

Dún Laoghaire-Rathdown County Biodiversity Action Plan 2021-2025

DRAFT SUMMARY CONSULTATION DOCUMENT



Draft Themes, Objectives and Actions

Introduction

This document provides an introduction to the DLR Biodiversity Action Plan 2021-2025 and outlines the draft Themes, Objectives and Actions of the Plan. A Biodiversity Steering Group was set up as part of the previous DLR Biodiversity Plan with representatives from NGOs such as BirdWatch Ireland (BWI), government bodies such as the National Parks and Wildlife Service (NPWS) and others. This group has continued to participate in drafting the next DLR Biodiversity Action Plan 2021-2025. Some members of the group have since retired or moved on, and therefore new members were added to represent their interests. Consultations have been undertaken with interested groups, and we are now at a stage of moving to public consultation.





"The fact is that no species has ever had such wholesale control over everything on earth, living or dead, as we now have.



That lays upon us, whether we like it or not, an awesome responsibility. In our hands, now lies not only our own future, but that of all other living creatures with whom we share the earth."

— David Attenborough, Life on Earth







What on earth is Biodiversity?

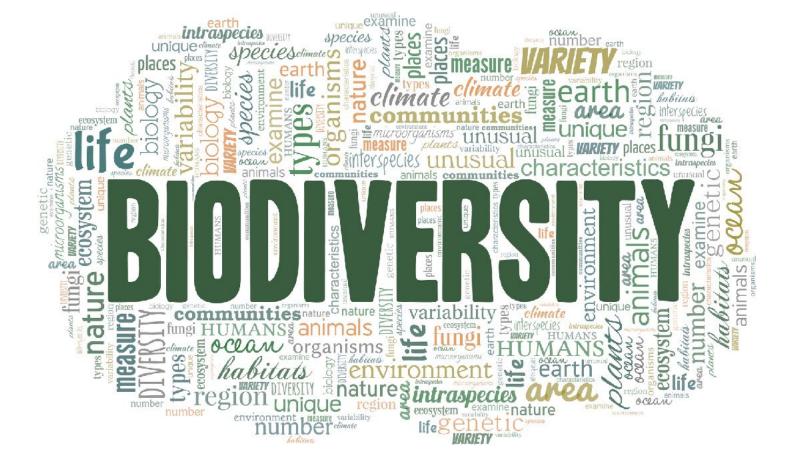
When it comes to describing the meaning of the word 'biodiversity', people have a number of ideas as to what it means,¹ with a diversity of answers to the question – What is Biodiversity?

In simple terms, 'biodiversity' includes all the variety of life on Earth. It is the diversity of nature, of our habitats, plants, and animals (including us) and their interconnections with each other. We are a part of nature and everything in nature is connected.

Think of all the different species and places on our planet as threads in a net – the more threads that intertwine, the stronger the net. The stronger the net, the better nature can provide for us and cope with threats such as Climate Change.

When we witness a species go extinct or a habitat lost, there are ripple effects throughout biodiversity and sometimes these biodiversity losses impact on other species, on other habitats, and on us. For example, the disappearance of some pollinating insects could lead to a knock-on effect and we would see problems with crops and our food supplies, but wild plants would also be affected, with potential effects on other insects and birds. This shows how biodiversity comprises a lot of interconnections and how something that affects one species, habitat or ecosystem, can affect a lot more.

If there are changes to habitats, or the number of species, as a result of our activities, this leads to biodiversity losses and changes to the biodiversity that benefits us, and so we may suffer as a result, sometimes financially and sometimes in other ways. Sometimes changes are so gradual that it will be future generations who will suffer, we can see this to some extent with Climate Change.



Why prepare a Biodiversity Action Plan?

The loss of the Earth's natural resources was recognised on an international level at the 1992 'Earth Summit'. The Convention on Biological Diversity (CBD) was signed by all nations at that meeting, including Ireland. Ireland's first National Biodiversity Action Plan (2002-2006) called for all Local Authorities to produce Local Biodiversity Action Plans. The purpose of these plans is to ensure the protection and appreciation of biodiversity at the county (local) level.

The production of a Biodiversity
Action Plan for the county is also listed in
the Dún Laoghaire-Rathdown (DLR)
Development Plan, the DLR Climate
Change Action Plan, the DLR Heritage
Plan, DLR Local Agenda 21 programme,
and the DLR Corporate Plan.

The current state of our Biodiversity

While most of us are not actively seeking to harm biodiversity, modern daily life is full of unintended consequences that affect biodiversity and the plants and animals sharing this planet with us. Both natural and human caused impacts reduce biodiversity and in turn can threaten human livelihoods and survival.

In recent decades, human impacts on biodiversity in Ireland, and across the planet, have accelerated and resulted in increased damage to habitats, loss of species, reduced abundance of wildlife, and degradation of our environment (air, water and soils).



If we, the current generation, continue to unsustainably use our natural resources, damage our natural habitats, drive species to extinction, and pollute our seas, rivers and soils, future generations will inherit a diminished and degraded environment unfit to support them and unfit to provide them with a wide range of benefits.

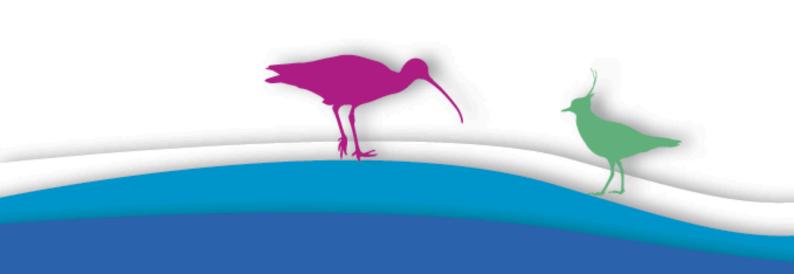
After all, there cannot be a healthy, happy and prosperous future for people in Ireland and the world with a destabilised climate, depleted oceans and rivers, degraded land, and empty woodlands, all stripped of biodiversity.

We are a small urban county with limited space and with many pressures on biodiversity, but that does not make it impossible to manage our land better and restore areas for biodiversity. We have areas of the county which provide for new buildings, roads, parking and of course homes. Now that we are more aware of the need to help biodiversity, which in turn helps us, we can look at how we can achieve a balance, and even gains for biodiversity.

Biodiversity Declines

The World Wildlife Fund (WWF) Living Planet Report² in 2018 reported an alarming 60% decline in the size of populations of mammals, birds, fish, reptiles, and amphibians over the past 40 years, all related to human activities.

In Ireland, more than 90% of our protected habitats are classified as 'poor' or 'inadequate' in their current condition (and that's to say nothing of our unprotected habitats). On average, 20% of the species that have been assessed are considered to be at risk of extinction in Ireland.



Why is Biodiversity important to us?

The benefits that biodiversity brings to us for free (which we call 'ecosystem services'), are critically important for our livelihoods, our economies, and for a good quality of life, and are, therefore, vital to sustaining human life on earth.

These ecosystem services are under threat due to the continuing loss of biodiversity. Ecosystem services are described below so that we understand what it is we are losing and how this is impacting on us, now and in the long term.

'Natural Capital' is the sum of our ecosystems, species, freshwater, land, soils, minerals, our air and our seas – our stock of nature. These are all elements of nature that either directly or indirectly bring value to people and the country at large. They do this in many ways, but chiefly by providing services to us, such as providing us with food, clean air and water, wildlife, energy, wood, recreation and protection from hazards – and these services are known as *Ecosystem Services*.

Ecosystem services are grouped into four broad categories:

- provisioning services, such as the production of food and supply of water;
- regulating services, such as the control of climate or such as flood control;
- supporting services, such as nutrient cycles and oxygen production; and
- cultural services, such as spiritual and recreational benefits.

Without a doubt, biodiversity and natural resources underpin these ecosystem services.

Ireland has recognised the value of protecting its biodiversity through the National Biodiversity Plan 2017-2021. The new DLR Biodiversity Action Plan 2021-2025 will also commit to actions aimed at conserving and restoring our biodiversity and ecosystems, to also strengthen the integration of the protection of ecosystem services into the decision-making and policies of DLR.

Recognising that biodiversity provides many valuable ecosystem services (the economic value of which is only now being recognised) further emphasises the importance of protecting our biodiversity, of integrating biodiversity into our decision-making, and of looking at more sustainable ways of managing our biodiversity and ecosystems. However, the value of biodiversity is not the same as its price, and it offers us so much more than just monetary or economic value.

For more information on ecosystem services please see our website:

https://www.dlrcoco.ie/en/biodiversity/natural-capital-and-ecosystem-services

The creation of the DLR Biodiversity Action Plan has taken into account the EU Biodiversity Strategy 2030 and the National Biodiversity Action Plan 2017-2021, along with other plans and policies outlined here.

EU Biodiversity Strategy 2030

In May 2020, the European Commission adopted the new EU Biodiversity Strategy for 2030 and an associated Action Plan (annex)³, a comprehensive, ambitious, long-term plan for protecting nature and reversing the degradation of ecosystems.

