During the past two decades, ZWAI has prepared and submitted to the Irish Government and to State Agencies many policy observations on waste management, on using resources sustainably, on promoting re-use, repair and recycling, and on development and implementation of the Circular Economy. More recently, ZWAI has also responded to the European Commission's calls for submissions on a variety of topics in the areas of wastewater and solid wastes.

Our principal objectives are:

- i) sharing information, ideas and contacts,
- ii) finding and recommending environmentally sustainable and practical solutions for domestic, municipal, industrial and agricultural waste management in Ireland;
- iii) lobbying Government and local authorities to implement environmentally sustainable waste management practices, including clean production, elimination of toxic substances, repairing, re-using, recycling, segregation of discarded materials at source, and other beneficial practices;
- iv) lobbying Government to follow the best international practice and EU recommendations by introducing fiscal and economic measures designed to penalise the manufacturers of products which cannot be repaired, re-used, recycled or composted at the end of their useful lives, and to financially support companies making products which can be re-used, recycled or are made from recycled materials;
- v) raising public awareness about the long-term damaging human and animal health and economic consequences of landfilling and of the destruction of potentially recyclable or re-usable materials by incineration;
- vi) investigating, raising public awareness and lobbying Irish Government departments and agencies about our country's failure to take adequate

care of vulnerable and essential natural resources, including clean water and air, biodiversity, and soil;

- vii) advocating changes in domestic and EU legislation to provide for more ecologically appropriate, environmentally sustainable and efficient uses of natural resources; and,
- viii) maintaining contact and exchanging information with similar national networks in other countries, and with international zero waste organisations.

2.2 Our Basic Principles

Human communities must behave like natural ones, living comfortably within the natural flow of energy from the sun and plants, producing no wastes which cannot be recycled back into the earth's systems, and guided by new economic values which are in harmony with personal and ecological values.

In nature, the waste products of every living organism serve as raw materials to be transformed by other living creatures, or benefit the planet in other ways. Instead of organising systems that efficiently dispose of or recycle our waste, we need to design systems of production that have little or no waste to begin with.

There are no technical barriers to achieving a “zero waste society”, only our habits, our greed as a society, and the current economic structures and policies which have led to the present environmental, social and economic difficulties.

“Zero Waste” is a realistic whole-system approach to addressing the problem of society's unsustainable resource flows – it encompasses waste elimination at source through product design and producer responsibility, together with waste reduction strategies further down the supply chain, such as cleaner production, product repairing, dismantling, recycling, re-use and composting.

ZWAI strongly believes that Ireland should have a policy of not sending to other countries our discarded materials for further treatment or recycling, particularly to developing countries where local populations are exposed to dioxins and other very toxic POPs. Relying on other countries' infrastructure to achieve our “recycling” targets is not acceptable from an ecological or societal perspective.

2.3 What We are Doing

One of our principal objectives is to encourage Irish government agencies, Irish local authorities and other organisations to develop and implement environmentally sustainable resources and waste management policies, especially resource efficiency, waste reduction and elimination; to promote reuse, repair and recycling, to develop and implement the Circular Economy, and to recognise that climate change and biodiversity loss are existential threats.

As an environmental NGO, and a not-for-profit company with charitable status since 2005, ZWAI also campaigns for the implementation of the UN Sustainable Development Goals, including (but not limited to) Goal 12, Responsible Consumption and Production; Goal 6, Clean Water and Sanitation (having particular regard to the need to avoid wasting water); and Goal 15, to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, to halt and reverse land degradation and halt biodiversity loss.

Zero Waste Alliance Ireland has continued to lobby the Government on the issue of sustainable resource management, and to express our concern at the failure to address Ireland's waste problems at a fundamental level.

ZWAI has responded to many Irish and EU public consultations; and, in its role as an environmental NGO, has given presentations and made submissions on:

1. Proposed amendments to the Irish Building Regulations (February 2016 and October 2021);
2. Submission to the Department of Housing, Planning and Local Government on Water Services Policy (April 2018);
3. How the European Union has addressed the problem of plastic waste (March 2019);
4. Response to public consultation on proposed new environmental levies (Nov-2019);
5. Submission on single-use plastic packaging by the food industry (November 2019);
6. Response to a public consultation by the Department of Housing, Planning and Local Government on significant water management issues in Ireland (August 2020);
7. Submission to Department of Environment, Climate and Communications on the proposed introduction of a deposit and return scheme (DRS) for beverage containers (November 2020), and on the legislative framework and scope of a Deposit Return Scheme in Ireland (May 2021);
8. Submission to the European Commission in response to a public consultation on the revision of the Urban Wastewater Treatment Directive (July 2021);
9. Submission to the Joint Oireachtas Committee on Environment and Climate Action on the general scheme of the Circular Economy Bill (October 2021);
10. Feedback to the European Commission in response to a public consultation on the proposed revision of the EU Regulation on Shipments of Waste (January 2022);

11. Feedback to the European Commission in response to a public consultation on protecting, sustainably managing and restoring EU soils, including comments on the updating of the 2006 EU Thematic Strategy on Soil (February 2022);
12. Feedback to the European Commission in response to public consultation on revision of the EU plant and forest reproductive material legislation (March 2022);
13. Providing feedback to the European Commission on the waste-related environmental performance of Ireland and certain other EU Member States, and the probability of their achieving the 2025 recycling targets and the 2035 landfill target (August 2022);
14. Providing feedback to the European Commission on the need to reduce the waste of unwanted or discarded food, at every stage of the food production process (August 2022);
15. Response to the European Commission's public consultation on an integrated action plan for the management of nutrients (August 2022);
16. Submission to the Department of the Environment, Climate and Communications to support and inform preparation of the 2023 Climate Action Plan (September 2022);
17. Several presentations on transforming the construction industry so that it could become climate neutral; and,
18. Several submissions on the separation, recovery and reuse of the phosphorus and nitrogen content of wastewater (2019 to 2022).

It will be clear that ZWAI is primarily concerned with the very serious issue of discarded substances, materials and goods, whether from domestic, commercial or industrial sources, how these become “waste”, and how such “waste” may be prevented by re-design along ecological principles. These same ecological principles can be applied to how we abstract and use water, and to the volumes of wastewater produced and nutrients lost as a consequence of these uses.

ZWAI is represented on the Irish Government's Water Forum (An Fóram Uisce) by one of our Directors; ZWAI is a member of the **Irish Environmental Network** (IEN), and is funded by the Department of Communications, Climate Action and the Environment through the IEN.

In 2019 ZWAI became a full member of the **European Environment Bureau** (EEB); and a member of the **Waste Working Group** of the EEB. Through the EEB, we contribute to the development of European Union policy on waste and the Circular Economy. In 2021, the EEB established a **Task Force on the Built Environment**; ZWAI is a member of this group, and we contribute to discussions on sustainability of construction materials, buildings and on the built environment.

