

Department of Agriculture, Food and Marine (DAFM)

Ireland's Forest Strategy Implementation Plan

Stage 1 AA Screening and Stage 2 AA Natura Impact Report (NIR)

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1. Introduction

1.1 Introduction

This report contains the Appropriate Assessment Screening (Stage 1) and Habitats Directive Appropriate Assessment (AA) Natura Impact Report (NIR) (Stage 2). Both have been prepared by Arup on behalf of the Department of Agriculture, Food and Marine (DAFM). It provides information on and assesses the potential for the Draft Ireland's Forest Strategy Implementation Plan (IFSIP) 2023- 2030 (referred to hereafter as 'the Draft IFSIP') firstly to result in likely significant effects on any European site and secondly, after inclusion of mitigation, to adversely affect the integrity of any European site within the Natura 2000 network (hereafter referred to as European site (s))¹.

The Draft IFSIP will provide details on the implementation mechanisms of achieving the overarching strategy objectives contained in Ireland's Forest Strategy 2030, to meet the immediate to short term needs for the period of 2023-2030.

The overarching objectives in the IFS are rooted in the three pillars of sustainability - People, Planet and Prosperity. These pillars guide the strategic objectives in the IFS and aim to make Ireland's ambitious shared national vision for forestry a reality.

The shared national vision for forestry, as developed by Project Woodland, following an extensive consultation process with stakeholders and citizens in general looks for significant change until 2050. The vision for the role of forests, and trees in Ireland's future, is built around the principle of the right trees in the right places for the right reasons with the right management. The shared national vision anticipates by 2050 that Ireland's forests will be a cornerstone in an inclusive and sustainable rural economy while assisting in achieving climate and biodiversity goals. In addition, it is seen as being a major contributor to people's health and well-being. The Shared National Vision is outlined in Section 2.2.

The IFS, which will cover the period between now and 2030, is the first of its kind and is designed to provide an overarching framework to identify the actions needed to implement the change required in order to achieve this ambitious shared national vision. The proposed IFS is defined by DAFM as '*outlining the main objectives and goals for forestry in the medium and long-term*'. The Draft IFSIP will function as the enabler 'Implementation Plan' to the higher-level IFS and overarching shared national vision.

The Draft IFSIP will do so, by the inclusion of a detailed Forest Action Plan (referred to hereafter as FAP) and a Forestry Programme (referred to hereafter as FP) for the period 2023 – 2027.

The Draft IFSIP's detailed Forest Action Plan, includes the Actions for each of the Enablers and Value Area Goals of the IFS, which are broken down by indicative timeframes, leads, key stakeholders and by what means the Action will be implemented. A significant proportion of these Actions will be implemented through the next FP for the period 2023 – 2027. Non forestry programme actions will be delivered over a longer timeframe as outlined in the IFS. The FP will be the primary means by which the Vision and the Strategy are delivered in the immediate to short term. The FP was created in alignment with the IFS and as such, contains a list of definitive Measures and Interventions as its main delivery mechanism. All of the Measures and Interventions supported in the FP have the principles of Sustainable Forest Management at their core. Overall, the Draft IFSIP sets out how Ireland's ambitions to expand its forests will be achieved and how to increase its role in helping address the climate and biodiversity objectives at both National and EU level can be realised.

The over-riding objective between now and 2030 forestry in Ireland is to radically and urgently expand the national forest estate on both public and private land in a manner that will deliver lasting benefits for climate change, biodiversity, wood production, economic development, employment and quality of life. This will be

¹ Appropriate assessment comes from the Habitats Directive (92/43/EEC), which seeks to safeguard the long-term survival of Europe's most valuable and threatened species and habitats. The geographical areas of particular importance to these species and habitats have been selected as Special Areas of Conservation (SAC) and Special Protection Areas (SPA) which are collectively referred to (in Ireland) as European Site (s). Together, these sites comprise the pan-European Natura 2000 network of protected areas.

a challenge of significant proportions, which will require a whole of society and the whole of government response if it is to succeed. The IFS is designed to make this happen and the Draft IFSIP describes the Actions to deliver the Strategy accordingly. The Draft IFSIP represents a comprehensive, ambitious, and long-term plan to protect and enhance Ireland's Forests, as Ireland is fully committed to realizing the important role that forests and the forest-based sector must play in the transition to a sustainable, green, climate neutral and competitive circular bioeconomy.

This Draft IFSIP will be based upon the best practice of sustainable forest management, that has been improved upon by evident management in the previous Forestry Programme 2014-2020, as extended.

The purpose of this report is to inform DAFM, the competent authority, of the potential for likely significant effects, and subsequently, any potential for adverse impacts on the integrity of European sites arising from the Draft IFSIP followed by the recommendation of mitigation, where required, to avoid any adverse effects.