It aims to put Europe's biodiversity on a path to recovery by 2030, with benefits for people, the climate and the planet. A core part of the European Green Deal⁴, the Biodiversity Strategy will also support a green recovery following the pandemic. The strategy is built around a simple headline commitment: 'by 2030, Europe's biodiversity is on the path to recovery for the benefit of people, the planet, the climate and our economy.'

The Strategy contains specific commitments and actions to be delivered by 2030, including:

 Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000

- areas, with strict protection for areas of very high biodiversity and climate value.
- An EU Nature Restoration Plan a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.
- A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation, and track progress, improving knowledge, financing and investments, and better respecting nature in public and business decisionmaking.
- Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.



THE EU BIODIVERSITY STRATEGY SETS AMBITIOUS EU TARGETS AND COMMITMENTS FOR 2030 TO ACHIEVE HEALTHY AND RESILIENT ECOSYSTEMS, FOR EXAMPLE:



(EU Biodiversity Strategy for 2030, EU 2020)

Ireland's Vision for Biodiversity

As outlined in the National Biodiversity Action Plan, 2017-2021⁵, *Ireland's Vision for Biodiversity* is "That biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally." The next National Biodiversity Action Plan is due in 2022 and it is envisaged that this will take us a step further towards gains for biodiversity. This is also considered in our DLR Biodiversity Action Plan 2021-2025.



'That biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society'



National Biodiversity Action Plan
 2017-2021 - Ireland's Vision for Biodiversity



DLR Biodiversity Action Plan 2021-2025

The new DLR Biodiversity Action Plan 2021-2025, the second Biodiversity Action Plan for the County, builds on the aims of the first Plan and continues to move us towards our overall EU and national Vision for Biodiversity. It is Government policy for Local Authorities to take the lead role in the production of Local Biodiversity Action Plans. This Plan demonstrates DLR's continuing commitment to achieving our obligations to protect our biodiversity for the benefit of future generations. This is achieved through a series of targeted actions provided in this Plan.

The preparation of the DLR Biodiversity Action Plan 2021-2025 is informed by:

- Existing knowledge and a review of the information contained in the previous DLR Biodiversity Plan 2009-2013, Treasuring Our Wildlife
- Consultation with our Biodiversity Steering Group and interested groups such as BWI, An Taisce, Coastwatch and others who influence biodiversity conservation in DLR
- Legislation, policy and strategies at local, national, European, and international level
- National and international best practice and experiences
- DLR Climate Change Action Plan 2019-2024
- DLR County Development Plan 2022-2028 in draft
- DLR Invasive Alien Species Plan 2020
- In particular, this Plan is informed by the seven strategic objectives and associated targets of the third National Biodiversity Action Plan, 2017-2021, Ireland's Vision for Biodiversity and the EU Biodiversity Strategy 2030.

The review of the previous *DLR Biodiversity Plan 2009-2013 – Treasuring Our Wildlife* showed that significant progress was made during the timeframe of the Plan and the implementation of the actions of the Plan have continued to date. However, during the time since its implementation, many changes have occurred, both in terms of plans, policies, legislation, land use management, climate change and biodiversity initiatives.

There are still areas where increased efforts are required to meet the targets and objectives of the previous Plan, while we also look to the future and implement new actions.

Most actions of the previous plan that were identified as ongoing or requiring further action are retained in this second Plan. As we face a Climate and Biodiversity Emergency, the actions of this Plan have been climate-proofed. 'Climate proofing' is a process that makes projects, strategies, policies and measures resilient to climate change, including climate variability. In order to do this, DLR identified each biodiversity action, the climate change risk (impact) to biodiversity and how the action helps to address the impact, e.g. making biodiversity more resilient to climate change through protection of important conservation areas.

Let's help biodiversity adapt to climate change

Biodiversity adaptation to climate change is a challenge when other pressures are also affecting biodiversity, and so there is a need to address this threat to biodiversity. In response to the threat that climate change poses, various sets of principles have been identified to guide adaptation for biodiversity conservation (Mitchell et al., 2007). These have been incorporated into the draft actions of Plan.

The impacts associated with climate change will not occur in isolation; rather climate-driven changes will combine with, and exacerbate, existing stresses on our biodiversity and natural systems. It is important that we understand those interactions between climate change and effects on biodiversity in order to incorporate measures and actions into our plans and policies to protect biodiversity and ecosystem services.

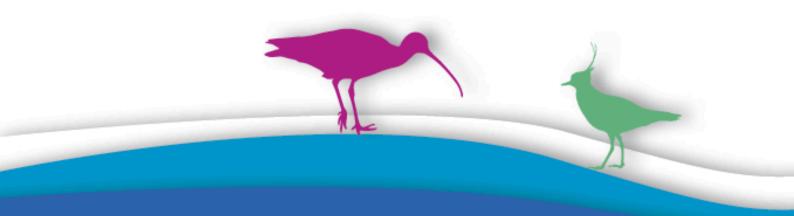
The actions of this Plan will include actions aimed at addressing climate change impacts. After all, we rely on biodiversity and ecosystem services, not only for our survival, but also for regulating our climate, helping to buffer against climate change and extreme weather events.

Helping biodiversity can also help us

Assisting biodiversity to adapt to climate change will have wider benefits for society, both in terms of ecosystem services and human adaptation to climate change.

Biodiversity and ecosystems provide society with many essential services, which will become ever more important as the climate changes. Many of the measures to protect and enhance biodiversity will have knock-on benefits for society, such as, flood protection, climate regulation, carbon sequestration, tourism and recreation benefits. The speed and scale of climate change means we need to take action now.

Biodiversity, through the ecosystem services it supports, can make an important contribution to reducing the negative effects of climate change (CBD Secretariat, 2016). For example, habitats, such as woodlands, wetlands and reedbeds at Ballycourus, Loughlinstown woodlands, or Booterstown Marsh can help to both mitigate the effects of climate by removing Carbon Dioxide from the atmosphere, and reduce the impacts of climate change by stabilising slopes or slowing flood waters in catchments. Indeed, natural environments provide a wide range of ecosystem services (MEA, 2005), many of which effectively buffer communities from the adverse effects of climate change at low cost. In recognition of these benefits, naturebased solutions are increasingly recognised as effective low-cost solutions to both the causes and consequences of climate change.





Biodiversity Climate Change



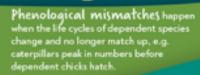
Upsetting nature's clock

The earlier arrival of spring changes the life cycles of many plants which provide food and habitat for other species.



Habitat fragmentation happens when natural landscapes are broken up by development, such as roads, which interrupt ecological corridors.

A changing climate will make trees and woodlands more stressed, and more vulnerable to widespread mortality from insect and disease threats.



competition for resources among species, as well as bigger and more frequent infestation outbreaks.



Many species won't be able to adapt quickly enough to changes in their environment.

Range changes

Climate change can cause range habitats shrink even further.

Many ecosystems are vulnerable to impacts from the influx of INVASIVE Alien Species and diseases.

Habitat destruction

In grassland ecosystems, the fluctuations between drought and flooding will harm some of our few remaining natural orchid-rich grasslands.

Extreme storms and rising sea levels can cause coastal squeeze

Climate change causes harmful algae growth in habitats also threatened by overfishing, pollution and wetland drainage.



Conservation & Adaptation

Protect - our important terrestrial and marine habitats and species Connect - wildlife corridors, fish passes, remove culverts where possible and create more connections.

Restore - ecosystems such as river corridor habitats, wetlands and other important habitats and species.

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Working with nature, rather than against it, can further pave the way towards a more resource efficient, competitive and greener economy. (EU, 2020)



Biodiversity is at the core of Nature-based Solutions

Manmade engineering or grey approaches to addressing risks, such as flooding, do not always address the root causes of risk, and can increase the vulnerability of populations over the long-term. Therefore, it is recognised that nature and ecosystems often provide better solutions.

The EU defines nature-based solutions to societal challenges "as solutions that are

inspired and supported by nature, which are cost-effective, and simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more and more diverse nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient, and systemic interventions."

Nature-based Solutions

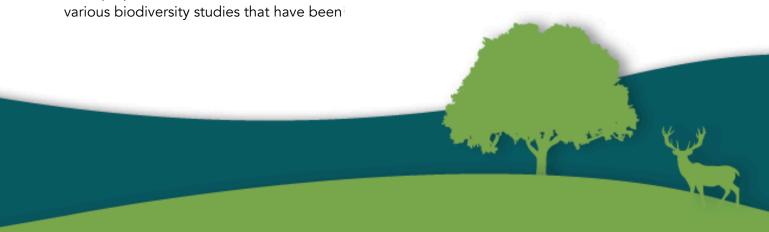
The concept of Nature Based Solutions is grounded in the knowledge that healthy natural and managed ecosystems produce a diverse range of services on which human wellbeing depends, from storing carbon, controlling floods and stabilising shorelines and slopes to providing clean air and water, food, fuel and medicines.