3. ADDRESSING THE SCALE OF BIODIVERSITY DAMAGE AND LOSS

It is a primary point of our submission that we cannot, and should not, ignore biodiversity loss; nor should we ignore the loss and damage to ecosystems which are important for nature and for mitigating climate change.

3.1 Global Destruction, Damage and Loss

Biodiversity is the variability that exists among all living organisms, between different species, within species including genetic makeup, and in wider ecosystems. Billions of years of co-evolution have provided the planet with an incredible variety of supporting ecosystems which help the planet to maintain an equable climate suitable for the maintenance, continuation and proliferation of living organisms. This global assemblage of living and non-living elements has co-evolved to produce the Earth we know today – a relatively homoeostatic system suitable for the myriad forms of life which inhabit it.

At the same time, the human population of the planet relies ultimately on wild species for food, water, energy, income, health and wellbeing. Crops worth up to €500 billion annually are pollinated by wild creatures, and an estimated 4 billion people depend on natural medicines for their healthcare. These vital ecosystem services are fundamentally based on a healthy environment, and this requires biodiversity. Losing biodiversity leaves species and ecosystems less resilient to challenges such as invasive species or pests, resulting in an increased risk of entire populations becoming extinct, and destabilising the entire ecological network. **Nature is a finite resource, and human self-interest alone should determine that biodiversity must be protected.**

Alongside overexploitation, humans are driving biodiversity loss by destroying, polluting and fragmenting habitats across the globe. The scale of biodiversity loss is very well described by the Irish Wildlife Trust in their submission to the Citizens' Assembly, a submission fully endorsed by ZWAI:

“The collapse of biodiversity, which is not confined to Ireland but is a global crisis, is acknowledged as among the primary threats to humanity’s future, at least on a par with climate change. Indeed, the link between biodiversity loss and climate change is such that they can be seen as one issue: one driving the other, both rooted in our patterns of consumption, but each supporting the other so that restoring biodiversity is also climate action, while driving down emissions of greenhouse gases will ensure that essential ecosystems can thrive”.⁵

⁵ Irish Wildlife Trust submission to the Citizens' Assembly on Biodiversity Loss; September 9th, 2022.

3.2 Loss and Damage to Peatlands (Bogs) in Ireland

A very high proportion of Ireland's peatlands, which are home to a high proportion of Ireland's biodiversity, and are essential for the sequestration of carbon from the atmosphere (and are therefore uniquely important for the mitigation of anthropogenic climate change) have been destroyed or severely damaged. Over the past 50 years humans have changed ecosystems more rapidly than in any comparable period of time in human history, while Ireland has witnessed a 77% loss in peatland habitat.

Not only have peatlands been cut for turf, which is a traditional activity (now prohibited), but extremely large areas of bog have been drained and mechanically harvested for the production of milled peat, for use as a fuel in power stations (an activity now ceased), and also for sale as "Irish Peat Moss" for horticulture (a nutrient free and therefore a relatively useless material for plant growth, but which has continued to be illegally extracted and marketed by number of private companies with neither planning permission nor the legally necessary licenses from the Environmental Protection Agency).

While only 10% of Ireland's biodiversity has been assessed we know that 15% of the original flora of Ireland are peatland plants. 14% (59 species) bird species have been recorded on peatland; 49% of all rare or endangered birds in Ireland occur on peatlands, most as breeding species; 26% of Ireland's animal species are dependent on peatlands in some phase of their life cycle, and 23 of the 35 butterfly species found in Ireland are found on peatlands.⁶

3.3 Status of Ireland's Habitats and Species

It is very disappointing, and a matter of extreme concern to us, to read that the overall status of habitats in Ireland is that 85% of habitats are in unfavourable (i.e. inadequate or bad) status, with 46% of habitats demonstrating ongoing declining trends.⁷ Threats to habitat integrity, and causes of damage include urbanisation, industrialisation, land conversion, drainage, recreation, grazing (specially intensive grazing and overgrazing), abandonment, burning, nutrient enrichment, associated pollution, roads, paths, shipping lanes, associated light and noise pollution, vandalism and disturbance.

It is a matter of further and growing concern that the above mentioned threats are expected to continue over the next 12 years. The frequency of threats is similar to the frequency of pressures across all habitats, implying that there is no evidence that there will be any major decline in pressures over the next 12 years.

⁶ <http://www.ipcc.ie/a-to-z-peatlands/status-of-peatland-biodiversity/>

⁷ The Status of EU Protected Habitats and Species in Ireland – Conservation Status in Ireland of Habitats and Species listed on the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC. Volume 1, Summary Overview; edited by Deirdre Lynn and Fionnuala O'Neill. NPWS, 2019; Results, page 79, and Conclusions, page 96.

A notable exception is climate change, which is listed more frequently as a potential threat (listed in 10 habitats, mostly peatlands) than as an active pressure (listed for sea cliffs). This result acknowledges the likely impact of climate change within the next 12 years on many of our more vulnerable habitats, based on the recent increased frequency of extreme weather events.⁸

The continuing damage to Ireland's biodiversity is also echoed in the submission made by the Irish Wildlife Trust to the Citizens Assembly:

“Experience in Ireland has shown that when pitted against the prospect of economic development and employment, nature rarely comes out on top. It has been seen as something that’s ‘nice to have’ but never ‘critically important’ like roads, schools or hospitals.

*It can be hard to believe that we have destroyed practically all vestiges of natural ecosystems in Ireland while living in a wealthy country with a level of consumer choice that would have been inconceivable even one generation ago. Yet, we depend fundamentally upon nature for our wellbeing and survival, and, having laid waste to our own ecosystems we are unwittingly doing the same at a global level through our unsustainable consumption patterns which draw on resources from across the world”.*⁹

Zero Waste Alliance Ireland fully endorses the above remarks by the Irish Wildlife Trust; we could hardly have expressed the same views more cogently or with the same sense of urgency.

It is therefore a key point of our submission that much greater priority must be given to wildlife protection, nature conservation, and biodiversity over and above any perceived need for economic development.

3.4 Illegal Waste Disposal (“Fly Tipping”) and Biodiversity

While waste disposal is not mentioned specifically in the NPWS habitat status report, it is our observation that many wildlife areas (particularly around the margins of peatlands to which vehicular access is possible by tracks formerly used by peat cutters) are used by persons as informal and illegal dumpsites for unwanted household goods and other discarded objects.

The ecological effects of illegal dumping of waste or “fly tipping” in Irish rural areas has not (to our knowledge) been accurately determined, nor does there appear

⁸ The Status of EU Protected Habitats and Species in Ireland – Conservation Status in Ireland of Habitats and Species listed on the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC. Volume 1, Summary Overview; edited by Deirdre Lynn and Fionnuala O'Neill. NPWS, 2019; Results, page 85.

⁹ Irish Wildlife Trust submission to the Citizens' Assembly on Biodiversity Loss; September 9th, 2022.

to be any detailed research or monitoring, showing the impact of such waste dumping on biodiversity. However, there is no doubt that our local authorities have such information, given that nearly all County and City Councils spend considerable effort and significant financial resources cleaning such fly-tipping sites and removing the waste.

In Ireland, approximately 70,000 tonnes of street cleaning wastes and fly-tipped wastes were collected in 2019, and the EPA estimates that approximately 48,600 tonnes of household waste went unmanaged in 2019, reflecting a minority of citizens illegally dumping or burning their waste.

The Waste Enforcement Regional Lead Authorities (WERLAs) coordinate an Anti-Illegal Dumping Initiative with local authorities and community groups to develop enforcement actions and clean-up operations in illegal dumping black spots around the country. In 2019, €2.9 million in funding was provided for 302 projects that managed to clean up 1638 tonnes of waste. A further €1 million of funding was ring-fenced in April 2020, to allow local authorities to respond to incidents of illegal dumping during the Covid-19 crisis.¹⁰

Research undertaken in Britain has shown that illegal dumping of waste has reached crisis point – with almost one million incidents recorded per year. Available data shows that the biggest “fly tipped” material is domestic waste, ranging from a single bag of rubbish to entire van and lorry loads. The negative impact on the environment, wildlife, biodiversity and people is very large, as a proportion of waste materials are hazardous and not biodegradable.

The most recent statistics from the Department for Environment Food and Rural Affairs in Britain has shown almost one million cases of fly-tipping between April 2019 and March 2020; and it is feared the next set of figures could be worse, following a year which saw local authority recycling centres closed at various stages during COVID-19 restrictions.

In rural areas in Britain, fly-tipping on farmland is common. In some cases, soil contaminating chemicals are dumped which are a danger to livestock and crops. In urban areas, discarded waste can attract vermin and spread disease. People who fly-tip often do it in places where they think they will not be caught. Often rivers, lakes, fields and ditches bear the brunt of fly-tipping, and this has a disproportionate impact on wildlife. Items deposited or thrown into streams, rivers and lakes can negatively impact on the diet of fish, ducks, birds and other species. Dumped waste can also leach toxic chemicals into the environment, contaminating the natural habitat for plants and animals.

The British statistics also showed that just under two-thirds of fly-tipping incidents involved household waste. The most common volume was equivalent to a small

¹⁰ <https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/waste/current-trends-waste/>

van load, and the second most common volume of waste dumped was equivalent to a car boot or less. Incidents of tipper-lorry loads being illegally dumped decreased during the above period by 8% to 33,000. The figures do not include fly tipping on private land, or large-scale cases, which are dealt with by the Environment Agency. The financial burden it places on the taxpayer is huge, as the cost of clearance to local authorities in England is more than £10 million per year.¹¹

3.5 Mitigating Climate Change And Biodiversity Loss

One of the most well-known and frequently quoted examples of ecological damage is that the Amazon rainforest is being cleared to such an extent that it may be near a tipping point beyond which it cannot recover – this will have a dramatic effect on the planet's climate, while at the same time, the climate crisis is exacerbating the problem.

Many species cannot adapt to the scale and pace of changing temperatures; for example, warming seas and ocean acidification are devastating coral reefs around the world. This year, the Great Barrier Reef suffered its sixth mass bleaching event since 1998 with more than 90% of reefs affected. In many cases, when an ecosystem loses biodiversity, it becomes less able to store carbon, contributing to further climate change. We therefore have a vicious cycle, a positive feedback loop: climate change leads to biodiversity losses, which in turn leads to further climate change. As governments around the world develop plans to reduce carbon emissions and conserve biodiversity, the message is simple: we must solve both problems together.

It is our submission that this message is equally true for Ireland: addressing climate change, and mitigating its affects, must be the subject a single, integrated and comprehensive policy. Legislation to address both of these critical issues must also be developed and implemented in combination.

¹¹ Dixon, A.C., Farrell, G. & Tilley, N. Illegal waste fly-tipping in the Covid-19 pandemic: enhanced compliance, temporal displacement, and urban–rural variation. *Crime Sci* **11**, 8 (2022). <https://doi.org/10.1186/s40163-022-00170-3>
<https://crimesciencejournal.biomedcentral.com/articles/10.1186/s40163-022-00170-3>

3.6 Amendment of Legislation to Address Biodiversity Loss

The Climate Action and Low Carbon Development (Amendment) Act 2021, which is excellent in many ways, though lacking in some specifics, includes important references to biodiversity.

For example, the preamble to the Act describes it as:

*“An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a climate resilient, **biodiversity rich** [our emphasis] and climate neutral economy by no later than the end of the year 2050 and to thereby promote climate justice, and just transition ...”*

An important component of the Act is to prepare a “National Climate Objective” (Section 5), which includes the following statement:

*3. (1) The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, **biodiversity rich** [our emphasis], environmentally sustainable and climate neutral economy (in this Act referred to as the ‘national climate objective’).*

Section 6 of the Act refers to the need for a climate action plan and national long term climate action strategy, and states that:

4. (8) For the purposes of performing their respective functions under this section, the Minister and the Government shall have regard to the following matters:

(b) the need to promote sustainable development and restore, and protect, biodiversity ...

A number of other acts are also amended by Part 3 of the Climate Action and Low Carbon Development (Amendment) Act 2021, including the National Oil Reserves Agency Act 2007 which now contains 3 references to the “*enhancement of biodiversity by supporting nature-based projects that seek to reduce, or increase the removal of, greenhouse gas emissions or support climate resilience in the State*”.

What is seriously lacking in the Climate Action and Low Carbon Development (Amendment) Act 2021 is any reference to significant changes in the Planning Acts which we suggest are very necessary to protect biodiversity, and to prevent further damage and destruction of habitats.

We are aware of so many planning issues and problems, where decisions made by local authorities and by An Bord Pleanála have resulted in damage to wildlife

and ecosystems, even though the Board and local authorities must have regard to the environment and to “sustainable development”.

As submitted by the Irish Wildlife Trust, and quoted in section 3.3 above,

“Experience in Ireland has shown that when pitted against the prospect of economic development and employment, nature rarely comes out on top”.

It is our submission that the Planning Act needs to be significantly amended (or totally revised) to ensure a better balance between biodiversity protection on the one hand and granting permission for development on the other hand. The Department will be aware that the current Planning Act 2000, as amended, has been further amended so many times that this piece of legislation is best described as a “minefield”, as it is so difficult to navigate. It is our understanding that the Law Reform Commission is considering undertaking a complete revision of the Planning Act; and, if this is the case, we would urge that the revision should include strong references to the need to protect biodiversity, ecosystems and habitats of importance.

It is our further submission that a Biodiversity Act which gives Ireland’s fourth National Biodiversity Action Plan a strong legislative foundation is absolutely necessary; and this act should specify clear lines of political and executive responsibility and accountability, with high level funding and political support. The existing Biodiversity Forum is underfunded, with no secretariat, with poor lines of communication between it and the relevant ministers, and with no budget for raising public awareness of its existence and its activities. A strengthened Biodiversity Act and a statutory Biodiversity Forum should bring about a radical transformation in how the current biodiversity crisis is addressed and communicated.