County-wide Ecological Network

A draft map showing the County-wide Ecological Network, stretching from the mountains to the sea, is provided in our draft County Development Plan 2022-2028. This map will also form part of the DLR Biodiversity Action Plan 2021-2025, and has been prepared using data derived from the various biodiversity studies that have been

undertaken. It is currently under review as more recent surveys are added.

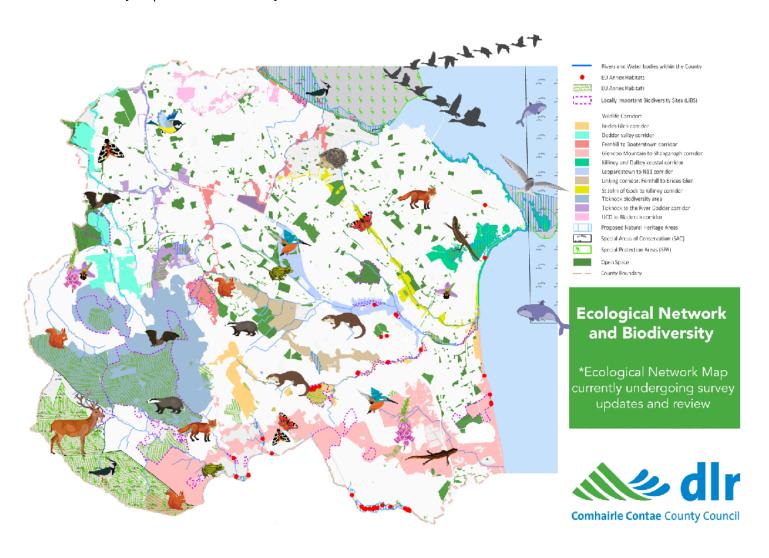
The most important biodiversity areas across the county that form the ecological network will be shown on the map. Other areas may arise, during the course of surveys and data collation, in coming years.



Some of these areas overlap due to their importance at various levels of international, national, county and local levels. These include:

- EU Natura 2000 protected sites, which comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)
- 2. Nationally protected nature conservation sites called 'proposed Natural Heritage Areas' (pNHAs)
- **3.** EU Annex I Habitats, e.g. EU priority habitat 'Petrifying Springs with Tufa Formation (Cratoneurion) 7220
- 4. EU Annex I Species, e.g. Otter
- **5.** Wildlife Corridors Watercourses, riparian habitats and other associated habitats
- 6. Locally Important Biodiversity Sites

This network forms our DLR Green Infrastructure and the importance of *protecting* and *restoring* our Ecological Network across the county is recognised by DLR. This Network also extends beyond the county into neighbouring counties.



EU Natura 2000 sites (European sites)

EU Natura 2000 sites are internationally protected sites that have been designated specifically to protect core areas for a subset of species or habitat types listed in the Habitats and Birds Directives. They are deemed to be of European importance because they are endangered, vulnerable, rare, endemic or present outstanding examples of typical characteristics of one or more of Europe's nine biogeographical regions. In total, there are around 2,000 species and 230 habitat types for which core sites need to be designated as Natura 2000 sites. For example, in Dún Laoghaire-Rathdown, we have Natura 2000 sites such as South Dublin Bay SAC, which contains habitat types such as mudflats and sandflats that are protected.

Proposed Natural Heritage Areas

Ireland's national designations for wildlife are the Natural Heritage Area (NHA) and proposed Natural Heritage Area (pNHA). These are areas considered important for the habitats present or which hold species of plants and animals whose habitat needs protection. For example, in Dún Laoghaire-Rathdown, this includes pNHAs, such as Loughlinstown Woods pNHA, which contains important native woodland.

EU Annex I habitats

EU Annex I habitats are habitats listed in Annex I of the Habitat Directive that are of EU Community Interest. The directive defines habitats of EU Community Interest as those that (i) are in danger of disappearance in their natural range; or (ii) have a small natural range following their regression or by reason of their intrinsically restricted area; or (iii) present outstanding examples of typical characteristics of one or more of the seven biogeographical regions.

These can occur within a Natura 2000 site as described above or they can occur outside a Natura 2000 site, as individual areas of Annex I habitat. For example, in Dún Laoghaire-Rathdown, there are tufa springs that occur within the Natura 2000 site of Ballyman Glen SAC, but they also occur in other parts of the county, such as Shanganagh Cliffs or Cherrywood.

Wildlife Corridors

In an increasingly urbanised county, wildlife corridors are vital for the survival of countless species, such as badgers, hedgehogs, bats and birds. They bridge the gap between habitats, which otherwise would be small and isolated, and join them together. Linking core wildlife habitats helps to restore and preserve biodiversity, allowing movement between important





habitats to maintain genetic diversity in wildlife populations. Without this, local extinctions can occur. They provide refuge and foraging areas, they store carbon and regulate our water flows and water quality, clean our air, and provide resilience to climate change. Our wildlife corridors include our watercourses, riparian habitats, hedgerows, treelines and other associated habitats, such as wet grassland, scrub and woodland.

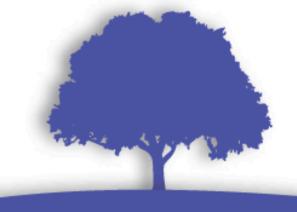
Locally important biodiversity sites

Locally Important Biodiversity Sites (LIBSs) are areas that are outside of protected areas, but which form an integral part of the ecological network across a county, and are considered important at a local level and provide a range of ecosystem services to communities. They have no formal designation but are sites which are worthy of protection and enhancement, providing additional benefits to and supporting protected areas. They do not include/ overlap with protected sites, but may be adjacent to them. These include areas in our parks, along our wildlife corridors, areas of wetlands, grasslands,

heath, fen and other habitats; as well as habitats that contain rare or important flora and fauna species.

Open Spaces

A lot of our open spaces contain areas that are important for biodiversity and this is reflected in the fact that some of our parks are included in our Locally Important Biodiversity Sites. Parks across the county contain meadows, hedgerows, native trees, and wetlands, and fauna, such as badgers, bats, otters, hedgehogs, birds amongst other species live or forage in some of our parks and residential green spaces. Our wildlife corridors, which provide connectivity and allow species to move and forage throughout the county, often pass through our green spaces in the form of a river, a stream, a treeline or a hedgerow, all forming important elements of the wider ecological network.



DRAFT Themes, Objectives and Actions

The draft Themes, Objectives and Actions of the DLR Biodiversity Action Plan 2021-2025 are set out in the following pages and these also reflect the objectives of the National Biodiversity Action Plan 2017-2021, the EU Biodiversity Strategy 2030, and includes cooperation with our Partners.



Theme 1 Reaching a deeper understanding of our county's biodiversity

Action 1.1 Gather information and map our biodiversity within DLR Action 1.2 Map all Locally Important Biodiversity Sites (LIBS) within DLR and identify opportunities to increase the number of sites Action 1.3 Identify and map all important species within DLR Action 1.4 Develop DLR Habitat and Species Action Plans of our terrestrial, coastal and marine areas Action 1.5 Map and protect our important hedgerows and promote native hedgerow enhancement and planting Action 1.6 Update our County Ecological Network Map to protect and enhance DLR'S Green Infrastructure Action 1.7 Identify important biodiversity areas most vulnerable to climate change, including terrestrial, watercourses, coastal and marine areas, and establish measures and projects that assist protection of vulnerable areas Action 1.8 Provide a central place for all biodiversity data for decision makers in DLR Action 1.9 Provide a map browser at appropriate scale to provide biodiversity information for the public Action 1.10 Support and encourage the volunteer network and local communities to carry out biological recording and citizen science projects that contribute to our biodiversity information and protection of biodiversity Action 1.11 Assess the overall state of our biodiversity resource in the county

Objective 1: Strengthen the knowledge base for conservation, management, and sustainable use of biodiversity



Theme 2 Making good decisions for biodiversity

- Action 2.1 Develop best management guidelines for important habitats and species within DLR, and communicate these to the public, decision makers, landowners, managers and other land users
- Action 2.2 Input into the County Development Plan, Local Area Plans, Special Amenity Area Orders, County Tree Strategy and Historic Landscape Character Assessments, all of which offer potential in terms of addressing biodiversity at local level
- Action 2.3 Undertake an audit of current council policies and plans to improve the mainstreaming of biodiversity
- Action 2.4 Produce an Invasive Alien Species (IAS) Action Plan and ensure the implementation and monitoring of actions
- Action 2.5 Develop biodiversity management plans for open spaces within DLR ownership and update existing plans
- Action 2.6 Develop our Ecological Network Maps to inform planning and decision making
- Action 2.7 Produce guidance on net gains for biodiversity, including guidance for strategies, planning, mitigation measures, and investment in green infrastructure.
- Action 2.8 Develop guidance related to Biodiversity, Ecosystem Services and Planning, to help those involved in Planning to ensure that development within the County protects and enhances our valuable biodiversity
- Action 2.9 Develop best practice guidance for Biodiversity and Greenway Developments to reduce the impacts of greenways on existing biodiversity and for the protection of existing biodiversity, enhancement of biodiversity and for biodiversity gains.
- Action 2.10 Incorporate the Inland Fisheries Ireland guidance: *Planning for watercourses in the Urban Environment* into our plans and policies.