These proposed legislative reforms must also guarantee that a **“whole of government”** approach is taken to addressing the combined crises of climate change and biodiversity loss, along with the connected problems which are among the causes of these crises; for example, ensuring a radical change in the way we extract and use raw materials, making the much-needed change from a linear to a circular economy, and eliminating all forms of waste, whether it be a waste of materials, water or energy.

3.7 Giving Rights to Nature

It is also our submission that the government must initiate a campaign to include in the Irish Constitution a **‘Rights of Nature’** article, which would grant legal rights to elements of the natural environment. On 29 March 2017, *“Nature’s Rights”* – a non-profit organisation seeking to establish legal personality and rights for ecosystems and species – held an event at the European Parliament in Brussels,

to launch their initiative in Europe and to communicate how the granting of nature's rights could be raised in the EU, and especially among member states.

Giving rights to nature is a recently-growing legal trend in many countries of the world, and Ireland must not be found lacking in this area. For example, in March 2017, the High Court in India found that the Ganges River and other ecosystems were "legal persons" with certain rights; and, in November 2016, in an extraordinary decision, Colombia's Constitutional Court declared that the Atrato River basin possesses rights to "*protection, conservation, maintenance, and restoration.*" This Court's ruling comes in a case brought to address the significant degradation of the Atrato River basin from mining, adversely impacting nature and indigenous peoples.

Declaring that the river has rights came after thousands of years of history in which nature has been treated as "property" or "right-less" under the law. Much like women, indigenous peoples, and slaves have been treated as property under the law, without legal rights, so do legal systems treat nature at present. Under the existing legal systems worldwide (with few exceptions, see examples above), environmental laws regulate human use (and misuse) of nature, resulting in the decline of species and ecosystems worldwide, and the acceleration of climate change.

Transforming nature to be considered as rights-bearing – and thus in possession of legally enforceable rights – is part of the growing "*Rights of Nature*" movement. The Community Environmental Legal Defence Fund (CELDF) has been at the forefront of this movement, partnering with communities and governments in developing the world's first Rights of Nature laws.

It may be surprising to hear that the first law was passed in Tamaqua Borough, Pennsylvania, in 2006. At present, dozens of communities in 10 states in the U.S. have enacted "*Rights of Nature*" laws. CELDF assisted in drafting the first Rights of Nature constitutional provisions, which were promulgated in the Ecuador Constitution in 2008.

Enhancing the legal status of nature can play an important role in addressing some of the planet's most pressing environmental challenges. Acknowledging nature's rights may be a useful tool to help leverage nature and aid in reaching Europe's biodiversity targets.

In Ireland, our Constitution has no reference to nature or biodiversity but such a move would represent a dramatic ethical shift in our relationship with the non-human world. Such moves must be accompanied by an education campaign, along the lines of what was done during the Covid-19 crisis. We need to develop an 'ecological literacy' so that people know why we have a biodiversity crisis and are aware of what we need to do about it.

4. THE IMPACTS OF “PLASTIC WASTE” ON BIODIVERSITY

In just over 70 years, our dependence on the efficient and cheap material that is plastic has skyrocketed to unsustainable levels. Yet as the global production and consumption of this material continues to soar, we are not disposing and recycling plastics at the same rate. Global plastic pollution jumped from 2.0 million tonnes in 1950 to 348 million tonnes in 2017, and is projected to double by 2040. What's left behind is incredibly harmful to all wildlife and to humans.

The world is facing a “plastics crisis”. Plastic pollution is found all around the globe, negatively affecting people and the environment at each stage of their lifecycle – extraction of fossil fuel, production, manufacturing, use, recycling, and disposal. The impacts are felt in a wide range of areas, including on biodiversity, climate change, human health and human rights.

Given the persistent nature of plastic and its toxicity, plastic pollution is a significant threat to biodiversity. It threatens ecosystems, animal and plant species, impeding their ability to deliver essential services to humanity. While the leakage of plastics into the ocean and the subsequent impacts on marine life has been most studied, plastic pollution also affects freshwater and terrestrial ecosystems. In fact, plastic and chemical leakage into the environment may arise at various stage of the plastics life cycle, from production, through using, to discarding, and the resulting pollutants are transported around the globe through air and ocean currents.

Environmental degradation occurs upstream in the production process, as extraction, fracking, production of plastics and chemical additives release substantial amounts of toxic substances into the air and contaminate the local environment. Disposal is also problematic: incineration of plastic waste releases toxic chemicals, together with micro-plastics and nano-plastics into the air, while landfills contaminate soil and water. All these elements then impact biodiversity both locally and globally.

Plastics are now everywhere, even in the deepest parts of the oceans. Of the approximately 275 million metric tonnes of plastic waste produced annually, up to 12 million tonnes find their way into the oceans, causing havoc to livelihoods and ecosystems. The result is an estimated \$13 billion in annual environmental damage to marine ecosystems. Plastic pollution affects marine life through various pathways, including ingestion, entanglement, toxic impacts, and more. In a 2016 report, the Secretariat of the Convention on Biological Diversity (CBD) recognised that marine debris is a globally significant stressor on the marine and coastal environment, as studies show that almost 800 marine species are affected by plastic pollution.

About 12 million tonnes of land-based plastic waste make their way into the ocean each year, but this statistic is currently set to triple in less than 20 years. Plastic pollution creates adverse problems for wildlife in the ocean, from the 800+ marine and coastal species impacted through entanglement and other dangers, to thousands more accidentally ingesting plastic, mistaking it for food. A study has found that 1,557 species worldwide, including many endangered species, have ingested plastic. In 2019, a turtle hatchling, no bigger than the palm of a hand, was found dead with 104 pieces of plastic in its stomach.

Plastic ingestion can block digestive tracts or can pierce the internal organs of wildlife. It can also choke and starve animals by making them feel that they “full”, while they have eaten no food, only ingested plastic. In some cases, plastic consumption can lead to the reduction in stomach storage volume, making it all the more difficult for animals to eat.