Objective 2: Mainstream biodiversity into decision-making and improve the management of this valuable resource

Net gains for Biodiversity

Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected. In this way it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored. This approach has been developed in the UK and forms part of legislation and government policy there. DLR will aim to promote such an approach by providing guidance and information towards adapting and achieving gains for biodiversity.⁷

Theme 3 Powerful actions to protect biodiversity and us

- Action 3.1 Identify and map habitats, species and supporting features that provide ecosystem services
- Action 3.2 Work in collaboration with NPWS and others to score ecosystem services for habitats at a local level in DLR
- Action 3.3 Strengthen our understanding of natural capital and ecosystem services and incorporate into policy and decision-making in DLR
- Action 3.4 Identify opportunities where ecosystems can be restored and enhanced, including terrestrial, river, coastal and marine ecosystems.
- Action 3.5 Develop and implement appropriate rewilding projects in DLR and extend our local biodiversity areas within DLR
- Action 3.6 To protect, restore and expand our County Ecological Network and DLR'S Green Infrastructure.

 Deliver Nature Recovery and Restoration as part of our Ecological Network and promote the use of nature-based solutions where these solutions allow the delivery and expansion of our Ecological Network.
- Action 3.7 Carry out ecological surveys and assessment of our habitats, including hedgerows, rivers and streams, to provide information regarding areas that require restoration in order to deliver Nature Recovery and Restoration and expansion of our Ecological Network.
- Action 3.8 Continue to implement the biodiversity actions of the Dalkey Island Heritage Plan
- Action 3.9 Complete the actions for councils outlined in the All-Ireland Pollinator Plan, and create areas for wildlife and pollinators
- Action 3.10 Protect existing swift nesting sites where possible; establish new sites in existing public and private properties; and request artificial swift nest boxes as part of new development in DLR
- Action 3.11 Continue the Red Squirrel Project and extend project to Fernhill
- Action 3.12 Continue to protect the Calcareous Wetland and Flora at Kingston, Kiltiernan
- Action 3.13 Protect and enhance Booterstown Marsh, an important, unique coastal area within DLR and an EU Natura 2000 site
- Action 3.14 Protect the sand martin colonies along our coastline, which occur in the coastal cliffs
- Action 3.15 Develop a Habitat Management Plan for Shanganagh Coast and Cliffs
- Action 3.16 Promote the creation of nature-based solutions (NBS), such as biodiversity roofs (brown roofs), pollinator areas, native hedgerow planting, wetlands and other NBS to promote biodiversity, as part of NBS for new developments and other projects
- Action 3.17 Promote local seed collection by qualified professionals, including for new developments, in order to keep our seed sources local
- Action 3.18 Continue to support conservation grazing at Fernhill Park and Gardens and to develop other public lands for conservation grazing
- Action 3.19 Develop habitats for reptiles and amphibians which also provide habitat for other species.

Objective 3: Conserve and restore biodiversity and ecosystems, and support ecosystem services in DLR, including coastal and marine.

Theme 4 Connecting People and Nature & Inspire a Positive Future

- Action 4.1 Provide education and raise awareness of biodiversity and ecosystem services among the public, decision makers and educators
- Action 4.2 Provide Information on biodiversity and ecosystem services through the DLR website and publications
- Action 4.3 Organise activities and events to promote biodiversity, ecosystems and ecosystem services
- Action 4.4 Establish training and education programmes to promote appreciation of biodiversity, ecosystems and ecosystem services
- Action 4.5 Establish and promote positive examples of cooperative local community biodiversity projects or demonstration models
- Action 4.6 Provide education and raise awareness of the impacts of climate change on biodiversity
- Action 4.7 Raise awareness of the physical and mental health benefits of biodiversity
- Action 4.8 Provide training to the public in relation to reptile and amphibian surveys with the Herpetological Society of Ireland (HSI)

Objective 4: Increase awareness, training and appreciation of biodiversity, ecosystems and ecosystem services



Theme 5 Strength in Working Together

- Action 5.1 Engage with local communities and business communities to develop local biodiversity projects
- Action 5.2 Work with our Dublin Bay Biosphere Partners to promote sustainable use of the DLR biodiversity resource in the Biosphere
- Action 5.3 Support implementation of the Dublin Bay Biosphere Nature Conservation Strategy, Education and Awareness strategy
- Action 5.4 Carry out a study of marine ecosystems and develop marine ecosystem restoration projects with our Biosphere Partners
- Action 5.5 Work with government departments and the public in relation to the designation of Marine Protected Areas
- Action 5.6 Work with other local authorities to strengthen our knowledge of important habitats and species
- Action 5.7 Work with other local authorities to fund satellite-tracking studies of winter birds listed as qualifying features in European sites and other important species
- Action 5.8 Provide supports to BirdWatch Ireland for the Dalkey Island Tern Project, Swift conservation, and other important bird projects
- Action 5.9 Work with LAWPRO to develop ways to protect and enhance our river wildlife corridors and waterway ecosystems
- Action 5.10 Work with our Climate Action Regional Offices (CARO) Partners, NPWS and others to ensure the protection of biodiversity in the face of Climate Change
- Action 5.11 Dún Laoghaire-Rathdown County Council is a partner in the Dublin Mountains Partnership. The Biodiversity Officer will liaise with this forum to promote the protection and enhancement of biodiversity.
- Action 5.12 Work with Coillte Nature for the protection and enhancement of biodiversity, including Red Squirrel.
- Action 5.13 Work with our colleagues across our own organisation in DLRCC and collaborate on biodiversity projects, including nature-based solution projects.
- Action 5.14 Work with NPWS and community groups to develop woodland management plans for the protection of Loughinstown Woods pNHA and Fitzsimons Woods pNHA.
- Action 5.15 Engage with third level institutions to support and to develop biodiversity research in DLR

Objective 5: Strengthen the effectiveness of collaboration between all stakeholders for the conservation of biodiversity, including with Local Communities, Local Authority Biodiversity Officers, LAWPRO, the National Biodiversity Data Centre, BirdWatch Ireland, NPWS and other State Bodies.

Monitoring and tracking our Plan

Undertake an annual review of the implementation and success of the Actions proposed in the Biodiversity Action Plan 2021-2025 and future plans.

A DLR seashore biodiversity workshop





Theme 1 Reaching a deeper understanding of our county's biodiversity

Objective 1: Strengthen the knowledge base for conservation, management, and sustainable use of biodiversity

Biodiversity Actions	Agencies & Partners	Indicators	Target	Climate Change Impacts	Climate proofing
Action 1.1 Gather information and map our biodiversity within DLR	NPWS, Biosphere Partners, Third level, Universities, NBDC, Public - Citizen Science	Number of habitats and species for which good data exists Number of surveys of habitats and species completed annually GIS Maps produced and updated	Collation of information regarding our biodiversity resource for its appropriate management, protection and enhancement	Potential negative impacts on our biodiversity resource due to climate change	Information on our biodiversity resource is vital to help manage our natural resources in order to provide ecosystem services and resilience to climate change
Action 1.2 Map all Locally Important Biodiversity Sites (LIBS) within DLR and identify opportunities to increase the number of sites	NPWS, BirdWatch Ireland (BWI), An Taisce, Herpetological Society of Ireland (HSI), Bat Conservation Ireland (BCI), Botanical Society of Britain and Ireland (BSBI)	Extent (Ha/Km) of Locally Important Biodiversity Sites (LIBS) for which good data exists Extent of LIBS (Ha/Km) identified and mapped Number of LIBS across the county GIS Maps produced and updated	Identification and collation of information regarding biodiversity areas of local and county importance, in order to protect and enhance these areas – and their ecosystem services	Potential negative impacts on our biodiversity resource due to climate change	Information on our biodiversity resource is vital to help manage our natural resources in order to provide ecosystem services and resilience to climate change
Action 1.3 Identify and map all important species within DLR	NPWS, BWI, An Taisce, HSI, BCI, BSBI	Number of Important species identified Number of species surveys completed Number of Species Action Plans across the four Dublin local authorities GIS Maps produced and updated	Collate information, identify and map all important species within DLR, in order to protect and enhance these areas – and their ecosystem services	Potential negative impacts on our biodiversity resource due to climate change	Information on our biodiversity resource is vital to help manage our natural resources in order to provide ecosystem services and resilience to climate change
Action 1.4 Develop DLR Habitat and Species Action Plans of our terrestrial, coastal and marine areas	NPWS, Fingal County Council (FCC), Dublin City Council (DCC), South Dublin County Council (SDCC)	Extent (Ha) of EU Annexed habitats and number of EU Annexed species for which good data exists. Extent (Ha) of EU Annexed habitats and populations of species surveyed and mapped Number of Habitat Action Plans across the four Dublin local authorities GIS Maps produced and updated	Collation of information on EU Annexed habitats and species, in order to protect and enhance these areas – and their ecosystem services	Potential negative impacts on our biodiversity resource due to climate change	The aim is to conserve protected areas and their important species. These areas have characteristics that will continue to favour high levels of biodiversity. These areas provide ecosystem services and resilience to climate change
Action 1.5 Map and protect our important hedgerows and promote native hedgerow enhancement and planting	DLR Planning, DLR Parks, NPWS, BWI, Landowners	Completion of a new county hedgerow survey Implementation of recommendations Inclusion of the survey in our County Ecological Network Map	Collation of information on important hedgerows in order to protect and enhance these areas – and their ecosystem services	Potential negative impacts on our biodiversity resource due to climate change	Hedgerows are important wildlife corridors and have characteristics that will continue to favour high levels of biodiversity. They provide ecosystem services and resilience to climate change.