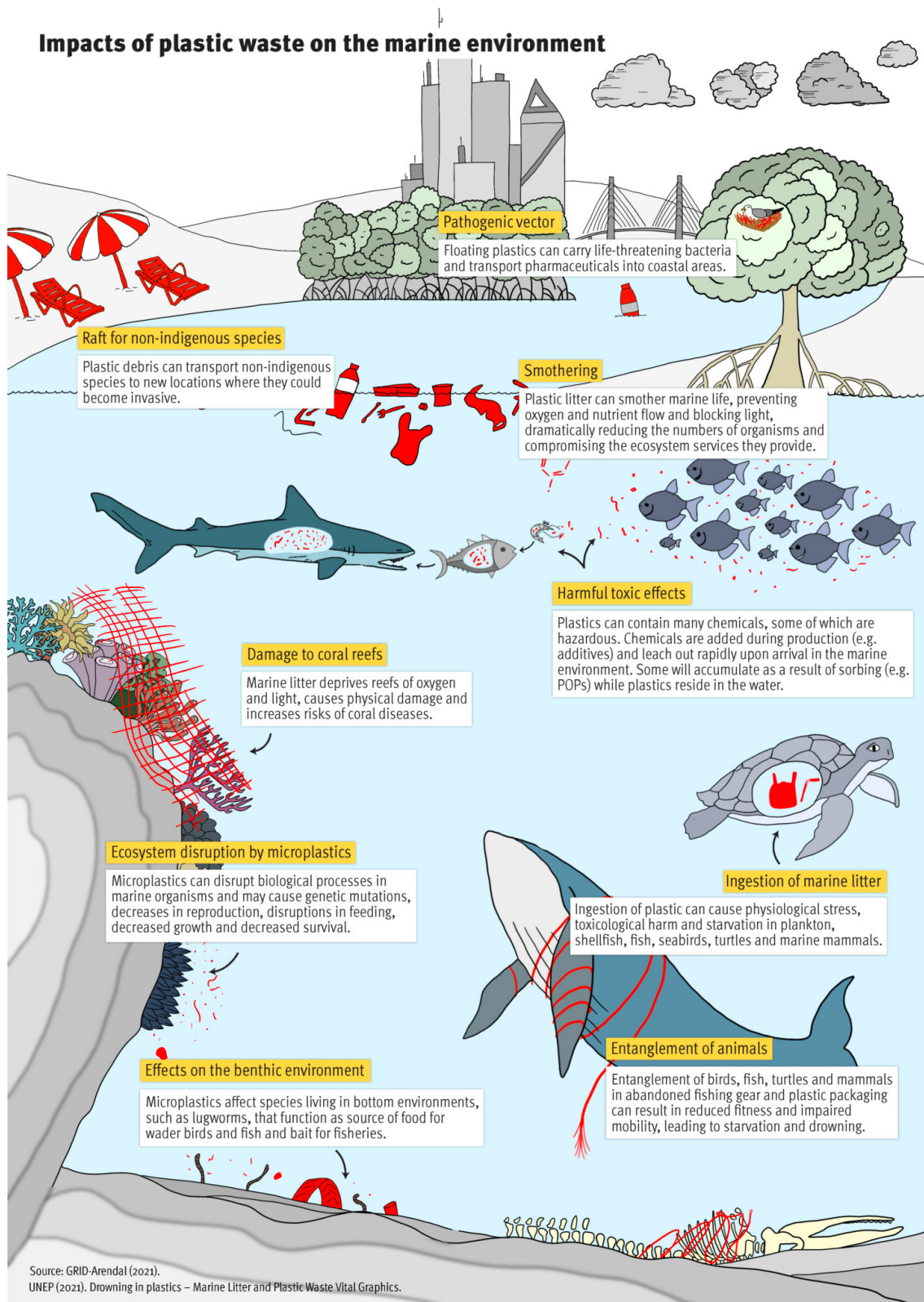
Plastic debris does not decompose but breaks down into tiny plastic particles that are less than five millimetres long known as microplastic. Considering their miniature size, microplastics can pass through animals’ digestive systems and be expelled without consequence. Scientists have found plastic fragments in literally hundreds of species, including 86% of all sea turtle species, 44% of all seabird species, and 43% of all marine mammal species.

Tests have confirmed that the presence of microplastics can cause liver and cell damage as well as disruptions to reproductive systems. For some species, such as oysters, this could mean they produce fewer eggs, threatening population growth. New research also shows that larval fish are eating nanofibres literally within days of hatching.

According to the United Nations, more than 51 trillion microplastic particles have already contaminated the world’s seas, and it is predicted that 99% of marine species will consume microplastic by 2050 if nothing is done to slow down plastic pollution.

Plastic pollution also adversely impacts terrestrial habitats, ecosystems and biodiversity on land. Much like the case with marine wildlife, plastic pollution and discarded waste can cause intestinal blockages and damage when land animals ingest them, and such ingestion can be fatal in many instances. There are many reported cases of land-based mammals, including elephants, hyenas, zebras, tigers, camels, and cattle, which have accidentally consumed plastic waste, resulting in a number of unnecessarily deaths.

For example in January 2018, a 20-year-old wild elephant in Periyar, India, died from plastic ingestion resulting from waste discarded by the tens of millions of Sabarimala pilgrims who trek through the heavily wooded forest to reach the shrine every winter. It was later revealed that significant amounts of plastic blocked up the elephant’s intestines, causing internal bleeding and organ failure.



Impacts of plastic waste on the marine environment. Source: GRID-Arendal, 2021.

Wildlife can easily become trapped and entangled in plastics, preventing them from being mobile to hunt for food or become more vulnerable to nearby prey. If

they accidentally get their head caught in plastic food containers, animals will suffer from overheating, suffocation, dehydration, starvation, and eventual death.

Plastic can also badly wound an animal, sometimes even resulting in loss of limbs. Species such as raccoons often get stuck in plastic ring beverage holders, which cause deep cuts in their bodies, according to the Humane Society of the United States. For birds, plastics impede their ability to fly and hunt.

Microplastic is a major concern to terrestrial animals as well. Microplastics leache into soil and nearby water sources from plastic waste in landfills and other sources. A recent 2020 study, the first-of-its-kind to explore how microplastics can affect soil fauna, revealed that terrestrial microplastic pollution has led to the decrease of species that live below the soil surface, such as mites, larvae and other soil micro-fauna. The decline of these species leads to less fertile soil and land. In addition, chlorinated plastic – such as plastic food packaging, plastic tubes, medical devices and products – can release harmful chemicals into the surrounding soil, seeping into groundwater that many species rely upon.

The food that we grow is therefore becoming more and more likely to be contaminated with microplastics. According to Greenpeace, fruit such as apples and pears have an average of 195,500 and 189,500 particles per gram respectively, whereas vegetables like broccoli and carrots average more than 100,000 plastic fragments per gram.

Discarded plastic in the environment, and the resulting adverse effects on biodiversity, also result in adverse effects on human beings. For example, considering that most fish species will ingest microplastics during their lifespan, plastic particles can easily travel across the food web, ultimately ending up in the human digestive system when we consume seafood. But these harmful and toxic plastic particles do not remain there, and studies have shown that they can travel throughout the human body.

A recent study discovered the presence of microplastics in the human placenta, carrying with them substances that can mimic and disrupt the regular function of hormones and cause long-term effects on human health such as oxidative stress as well as chronic DNA damage and inflammation. In March 2022, microplastic was detected in human blood for the first time, and weeks later, found in human lungs as well.

Though it's still early to tell the impacts of microplastics on human health, scientists have raised concerns about the possibility of these contaminants travelling around the body and lodging in delicate organs such as the brain, causing major damage.¹²

¹² <https://earth.org/plastic-pollution-animals/>

5. OBJECTIVES OF THE FOURTH NATIONAL BIODIVERSITY ACTION PLAN (NBAP)

As stated by the department in the invitation to submit observations on the draft Biodiversity Action Plan, it is structured around the delivery of Ireland's vision for biodiversity by 2050. The Plan contains six objectives, each addressing a different theme that will contribute to the realisation of the vision for biodiversity:

Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity

Objective 2 - Meet Urgent Conservation and Restoration Needs

Objective 3 - Secure Nature's Contribution to People

Objective 4 - Embed Biodiversity at the Heart of Climate Action.