Biodiversity Actions



Agencies & **Partners**



Indicators

Target



Climate Change Impacts



Climate proofing



Action 1.6

Update our County Ecological Network Map to protect and enhance DLR'S Green Infrastructure

DLR Planning,

DLR Parks, NPWS, BWI, An Taisce, Herpetological Society, Bat Conservation Ireland, Local Authority Waters Programme

Completion of our current County Ecological Network Мар

Inclusion in the DLR County Development Plan

Inclusion of pollinator areas on the network

Provide easily accessible and userfriendly information and data on our County Ecological Network to inform decision-makers and others

Without joined-up thinking on climate change and biodiversity loss, the impacts of both will result in losses in ecosystem services

Provide more integrated decision making to climate change and biodiversity

Action 1.7

Identify important biodiversity areas most vulnerable to climate change, including terrestrial, watercourses, coastal and marine areas, and establish measures and projects that assist protection of vulnerable areas

NPWS, Department of Marine

(LAWPRO)

Completion of report on the relevant important areas vulnerable to climate change

Extent (Ha) mapped

Protection measures identified and implemented To identify important areas that may require strict protection in the

To identify the protection measures required

Climate change pressures can cause habitat fragmentation, habitat loss and associated loss of species

Increase resilience to climate change by protecting important areas for biodiversity against the impacts of climate change

Action 1.8

Provide a central place for all biodiversity data for decision makers in DLR

DLR GIS Technical, DLR Forward Planning

Completion of GIS Browser for Biodiversity Maps by 2023

Completion of Wildlife Corridor Plan Mapping for Planners and Decision Makers in 2021

Completion of our current Ecological Network Map

Provide easily accessible and userfriendly information and data to inform decision makers and others

Without joined up thinking on climate change and biodiversity, the impacts of both will result in biodiversity loss and ecosystem services

Provide a more integrated information source for decision makers in relation to climate change and biodiversity

Action 1.9

Provide a map browser at appropriate scale to provide biodiversity information for the public

NPWS, NDBC. DLR Drawing Office and GIS

Public Map Browser available on DLR Website

Provide easily accessible and userfriendly information to the public and raise awareness of the value and importance of biodiversity

The drivers of biodiversity loss today are human impacts, land use pressures, climate change and invasive species.

Provide information on biodiversity, to raise awareness and help reduce biodiversity loss, in order that biodiversity can provide ecosystem services and resilience to climate change

Action 1.10

Support and encourage the volunteer network and local communities to carry out biological recording and citizen science projects that contribute to our biodiversity of biodiversity

NBDC, BWI, NPWS, Local groups, DLR Volunteers

Number of records submitted to NBDC

Number of participants in volunteer organisations. Number of projects where data is gathered by citizen scientists

Provide support to community groups and DLR Volunteers The drivers of biodiversity loss today are human impacts, land use pressures, climate change and invasive species.

Support local volunteers and communities to help reduce biodiversity loss, in order that biodiversity can provide ecosystem services and resilience to climate change

Action 1.11

Assess the overall state of our biodiversity resource in the county

NBDC, BWI, NPWS, Universities **Ecologists**

Assessment and analysis report completed.

Implementation of measures to address any issues highlighted.

Collation of information regarding our biodiversity resource for its appropriate management, protection and enhancement

Potential negative impacts on our biodiversity resource due to climate change

Information on our biodiversity resource is vital to help manage our natural resources in order to provide ecosystem services and resilience to climate change

Theme 2 Making good decisions for biodiversity

Objective 2: Mainstream biodiversity into decision-making and improve the management of this valuable resource

Biodiversity Actions



Agencies & Partners

Indicators

Target



Climate proofing



Action 2.1

Develop best management guidelines for important habitats and species within DLR, and communicate these to the public, decision makers, landowners, managers and other land users DLR Planning Section, Developers, Landowners, four Dublin local authorities, NPWS

- Number of guidelines produced including:
- Guidance for management of watercourses for Otter
- Ecological Guidance for Design of Greenways
 Habitat and Species Action Plans acros
- Habitat and Species Action Plans across the Four Dublin Local Authorities
- Instream Management for Biodiversity -Guidance and Toolbox talks – Water and Drainage works (Biodiversity Training)
- Best Practice Invasive Species Guidance for Developers and LAs

Provide advice and guidance on important habitats and species

The drivers of biodiversity loss today are human impacts, land use pressures, climate change and invasive species.

Climate Change

Provide guidance, to reduce biodiversity loss, in order that biodiversity can provide ecosystem services and resilience to climate change

Action 2.2

Input into the County
Development Plan, Local
Area Plans, County Tree
Strategy, Special Amenity
Area Orders and Historic
Landscape Character
Assessments, all of which
offer potential in terms of
addressing biodiversity at
local level

DLR Forward Planning DLR Planning Development Objectives and Actions identified from the County Biodiversity Action Plan that have been integrated into each DLR Plan

Number of Policies and Plans demonstrating the integration of Biodiversity

Use of the Ecological Network Maps to inform policies and plans

To integrate Biodiversity Objectives from the County Biodiversity Action Plan into each DLR Policy and Planning Without joined-up thinking on climate change and biodiversity, the impacts of both will result in biodiversity loss and ecosystem services loss

Provide a more integrated approach to decision making in relation to climate change and biodiversity

Action 2.3

Undertake an audit of current council policies and plans to improve the mainstreaming of biodiversity All DLR sections

- Policies, guidelines and administrative mechanisms identified through a Biodiversity Audit
- Policies, Plans and Projects demonstrating the integration of Biodiversity
- Number of actions completed from the DLR Climate Change Action Plan 2019-2024 relating to biodiversity
- Number of actions completed from the DLR IAS Action Plan relating to biodiversity
- Projects demonstrating restoration and conservation of ecosystems
- Guidance completed for Implementing Nature Based Flood Protection
- Principles and Workshop
- Use of the County Ecological Network Map to inform policies and plans

To identify gaps and ensure that biodiversity is incorporated into each DLR policy and plan Without joined-up thinking on climate change and biodiversity, the impacts of both will result in biodiversity loss and ecosystem services loss Provide a more integrated approach to decision making in relation to climate change and biodiversity

Action 2.4

Produce an Invasive Alien Species (IAS) Action Plan and ensure the implementation and monitoring of actions All DLR sections, NBDC, NPWS, Local Communities

- Completion of the DLR IAS Action Plan
- Grey Squirrel Project ongoing in consultation with NPWS
- \bullet Completion of DLR IAS Map
- Establishment of the DLR Section Leads for IAS actions
- Number of actions completed by 2025 by various Section Leads

Invasive species are identified, priority species controlled or eradicated, and pathways managed to prevent new invasive species from impacting

on biodiversity.

The drivers of biodiversity loss today are human impacts, land use pressures, climate change and invasive species. Provide a more integrated approach to decision making in relation to climate change and biodiversity Agencies & Partners

Biodiversity Actions

Climate Change

Climate proofing

bloatversity Actions	Agencies & Faturers	Indicators	Ø	Impacts	S
Action 2.5 Develop biodiversity management plans for open spaces within DLR ownership and update existing plans	DLR Parks, DLR Water and Drainage	Parks ecology surveys and management plans	To manage biodiversity in our Parks	Without joined-up thinking on climate change and biodiversity, the impacts of both will result in biodiversity loss and ecosystem services loss	Provide a more integrated approach to decision making in relation to climate change and biodiversity
Action 2.6 Develop our Ecological Network Maps to inform planning and decision making	DLR Sections, NPWS, NBDC	Input to the new Green Infrastructure (GI) Strategy in line with the EU GI Strategy and the fundamental role of biodiversity, including its protection and enhancement	Protection of our Ecological Network Increase our resilience to climate change	Climate change can cause fragmentation and damage to our Ecological Network.	Protecting our Ecological Network (which is the backbone of our Green Infrastructure) will help our resilience to climate change, including threats such as flooding.
Action 2.7 Produce guidance on net gain for biodiversity, including guidance for strategies, planning, mitigation measures, and investment in green infrastructure	NPWS, DLR Planning, Consultant Ecologists, Developers	Guidance on Biodiversity Net Gain completed.	Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better state than beforehand.	Climate change impacts, along with other pressures such as development, can result in biodiversity loss.	Provide guidance on biodiversity net gain and increase our resilience to climate change.
Action 2.8 Develop guidance related to Biodiversity, Ecosystem Services and Planning, to help those involved in Planning to ensure that development within the County protects and enhances its valuable biodiversity	NPWS, DLR Planning, Consultant Ecologists and Environment specialists, Developers	Guidance on Biodiversity, Ecosystem Services and Planning GIS Mapping integrated into the Planning GIS tools	Provide guidance to Planners to assist with decision making related to biodiversity.	Climate change impacts, along with other pressures such as development, can result in biodiversity loss.	Provide guidance and tools to Planners in order to improve our resilience to climate change.
Action 2.9 Develop best practice guidance for Biodiversity and Greenway Developments to reduce the impacts of greenways on existing biodiversity, and enhancement of biodiversity and for biodiversity gains.	NPWS, NTA, Infrastructure & Climate Change Department, DLR Transport, DLR Roads, DLR Parks, Consultant Ecologists and Environment specialists, Consultant Engineers, Developers	Guidance on Greenways and Biodiversity	Provide guidance to Transport and Roads to assist with decision making related to biodiversity.	Climate change impacts, along with other pressures such as development, can result in biodiversity loss.	Provide guidance for better decision making in order to improve our resilience to climate change.
Action 2.10 Incorporate the Inland Fisheries Ireland guidance: Planning for watercourses in the Urban Environment into our plans and policies	DLR Planning, LAWPRO, IFI	Implementation of best practice into our plans and policies	Provide guidance to assist with decision making related to biodiversity.	Climate change impacts, along with other pressures, such as development can result in biodiversity loss.	Provide guidance for better decision making in order to improve our resilience to climate change, in particular, flooding and water quality impacts.

Indicators

Target

Theme 3 Powerful actions to protect biodiversity and us

Objective 3: Conserve and restore biodiversity and ecosystems, and support ecosystem services in DLR, including coastal and marine.

Biodiversity Actions Agencies & Indicators Climate Change Climate proofing **Target** Partners Impacts DLR, NPWS, EPA, To establish Knowledge of the Action 3.1 • Completion of an ecosystem Climate change INCASE Project, services map for biodiversity in threatens biodiversity value of ecosystem Identify and map habitats, baseline Biosphere Partners information on and causes significant services is important to Number of habitats and and others ecosystem services alterations to the supply enhancing biodiversity species that have been scoring and natural of ecosystem services to improve resilience assessed for extent and capital accounting that are vital for human to climate change condition. wellbeing. Completion of DLR Natural Capital Accounting, using baseline information on extent and condition **NPWS** Map produced of ecosystem To establish Climate change Knowledge of the Action 3.2 services for biodiversity in DLR baseline threatens biodiversity value of ecosystem information on and causes significant services is important to NPWS and others to score Habitats with an ecosystem ecosystem services alterations to the supply enhancing biodiversity scoring and natural of ecosystem services service score to improve resilience habitats at a local level in capital accounting that are vital for human to climate change wellbeina. Action 3.3 DLR All Sections, • Number of presentations to Integrating Climate change Highlighting the **NPWS** DLR decision makers, including ecosystem services threatens biodiversity interrelationship the promotion and use of DLR into policy, and causes significant between biodiversity, Ecosystem Services - Benefits planning and alterations to the supply ecosystem services and climate change in of Biodiversity Animation of ecosystem services practice • Number of objectives relating that are vital for human decision making wellbeing. to ecosystem services and natural capital in DLR County Development Plan 2020-2025 (incl. Green Infrastructure) Continue to develop **Ecosystem Services Scoring** and Natural Capital Accounting, which provide tools for decision makers DLR All Sections. Restoration and enhancement Action 3.4 Investment in Climate change Enhancing biodiversity NPWS, Inland projects of ecosystems ecosystem threatens biodiversity and ecosystem Fisheries, LAWPRO, undertaken across all DLR restoration and and causes significant services to improve EPA, Dept of Marine, departments enhancement alterations to the supply resilience to climate landowners, local projects to of ecosystem services change terrestrial, river, coastal and Number of Nature Based mitigate habitat that are vital for human communities marine ecosystems Solutions Flood Projects loss, conserve wellbeing biodiversity, and demonstrating restoration and boost ecosystem conservation of ecosystems services NPWS, Inland Number of appropriate rewilding Investment in Climate change Enhancing biodiversity Action 3.5 threatens biodiversity Fisheries, EPA. projects completed and ecosystem ecosystem LAWPRO, DLR Parks, restoration and and causes significant services to improve DLR Water and enhancement alterations to the supply resilience to climate

projects to

mitigate habitat

biodiversity, and

boost ecosystem services

loss, conserve

of ecosystem services

wellbeing

that are vital for human

change

Drainage,

Infrastructure &

Climate Change

Department, local

our local biodiversity areas

Biodiversity Actions



Agencies & Partners



Indicators



Target

Climate Change Impacts



Climate proofing



Action 3.6

To protect, restore and expand our County Ecological Network and DLR'S Green Infrastructure. Deliver Nature Recovery and Restoration as part of our Ecological Network and promote the use of nature-based solutions where these solutions allow the delivery and expansion of our Ecological Network.

NPWS, Inland Fisheries, EPA, LAWPRO, DLR Parks, DLR Water and Drainage, Infrastructure & Climate Change Department, other Local Authorities Area (HA) or length (KM) recovered

Investment in ecosystem restoration, NBS and ecological network projects to mitigate habitat loss, increase connectivity, conserve biodiversity, and boost ecosystem services

Climate change threatens biodiversity and causes significant alterations to the supply of ecosystem services that are vital for human well-being Enhancing biodiversity, connectivity and ecosystem services to improve resilience to climate change

Action 3.7

Carry out ecological surveys and assessment of our habitats, including hedgerows, rivers and streams, to provide information regarding areas that require restoration in order to deliver the recovery of our Ecological Network

NPWS, Universities, Ecologists Number of surveys completed and areas identified for restoration

To establish baseline information areas in need of investment and recovery of our Ecological Network Climate change can cause fragmentation and damage to our Ecological Network. Restoring and protecting our Ecological Network (which is the backbone of our Green Infrastructure) will help our resilience to climate change including threats such as flooding.

Action 3.8

Continue to implement the biodiversity actions of the Dalkey Island Heritage Plan DLR Parks, DLR Heritage, BWI, NPWS, Biosphere Partners

- Tern species population returning annually
 Tern species young
- Iern species young successfully fledged annuallyGoat population maintained
- on island
 Area of habitat unchanged
- or improving (Ha)
 Presence of rare plants

Management of Dalkey Island, in order to protect and enhance the island for tern species, habitats and flora, including rare plant species – and their The drivers of biodiversity loss today are human impacts, including visitor pressures to natural areas, climate change and invasive species. Protecting and enhancing biodiversity and ecosystem services to improve resilience to climate change

Action 3.9

Complete the actions for councils outlined in the All-Ireland Pollinator Plans 2015-2020 and 2021-2025, and create areas for wildlife and pollinators

DLR Sections, Local Communities, e.g. Tidy Towns, Residents' Associations; NBDC

- Pollinator Areas created and increasing
- Enhancements of Biodiversity including Wildlife Corridors and Green Infrastructure
- Council pollinator-friendly actions completed
- Ecosystem Services Scoring of Biodiversity and Wildlife Corridors and the level of increased scoring achieved through habitat restoration, enhancements and rewilding projects.

Increase pollinatorfriendly areas across the county

ecosystem services

Climate change pressures can cause the loss of wildlife corridors and refuges and loss of pollinators, resulting in loss of ecosystem services. Enhancing biodiversity and ecosystem services to improve resilience to climate change

Action 3.10

Protect existing swift nesting sites where possible; establish new sites in existing public and private properties; and request artificial swift nest boxes as part of new suitable development in DLR

DLR Sections, Schools, Swift Conservation Group, BWI Number of successful swift nesting boxes and monitoring of these

Map completed of the locations of existing and newly created swift nests

populations to survive the threats of climate change and to address threats to swifts from renovation of old buildings and development

To assist swift

Increased storms and wet weather are affecting swift migration and threatening their populations as a result of climate change, along with the renovation of old buildings which causes a loss of nesting sites.