Objective 5 - Enhance the Evidence Base for Action on Biodiversity

Objective 6 - Strengthen Ireland's Contribution to International Biodiversity Initiatives

5.1 Objective 1 – Adopting a Whole of Government, Whole of Society Approach to Biodiversity

Even though we consider that we have addressed a proportion of this objective in section 4 above, where we have shown that biodiversity loss, climate change and the way in which we use and misuse materials, and fail to implement the circular economy, are integrated issues, requiring a whole of government response, there are further issues which we would like to explore.

All available evidence shows that [Ireland's environment](#) is in a parlous state, with biodiversity indicators in [decline](#). The Climate Emergency and the Biodiversity Crisis are [inextricably interlinked](#), as acknowledge by the [EU's Adaptation Strategy 2021](#), and the Dáil Declaration of a [Climate and Biodiversity Emergency in 2019](#). This is in common with the [EU](#) and [global](#) situation, and it is increasingly evident that current measures to protect biodiversity are inadequate. The current biodiversity strategy therefore can only be said to have failed. Climate action is also failing to meet [targets](#). CoP27 saw calls for [enhanced implementation and accountability mechanisms](#).

In the Irish context, the reasons for this failure do not appear to have been sufficiently studied. Of the circa 31,000 species in Ireland, [only around 10%](#) have had an assessment of their conservation status. Many species of particular importance in Ireland (such as the black [Honeybee](#)) have no particular protection. Protections only stem from EU law in the form of designated static habitats and

limited species protections, and a poor level of State initiative to assess and protect species has been demonstrated to date. The static habitats approach has limitations. Within this framework extensive failures, (such as only 217 of 423 sites being designated, and failure to set specific nature conservation objectives for 140 sites) are [evident in Ireland](#). Addressing biodiversity issues continues to be hampered by both lack of data and lack of enforcement, State body will to act, accountability for State failure to act and accountability for private actors. While there have been some notable successes such as the [Marsh Fritillary Project](#) and the All-Ireland Pollinator project, most species are not consistently monitored on an All-Ireland basis. Comprehensive funding for proper biodiversity monitoring is required.

In particular other than the Marsh Fritillary and the All-Ireland Pollinator plan, monitoring and protection lacks an all-Ireland integration, with the border with Northern Ireland representing a boundary to biodiversity action that is artificial in nature terms. There are no enforceable mechanisms for managing cross-border sites and [cross-border environmental crime](#) remains a large problem. There has been a [failure to adequately utilise the nature potential of the Good Friday/Belfast agreement](#), which nominates the environment as one of its twelve areas of cooperation and which has institutions tasked specifically with this (e.g. the North-South Ministerial Council). However, the combination of the ongoing political vacuum in Northern Ireland, Brexit and failure to use the institutions of the GF/BA even when there wasn't a political vacuum, have left a governance gap at an all-Ireland environment level. The island is a single biogeographic unit and there needs to be an all-Ireland mechanism for biodiversity management and nature protection, as well as cooperation on environmental crime. The lack of cooperation on environmental crime, and lack of an independent regulator in Northern Ireland, has turned the border regions into a de-facto dumping ground and sites of environmental crime on a large scale.

It is argued therefore that any biodiversity strategy is pointless without strong data, enforcement and accountability measures. Funding streams should be made available to support comprehensive biodiversity assessment on an all-island basis.

Frequently the culprit for breaches of laws designed to protect biodiversity are State actors, and as such this leads to a level of perceived hypocrisy that sends a strong message to the public that biodiversity protections are something that are to be paid lip service to on paper but which need not actually be observed. This is reinforced by the almost complete failure to have either a comprehensive system of environmental crime protection, or to utilise/implement the laws that are there, so that the environment can be harmed with impunity.

Biodiversity protection should be integrated into all State functions, with a system for punishing failures and rewarding success. A **biodiversity charter** should be drawn up for all public bodies, and adherence to it be mainstreamed as part of

State Department and individual employee appraisal processes, as well as integrated into tender procurement processes.

Environmental Governance and Environmental Policy Integration, and the international/EU obligations in relation to these need to be taken seriously, and State actors cannot continue to publish policies to address these on one hand and then flout them on the other, or to tolerate the widespread flouting of them by private actors.

Environmental governance needs to be protected and enhanced, and the State bodies and local authorities should be prevented from actions that undermine environmental governance (possibly through adherence and monitoring of a biodiversity charter) such as

- State action at EU level to undermine access to justice, access to information, and public participation in environmental decision making, for example by Irish Council Representation voting against such proposals in trilogue negotiations on the Aarhus Regulation revision and elements of the Fit for 55 legislative package.
- Proposing legislation that fails to address the current biodiversity and climate crisis.
- Proposing policies of any kind that fail to protect biodiversity at National and Local Government Level.

Environmental Governance needs to be enhanced by protecting access to justice, public participation in environmental decision making, and fundamentally revising the national approach to environmental information, collection, dissemination, education and response to access to information across all State bodies, in line with our EU and international law obligations. Enforceability of environmental obligations is a key issue and this requires two elements, binding rules, and rights to review compliance with these rules. As such **Target 1B1** of a statutory basis for the National Biodiversity Plan is of crucial importance and should be prioritised.

The Convention on Access to Information, Public Participation in decision-making and Access to Justice in Environmental Matters (Aarhus Convention) entered into force on 30 October 2001 (UNECE, 2021), and has since been signed and ratified by 47 State Parties worldwide – including by Ireland (2012), the EU (2005) and Britain. It embodies a key principle of international environmental law, that environmental decisions are best handled with the participation of those concerned. The Convention marked a departure from previous international environmental law approaches in several respects, creating rights for NGOs and individuals, creating a complaints mechanism open to individuals and NGOs as well as State Parties, and importing ambitious concepts of environmental democracy and stewardship into the legal systems of the contracting Parties.

The Aarhus Convention's implementation is widely considered to be unsatisfactory in Ireland (e.g. (Ryall Á., 2018) [and in both jurisdictions](#) (Hough et al. 2022) and has been the subject of multiple EU infringements (e.g. in the area of EIA) as well as complaints to the Aarhus Convention Compliance Committee (e.g. in the area of access to information and costs).

The Convention's transparency and access to justice rights are a key component of public oversight over implementation of the State's biodiversity and environmental obligations, and important for comprehensive enforcement, in tandem with State enforcement.

The State has continued to attack Aarhus rights through various legislative proposals seeking to limit rights of review and participation, and to fail to respect the guarantee of protection for environmental defenders in Art 3(8) of the Convention (for more see the 2022 Report on [Ireland's](#) Implementation of the Aarhus Convention available at www.findingcommonground.ie as well as a report on cross-border implementation).

A stakeholder body to review all Government legislative proposals in the area of Planning law, and any laws with potential environmental impact, for compliance with international law obligations such as the Aarhus Convention is required. This could be done through funding for an Aarhus Centre. The Government need to engage in Aarhus assessments of all legislative proposals. A domestic mechanism for protection of environmental whistle-blowers is required as existing whistle-blowers only covers intra-organisational whistleblowing (where a member of an organisation such as an employee or volunteer) reports wrongdoing, and not external activists and NGOs.

Anti-SLAPP protections should be advanced ([SLAPPs](#) are Strategic Lawsuits Against Public Participation). Public participation in plans, programs and projects should be enhanced.

It is respectfully submitted that the targets in the current draft plan lack vision and fall far short of what is required to stem the tide of biodiversity loss in Ireland. Target 1A6 of the year 2024 for implementing training and improved governance arrangements in public bodies is too long. A review of needs should take no longer than 3 -6 months, and recommendations from this can be implemented in the final quarter of 2023 at the latest. Targets 1B4 and 1B6 pinpointing 2026 as the year all biodiversity officers will be appointed and for local authorities to have Biodiversity plans in place is an unnecessarily long time frame. Targets 1E1 and 1E2 setting the year 2027 to implement revised Wildlife legislation, and Target 1E3 of the year 2030 to improve enforcement of Wildlife crime and legislation are far too long, and demonstrate the failure to grasp the urgency of the situation. These long timeframes are not compatible with [the declaration of a climate and biodiversity emergency by the Dail](#) in 2019. In the three years since this

declaration, Ireland has gotten worse not better, and has failed to rise to the challenge implied by such a declaration.

The timeframes of the objectives set out in the draft plan show a failure to understand that we have reached a crucial juncture in climate action. They show that the intrinsic link between climate action and biodiversity protection is not being capitalised on. [IPPC](#) and other reports consistently show that protecting biodiversity is a strong climate adaptation, and therefore we need to act to protect biodiversity, not just for its own sake but for the sake of future generations. Human health is also an important consideration with extensive evidence showing the social and health benefits of a healthy environment.

The high level of [fly tipping](#) (documented by [the EPA](#)) and casual damage to sensitive areas is enabled by the lack of an enforcement framework and poor environmental governance, but is also likely symptomatic of an insufficient understanding of the importance of nature for human life. In this regard the education of the public about nature and the relationship between humans and the natural world needs to be tackled in a much more ambitious way than heretofore. While there are some excellent initiatives like An Taisce's [Green Schools](#) and [Green Campus](#) programs, there remains [large sections of the public who have limited access to the natural world](#). State funding for a comprehensive system of outdoor education from Pre-School level to Adult Education should be evaluated. Models of mainstreaming schooling outdoors that take place in countries such as [Luxembourg](#) and [Finland](#) should be researched for applicability in an Irish context. Studies show a connection between pro-nature behaviour and nature exposure, particularly in [children](#). In particular, establishment of academic research on the pedagogy of outdoor/forest learning should be considered.

Nature-based [Social Prescribing](#) training should be provided to all medical professionals.

Centres to facilitate nature education development and the training of Forest School Leaders should be established, in conjunction with [Irish Forest Schools](#). Centres should also be established for facilitating the connection to nature of marginalised groups who are usually the ones least likely to have green space access like the [economically disadvantaged, disabled](#), migrants, and Travellers.

The legal framework for protection of Biodiversity consists mainly of the Habitats regime, which designate protected "Natura 2000" sites, and the Wildlife Act 1976 (as amended) prohibition on hunting during closed season, hedgerow cutting during nesting season and Pesticide Regulations. As mentioned Ireland has repeatedly been found in breach of its Habitats obligations by the EU (e.g. Case C-117/00, Case C-418/04, Case C-258/11) and has [been laggardly in designating sites and putting in place protections](#).

Unfortunately, the Wildlife Act 1976 (as amended) is opaque and difficult to understand and poorly implemented. It is common to see incorrect information about its requirements circulated, even on some local authorities' websites.

The commitment in the draft plan to revising and updating this legislation is very welcome. However, the timeframe of five years to implement this is disastrous. Ireland's biodiversity loss continues at massive speed and in five years' time the level of deterioration will be exponential.

The commitment to enhanced enforcement is also welcome but again the timeframe of 2030, eight years, for carrying this into effect, is much too late to avoid the worst effects of biodiversity loss as well as to ensure that we course-correct on climate adaptation through land use and biodiversity protection.

It is respectfully submitted these timeframes need to be drastically revised.

Despite pesticides use reduction being highlighted in the Introduction as a key element of this plan, there is only one target in relation to this, and it is exceedingly vague. Target 2B4: "DAFM, Teagasc, Local Authorities and other relevant stakeholders will put forward measures to reduce pesticide use in Ireland by 50% by 2030".

It is suggested the domestic pesticides legislation be reviewed immediately, and EU rules on risk assessment for pesticide use that have been transposed but not commenced, be commenced immediately. Consideration should be given to the [PAN EU Report in 2021](#) on alternatives to current spraying practices:

- Reducing spraying – only doing so when necessary, rather than on an unmonitored schedule
- Letting native plant species grow, replace bedding plants with native wildflowers.
- Mechanical means – hoeing, strimming, mowing.
- Higher tech non-herbicide methods – steam, Foamstream, heat, electricity-based applications.

Pesticides such as glyphosate are harmful to the environment. They can have a place in the management of invasive species such as Japanese Knotweed (which in themselves harm biodiversity), but indiscriminate use along hedgerows, and in particular, waterways, is counter to the environmental objectives the Council is obliged to have regard to. It is also potentially a breach of EU law.

Under [Directive 2009/128/EC](#) (consolidated) on sustainable use of pesticides, it is illegal to spray in public areas and in areas used by the "vulnerable" under Directive unless a risk assessment is carried out and concludes that there is no

viable alternative. This Directive is implemented in Ireland by legislation that has not yet been commenced¹³. However, the Directive has passed its date for transposition so is now potentially directly effective and is binding on public bodies who are obliged to apply relevant provisions of EU law even if they conflicted with operational domestic law.

Many British Councils have banned pesticides – [Hackney Borough Council](#), [Wiltshire](#), and many more [examples](#). Leitrim. Some Irish Council's are working on it – there are initiatives in Cork. Other Irish County Councils have Pesticide Use Policies designed to eliminate or reduce pesticide use. E.g. [Dublin City Council Pesticide Policy](#) which was [adopted](#) last year.

It is suggested that a Target be introduced to require all Local Authorities to develop a “Rational Use” approach to pesticide management, which involves restricted use of spraying as a last resort in difficult areas, and uses approaches such as “Leave the Weeds Be”

Introduction of a written policy is required on this is crucial. Local Authorities should report regularly on when decision is made to spray and the risk assessments and update Council procurement policies in line with their new policies.