Enhancing biodiversity to improve resilience to climate change

Action 3.11

Continue the Red Squirrel Project and extend project to Fernhill

NPWS Research, UCD, DLR Parks Red squirrel juveniles annually in Killiney Hill and viable population

Red squirrel in Fernhill

To assist the Red Squirrel population to survive in Killiney Hill Park and to monitor their use of Fernhill Park Habitat fragmentation and habitat loss as a result of climate change impacts on the red squirrel populations and their survival Protecting biodiversity to improve resilience to climate change

Biodiversity Actions	Agencies & Partners	Indicators	Target	Climate Change Impacts	Climate proofing
Action 3.12 Continue to protect the Calcareous Wetland and Flora at Kingston, Kiltiernan	NPWS, DLR Water and Drainage	Monitoring surveys completed every 3 years	To protect the important EU Annex habitats at Kingston and prevent their loss	The drivers of biodiversity loss today are land use pressures, climate change and invasive species.	Protecting biodiversity to improve resilience to climate change
Action 3.13 Protect and enhance Booterstown Marsh, an important, unique coastal area within DLR and an EU Natura 2000 site	NPWS, An Taisce, DLR Parks, DLR Water and Drainage	Monitoring programme developed and implemented annually	To protect the important EU Annex habitats and species at Booterstown Marsh and to prevent their deterioration and loss	The drivers of biodiversity loss today are land use pressures, climate change and invasive species.	Protecting biodiversity to improve resilience to climate change
Action 3.14 Protect the sand martin colonies along our coastline which occur in the coastal cliffs	NPWS, BWI, DLR Infrastructure and Climate Change Department, and Water and Drainage Department	Awareness campaign of the occurrence of these species to DLR staff and to the public, in particular in relation to coastal protection projects	To protect the sand martin colonies	Climate change related projects may impact on biodiversity	Protecting biodiversity to improve resilience to climate change
Action 3.15 Develop a Habitat Management Plan for Shanganagh coast and cliffs	NPWS, BWI, DLR Infrastructure and Climate Change Department, and Water and Drainage Department	Habitat Management Plan completed	To provide an understanding of the biodiversity role of the coastal habitats along the Shanganagh coastline and for their appropriate management	Climate change related projects and coastal erosion may impact on biodiversity	Protecting biodiversity to improve resilience to climate change
Action 3.16 Promote the creation of nature-based solutions (NBS), such as biodiversity roofs (brown roofs), pollinator areas, native hedgerow planting, wetlands and other NBS to promote biodiversity, as part of NBS for new development and other projects	DLR Water and Drainage, developers, Infrastructure and Climate Change Department, decision makers	Number of biodiversity roofs incorporated into new development	To provide additional biodiversity measures in an urban environment	Climate change impacts, along with other pressures such as development, can result in biodiversity loss.	Providing additional biodiversity measures to improve resilience to climate change
Action 3.17 Promote local seed collection by qualified professionals, including for new developments, in order to keep our seed sources local, and encourage communities to collect and share local seed	NPWS, Botanic Gardens, DLR Parks, other LAs; local communities	Pilot seed collection project from DLR public lands to preserve seeds for future use in community and capital projects.	To keep local seed sources for re-use in the county. To share rare plant species' seed source where appropriate	Climate change impacts, including soil loss, along with other pressures such as development, can result in loss of our local seed sources.	Providing additional biodiversity measures to improve resilience to climate change
Action 3.18 Continue to support conservation grazing at Fernhill Park and Gardens and to develop other public lands for conservation grazing	Irish Droimeann Society, DLR Parks, Universities	Fernhill meadows managed through grazing	To maintain the diversity of the old meadows through traditional, low-impact grazing	Climate change will compound the existing pressures on our pollinators and biodiversity	Providing opportunities for more diverse habitats for pollinators to improve resilience to climate change
Action 3.19 Develop habitats for reptiles and amphibians which also provide habitat for other species	Herpetological Society of Ireland (HSI), DLR Parks, DLR Infrastructure and Climate Change Department, and Water and Drainage Department	Habitats created for reptiles and amphibians	To increase habitats for reptiles and amphibians	Climate change impacts, along with other pressures such as development, can result in biodiversity loss.	Providing opportunities for more diverse habitats for reptiles and amphibians to improve resilience to climate change

Theme 4 Connecting People and Nature and Inspire a Positive Future

Objective 4: Increase awareness, training and appreciation of biodiversity, ecosystems and ecosystem services

Biodiversity Actions



Agencies & Partners



Target

Climate Change Impacts Climate proofing



Action 4.1
Provide education and raise awareness of biodiversity and ecosystem services among the public, decision makers and educators

Schools, Third level, DLR sections, Dept of Marine, NPWS, EPA, BWI WFD officers, LAWPRO, Inland Fisheries Number of schools taking part in the Ecosystem Services programme

Indicators

• Public biodiversity events annually

 Promotion and use of DLR animation Ecosystem Services – Benefits of Biodiversity by others in education and training To inform and raise awareness of ecosystem services

Lack of awareness of the impacts of climate change on ecosystem services can lead to poor decisions and unintended loss of biodiversity Increasing awareness of the interrelationship between biodiversity, ecosystem services and climate change

Action 4.2

Provide Information on biodiversity and ecosystem services through the DLR website and publications DLR - all sections, DLR

Communications, Schools, Third level, Biosphere Partners Biodiversity Section of DLR website updates

• Biodiversity News updates on social media

• Completion of the *Biodiversity Tour of DLR* publication

• Completion of *Biodiversity Action Plan* Publication

• Completion of DLR Biodiversity Map Browser for Habitats and Species

• Completion of biodiversity signs in parks and green spaces

Increase awareness of biodiversity Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity Increasing awareness of the interrelationship between biodiversity, ecosystem services and climate change

Action 4.3

Organise activities and events to promote biodiversity, ecosystems and ecosystem services Parks, Schools, Educational Groups, Local Communities, BWI, NPWS, Heritage Council Promotion and use of the DLR animation Ecosystem Services – Benefits of Biodiversity

• Monthly biodiversity events

• Staff biodiversity training events

• Local Communities engagement events and projects

Increase awareness of biodiversity Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity Increasing awareness of the interrelationship between biodiversity, ecosystem services and climate change

Action 4.4

Establish training and education programmes to promote appreciation of biodiversity, ecosystems and ecosystem services

Educational organisations, Green Schools, Third level, Local communities, BWI, NPWS • Number of schools taking part in the Ecosystem Services programme

• Number of BWI Schools Bird Workshops

 Number of public training workshops and staff biodiversity training workshops

 Dog training courses in parks and public spaces, including beaches, to raise awareness of the impacts of dogs on biodiversity Increase training and awareness of biodiversity Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity Increasing awareness of the interrelationship between biodiversity, ecosystem services and climate change

Action 4.5

Establish and promote positive examples of cooperative local community biodiversity projects or demonstration

Local community groups, Tidy Towns, residents' groups, DLR Volunteers Number of local community projects

Encouraging and supporting local communities to become involved in biodiversity.

Impacts of climate change on local communities are increasing. The involvement and empowerment of local communities to protect and enhance biodiversity is important.

Partnership with communities and encouraging community involvement to foster active participation in biodiversity conservation also increases climate change resilience.

Biodiversity Actions

Agencies & Partners

Indicators

Climate Change Impacts

Climate proofing











Target





Action 4.6

Schools, Third level, DLR sections, Dept of Marine, NPWS, EPA, BWI, WFD officers, LAWPRO, Inland Fisheries

Number of schools taking part in the Ecosystem Services programme

Public biodiversity and climate change events

Promotion and use of DLR Biodiversity and Climate Change Poster

To inform and raise awareness of ecosystem services

Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity

Increasing awareness of the interrelationship between biodiversity, ecosystem services and climate change

Action 4.7

Local community groups, Tidy Towns, residents' groups, DLR Volunteers

Number of events

To inform and raise awareness of the benefits of biodiversity Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity

Increasing awareness of the interrelationship between biodiversity, physical and mental health benefits (part of ecosystem services) and climate change

Local community groups, Tidy Towns, residents' groups, DLR Volunteers

Number of training events

To provide training for local communities to survey reptiles and amphibians and take part in citizen science

Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity

Partnership with communities and encouraging community involvement to foster active participation in biodiversity conservation also increases climate change resilience.



Theme 5 Strength in Working Together

Objective 5: Strengthen the effectiveness of collaboration between all stakeholders for the conservation of biodiversity, including with Local Communities, Local Authority Biodiversity Officers, LAWPRO, the National Biodiversity Data Centre, BirdWatch Ireland, NPWS and other State Bodies.