A Target should be introduced of requiring Councils to publish on their websites annual figures on pesticide use, broken down by area with volumes and times of spraying. The public should be warned when spraying is taking place, as they are with Road Works and traffic delays.

Hedgerows are crucial to maintaining biodiversity on farms and urban areas as they form wildlife corridors for flora and fauna to have range and movement, in a largely artificial landscape. Urban trees are an important climate measure, as trees provide sources of shade and cooling in a warming climate and also carbon capture and storage. Urban temperatures are on average much higher than those in rural areas due to heat reflection and output from business and residences as well as the sheer mass of people gathered in urban areas. However, trees can also pose a safety issue from time to time. A balance needs to be struck.

The widespread Council practice of excessive flailing in February and November has to end, and the public must be educated around the importance of protecting hedgerows also. This has to be balanced with Road Safety needs.

Our proposals:

¹³ Section 12 of the [S.I. No. 155/2012 - European Communities \(Sustainable Use of Pesticides\) Regulations 2012](#).

- Set up a Citizen Portal for alerting the Council to instances of hedgerow destruction.
- Local Authorities to be funded to run awareness raising campaign in co-operation with local eNGOs for the local area about what the rules are. Consult with experts on the law first to ensure clear message.
- Written Council policy on hedgerow management should be developed in consultation with eNGOs, the public and hedge laying associations.

5.2 Objective 3: Secure Nature's Contribution to People

5.2.1 An Overview

Objective 3 of the National Biodiversity Action Plan focuses on securing nature's contribution to people. The interlinkages between biodiversity and humanity cannot be underplayed. For centuries, man has been dependent on nature for nutrition, protection from wild beasts, medicine, shelter, heat, and for perhaps an infinite pool of resources that cannot be numbered or listed here. With a growing population, these needs have grown exponentially and until recently, nature had been able to provide for and meet these demands without defaulting.

However, the Industrial Revolution of the 18th century brought with it a new manufacturing system that boosted demand for new products. Equipped with new factories and powerful machines, the Revolution also brought with it a greater reliance on natural resources particularly fossil fuels such as oil, coal, and natural gas to meet growing demand for products.

This was the turning point in the stable relationship between nature and people. With an imbalance now striking this relationship, although people's dependence on nature continued to increase, nature found itself at a threshold of complete exhaustion. This could be seen evidently in the sudden loss of biodiversity, rivers turning into waste streams, greyer skies, and loss of nutrient values in the soils that pushed sales for chemical fertilisers and pesticides. What may have begun in the 18th century has over the years brought further degradation of nature and its resources.

Objective 3 of the Draft National Biodiversity Plan identifies the intrinsic relationship between nature and people and proposes commensurate targets and actions that could restore the balance between the two. In line with some of Ireland's existing plans including Heritage Ireland 2030, the outcomes of the draft National Biodiversity Plan outline the role of biodiversity in supporting livelihoods, enterprise and employment.

In a post-pandemic world, restoration of Ireland's biodiversity would be an essential element of reviving the country's economy. Nature's recovery would boost economic growth and allow people and society to be empowered enough to give back to nature more than they took. Having established the close relationship between nature and people, the following section has been developed through a critical assessment of the outcomes laid down under Objective 3 and offers modifications that could be adopted to make the actions and outcomes identified more robust and specific.

5.2.2 Critical assessment of the Outcomes and Targets of Objective 3

1. Upon conducting a critical assessment of the outcomes of Objective 3 one observes that certain outcomes such as 3A3 stand out. It is a strong target as it outlines which aspects of ecosystem services will be incorporated in the DTCAGSM investment projects and appraisal processes which would establish a direct link between biodiversity conservation and economic growth. However, further clarity on how these services will be incorporated and whether a monitoring body would be set up for this purpose could be included within the description of the outcome.
2. On the other hand, outcome 3A5 that deals with increasing public awareness by authorities such as the Dublin Zoo falls short in accurately describing how biodiversity-related awareness-raising campaigns and drives will be held. Without the identification of relevant stakeholders who would drive the campaign as well as recognition of a targeted audience for the campaigns leaves this target asking for more clarity. To achieve this target, the indicator should also include a measurement tracker that tracks any impacts among visitors made by the awareness-raising campaigns.
3. Outcome 3A6 also fails to outline how the publication of a policy statement would suffice for action if it is not converted into a legal requirement for institutions in Ireland to implement the recommended actions to integrate biodiversity conservation with community development and the Irish language.
4. Target 3A8 could be expanded to include an indicator that tracks how increasing tourism in Ireland could negatively impact the country's biodiversity and what could be the potential measures that could be incorporated to prevent any future damage from increased tourism. An indicator could also be developed to track protected sites and any indirect damage that may be caused to them due to increased tourism in the country. Without severely impacting the tourism industry, an assessment on how best tourism can be regulated would be ideal.
5. Outcome 3A11 although detailed, does not identify who the 'relevant departments' would be and whether a monitoring body/dedicated team

would be set up in each department that would report periodically to a higher authority about the synergies between the National Strategy on Education for Sustainable Development - ESD to 2030 and the 4th National Biodiversity Action Plan.

5.2.3 Comments

Although the outcomes and targets within the Objective have covered all important and relevant themes and challenges that exist between managing nature without compromising the ability of people to grow, the actions listed against the outcomes could be better implemented. This could be achieved if the final Biodiversity Plan includes adequate information on monitoring bodies and the structure that would be adopted for the implementation of the targets against a clearly outlined timeline.

6. CONCLUDING REMARKS

Past and present Irish Government policies have proven to be inadequate for addressing the country's loss of biodiversity; and, while this may be partly understandable in previous decades when nature was not seen to be important (though it was such an intrinsic part of our farming communities' lives), we are now in a serious biodiversity crisis, and it is essential to implement necessary rapid and appropriately targeted actions.

Ireland's Biodiversity Action Plan must be free of distortions caused by sectoral interests, or by industrial lobbying, and must not be influenced by individuals or organisations who deny the urgency needed for action to ensure the protection of nature and biodiversity, and the restoration of damaged areas.

Ireland's Biodiversity Action Plan must also take into account climate change, our excessive use of material resources, and the need to change from a linear economy to a circular economy; and must be closely linked with the urgent requirement to eliminate our dependence on any form of fossil fuel. It should be obvious by now that large-scale extraction of raw materials and fossil fuels are the cause of significant environmental damage, including widespread damage to ecosystems and wildlife.

Even though Ireland may be less detrimentally affected than many other countries, the damaging effects of biodiversity loss and climate change are being felt globally, and will have repercussions in Ireland.

Actions at individual level, and at community level, and in each village, town, city and rural townland are important; and therefore the raising of peoples' awareness of the need to protect and enhance biodiversity must be key elements of Ireland's new Biodiversity Action Plan.



Zero Waste Alliance Ireland

This submission was researched and written by [REDACTED] (ZWAI founder and environmental scientist) with substantial contributions by [REDACTED] (ZWAI administrator and researcher), [REDACTED] (ZWAI member) and [REDACTED] (ZWAI member).

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