Biodiversity Actions	Agencies & Partners	Indicators	Target	Climate Change Impacts	Climate proofing
Action 5.1 Engage with local communities and business communities to develop local biodiversity projects	Schools, Tidy Towns, Residential Groups, Faith Communities	Number of community biodiversity projects	Building partnerships with communities for biodiversity conservation and engaging people in biodiversity	Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity	Partnerships with communities and encouraging community involvement to foster active participation in biodiversity conservation also increases climate change resilience.
Action 5.2 Work with our Dublin Bay Biosphere Partners to promote sustainable use of the DLR Biodiversity Resource in the Biosphere	Biosphere Partners	Biosphere events annually Biosphere projects completed Biosphere Conservation Actions completed for DLR	Provide support for the Biosphere and promote the Biosphere	The impacts of climate change would be compounded by unsustainable use of the Biosphere	By encouraging sustainable use of the Biosphere with our partners, we can protect and enhance biodiversity and ecosystems to improve resilience to climate change
Action 5.3 Support implementation of Dublin Bay Biosphere Nature Conservation Strategy, Education & Awareness strategy	Biosphere Partners	Completion of the Dublin Bay Biosphere Nature Conservation Strategy, Education & Awareness strategy Implementation of priority actions in DLR	Dublin Bay Biosphere Nature Conservation Strategy, Education and Awareness strategy	Lack of awareness of the impacts of climate change on biodiversity can lead to poor decisions and unintended loss of biodiversity	Increasing awareness and appreciation of the Biosphere and sustainable use of the Biosphere will help to improve resilience to climate change
Action 5.4 Carry out a study of marine ecosystems and develop marine ecosystem restoration projects with our Biosphere Partners	Biosphere Partners	Number of marine ecosystem restoration projects implemented with our Biosphere Partners	Part of the Biosphere Conservation Actions common to all partners	Without joined-up thinking on our shared marine environment, the impacts of climate change may result in biodiversity loss and ecosystem services loss	Working with our Biosphere Partners, we aim to strengthen and share our biodiversity information and to provide a collaborative approach at the wider Dublin bay level in relation to marine ecosystems. This in turn will help to improve our resilience to climate change.
Action 5.5 Work with government departments and the public in relation to the designation of Marine Protected Areas (MPAs)	DAFM, NPWS, EPA, Coastwatch, Universities, local communities	Progression of the designation of MPAs	To protect our marine areas and encourage sustainable use of these areas	Climate change is a serious threat to the marine environment and its resources. Degraded marine ecosystems are less likely to be resilient to the effects of climate change than healthy, fully-functional ecosystems	MPAs have the potential to play an important role in maintaining and restoring ecosystem resilience, protecting biodiversity and creating refugia from climate change impacts.

Biodiversity Actions







Target







Climate proofing

Action 5.6
Work with other local authorities to strengthen our knowledge of important habitats and species

FCC, DCC, SDCC and others Number of projects completed in collaboration with other local authorities To protect biodiversity that extends beyond geographical boundaries of local authorities Without joined-up thinking on climate change and biodiversity, the impacts of climate change may result in biodiversity loss and ecosystem services loss Working with other local authorities, we aim to strengthen and share our biodiversity information and to provide a collaborative approach at a wider landscape level. This in turn will help to improve our resilience to climate change.

Action 5.7

Work with other local authorities to fund satellite-tracking studies of winter birds listed as qualifying features in European sites and other important species FCC, DCC, SDCC and others Projects completed in collaboration with other local authorities

To protect biodiversity that extends beyond geographical boundaries of local authorities Without joined-up thinking on climate change and biodiversity, the impacts of climate change may result in biodiversity loss and ecosystem services loss Working with other local authorities, we aim to strengthen and share our biodiversity information and to provide a collaborative approach at a wider landscape level. This in turn will help to improve our resilience to climate change.

Action 5.8
Provide supports to
BirdWatch Ireland for the
Dalkey Island Tern Project,
Swift conservation, and
other important bird

NPWS, DLR Parks, BWI, other LAs Projects related to the protection of DLR's important bird species completed

To protect our important bird species The impacts of climate change can be seen in the changes in the breeding and distribution patterns of bird species and this is compounded by other pressures.

Working with BWI on birdrelated projects will help to understand and address, where possible, climate change pressures on bird species.

Action 5.9

projects

Work with LAWPRO to develop ways to protect and enhance our river wildlife corridors and waterways DLR Water and Drainage, DLR Parks, DLR Planning, LAWPRO, IFI Projects related to our wildlife corridors completed

To protect our important river wildlife corridors

Climate change impacts, such as increased peak river flows, bank erosion, flood protection measures in response to climate change may all impact on biodiversity. Working with LAWPRO and other partners, to protect and enhance our river wildlife corridors and waterways will also help to build our climate change resilience.

Action 5.10

Work with our CARO Partners, NPWS and others to ensure the protection of biodiversity in the face of Climate Change CARO, DLR Climate Action Officer, Infrastructure and Climate Change Department DLR Sections, NPWS Biodiversity - Climate Change Collaboration projects completed.

Raise awareness and training on the impacts of climate change on biodiversity To protect biodiversity in the face of climate change and its associated impacts. Climate change impacts, such as habitat fragmentation, biodiversity loss, shifts in species distribution, species unable to adapt, phenological mismatches, invasive alien species, etc. Working with CARO and other partners, to raise awareness of the impact of climate change on biodiversity and to collaborate on projects that support and assist biodiversity to build climate change resilience.

Action 5.11

Dún Laoghaire-Rathdown County Council is a partner in the Dublin Mountains Partnership. The Biodiversity Officer will liaise with this forum to promote the protection and enhancement of biodiversity Dublin Mountains Partnership (DMP), Coillte Collaborations with DMP

To protect the biodiversity of our upland areas

Without joined-up thinking on our shared upland environment, the impacts of climate change may result in biodiversity loss and ecosystem services loss Working with Dublin Mountain Partnership, we aim to strengthen and share our biodiversity information and to provide a collaborative approach to the uplands. This in turn will help to improve our resilience to climate change.

Biodiversity Actions



Agencies & Partners



Collaborations with

Coillte

Target

Climate Change Impacts

Climate proofing



Action 5.12

Work with Coillte Nature for the protection and enhancement of biodiversity, including Red Squirrel. iăi

Coillte, NPWS

To protect biodiversity of our forested areas Climate change impacts, such as increased wildfires, pests and diseases, along with increased visitor pressures, may result in biodiversity loss and ecosystem services loss

Working with Coillte, we aim to strengthen and share our biodiversity information and to provide a collaborative approach to managing biodiversity on Coillte lands. This in turn will help to improve our resilience to climate change.

Action 5.13

Work with our colleagues across our own organisation in DLRCC and collaborate on biodiversity projects, including nature-based solution projects.

DLR Sections DLRCC NBS projects

To increase collaborations for biodiversity across DLRCC Without joined up thinking on climate change and biodiversity, the impacts of climate change may result in biodiversity loss and ecosystem services loss Working within DLRCC, we aim to strengthen a collaborative approach for the management and protection of biodiversity in relation to DLRCC projects. This in turn will help to improve our resilience to climate change.

Action 5.14

Work with NPWS and community groups to develop woodland management plans and the protection of Loughlinstown Woods pNHA and Fitzsimons Woods pNHA. NPWS, community groups Completion of the Loughlinstown Wood pNHA Woodland Management Plan ant the Fitzsimons Woods pNHA Woodland Management Plan To protect our native woodlands

Climate change impacts, such as increased wildfires, tree pests and diseases, along with increased invasive species, may result in biodiversity loss and ecosystem services loss Working with communities to ensure that the only two native woodlands in DLR have comprehensive management plans to conserve these important areas so they can continue to take up carbon.

Action 5.15

Engage with third level institutions to support and to develop biodiversity research in DLR

Third level institutions, Universities

Student research projects

To develop scientific biodiversity data that can assist local authorities Potential negative impacts on our biodiversity resource due to climate change Scientific data in relation to our biodiversity resource is vital to help manage our natural resources in order to provide ecosystem services and resilience to climate change

Monitoring and tracking our Plan

Biodiversity Actions



Undertake an annual review of the implementation and success of the Actions proposed in the Biodiversity Action Plan 2019-2024 and future plans

Agencies & Partners



DLR Biodiversity

Officer

Indicators



• Number of Biodiversity Actions implemented

Tracking success of the action takenAnnual review and presentation

to Steering Group

• Steering Group meeting

annuallyPublication of report on DLR webpages

Target



To monitor implementation of Biodiversity Actions

Climate Change



Potential negative impacts on our biodiversity resource due to climate change Climate proofing



Monitoring our plan is important in providing resilience to Climate Change



Acronyms	Affiliation
BCI	Bat Conservation Ireland
BSBI	Botanical Society of Britain and Ireland
BWI	BirdWatch Ireland
CARO	Climate Action Regional Offices
DCC	Dublin City Council
DMP	Dublin Mountains Partnership
DLR	Dún Laoghaoire-Rathdown County Council
EPA	Environmental Protection Agency
FCC	Fingal County Council
HSI	Herpetological Society of Ireland
IFI	Inland Fisheries Ireland
LAWPRO	Local Authority Waters Programme
NBDC	National Biodiversity Data Centre
NPWS	National Parks & Wildlife Service
SDCC	South Dublin County Council

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DLR Biodiversity Action Plan Draft Summary Consultation Document, July 2021 For more information, contact the DLR Biodiversity Officer