In preparing this NIR, a multi-stage approach has been taken. The purpose of this staged approach has been to align the AA process with the requirements of the Strategic Environmental Assessment (SEA) Directive (2001/42/EC)² process which is also required to support the development of the Draft IFSIP which is being prepared. Article 3.2(b) of the SEA Directive expressly links to assessments pursuant to Article 6 of Directive 92/43/EEC. The preparation of the SEA and AA reporting comprises an integrated approach, such as sharing of baseline data and mapping of European sites and sharing of potential ecological effects of the Draft IFSIP on European sites.

Where, following the period of public consultation, changes are made to Draft IFSIP, these changes will be assessed as necessary and documented as supplementary material to this NIR.

1.2 Legislative Context of the Natura Impact Report (NIR)

The preparation of the NIR has had regard to Article 6 of the Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland primarily by Part XAB of the Planning and Development Act, 2000, as amended and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (hereafter referred to as the Habitats Regulations).

Articles 6(3) of the Habitats Directive set out the requirement for AA, i.e., an assessment of proposed plans and projects likely to affect European sites. Article 6(3) established the requirement to screen all plans and projects and to carry out a further assessment if required (i.e., Stage 2 AA).

An AA Screening exercise to inform the AA Screening Determination in accordance with the requirements of Part XAB of the Planning and Development Act 2000 has been prepared and is included within this report. The AA Screening was prepared to assess, in view of best scientific knowledge, whether the Draft IFSIP, individually or in combination with other plans and projects, is likely to have a significant effect on a European site. The AA Screening provides details on guidance documents, guiding principles and relevant case law, which are of relevance to and subsequently referred to in the Stage 2 AA.

The AA Screening concludes that significant effects are likely, or that sufficient uncertainty remains, to indicate that an AA should be carried out for the Draft IFSIP. The relevant European sites subject to potential significant effects are listed are shown in Figure 3, however it should be noted that a large number of European sites in the Republic of Ireland have the potential for likely significant effects.

1.3 Layout of Report

This report presents the AA (Stage 1 and Stage 2) for the Draft IFSIP.

- Sections 1-5 provides an introduction, the Draft IFSIP, the approach to AA, relevant European in Ireland and the Stage 1 Screening for AA. The Stage 1 Screening details a list of sites with potential to be affected by the implementation of the Draft IFSIP and therefore, Stage 2 AA is required. The potential

² Official Journal of the European Communities, Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.

likely significant effects considered at this stage will either be effects occurring as a result of the application of the Draft IFSIP alone or in-combination with other plans, programmes, and/or projects.

- Sections 6 – 7 provides the Stage 2 AA and mitigation. The main objective of Stage 2 AA is to determine whether the Draft IFSIP would result in adverse effects on the integrity of any European site with respect to the site's structure, function, and/or conservation objectives and either alone or in combination with other plans or projects; and
- Section 8 provides the Stage 2 AA summary and conclusion.

2. Draft Ireland's Forest Strategy Implementation Plan 2023-2030

2.1 Introduction

The Draft IFSIP 2023-2030 is the Implementation Plan for the Ireland's Forest Strategy (IFS), the Draft IFSIP is a national document that will function as the enabler 'Implementation Plan' to achieve Ireland's Forest Strategy's overarching objectives, for the first rolling five-year period of 2023-2030.

The purpose of the Draft IFSIP is to implement the overarching objectives specified in the IFS through its detailed Forest Action Plan and Forestry Programme for the period 2023-2030. The overarching objectives in the IFS are rooted in the three pillars of sustainability - People, Planet and Prosperity. These pillars guide the strategic objectives in the IFS and aim to make Ireland's ambitious shared national vision for forestry a reality. The contents of the Draft IFSIP will allow for the short-medium term achievement of the objectives set out in the new Forest Strategy, which is based on the long-term shared national vision for forestry in Ireland to 2050.

The Draft Implementation Plan will implement the Measures, Interventions and Actions that will guide forestry across the Republic of Ireland.

2.2 Strategic Vision of Ireland's Forest Strategy

In September 2022, DAFM published a Shared National Vision for Trees, Woods and Forests in Ireland to 2050³. The Shared Vision is based on the work of Project Woodland, the group formed to examine potential reforms to Ireland's forestry sector and to consider Ireland's longer term strategic direction for forestry.

DAFM's Shared National Vision for 2050 states;

By 2050, Ireland's forests and woodlands will be seen as a symbol of the transformational social, economic and environmental changes that were needed to address the climate, biodiversity, housing and health emergencies of the 2020's. A much larger and more diverse forest footprint is being successfully managed to balance and deliver multiple objectives and benefits for climate, nature, water quality, wood production, people, the wider economy and rural communities. It forms a valuable, compatible element of the farming enterprise and is co-existing in harmony with urban and other landscapes and valued highly by citizens. It is also supporting a thriving and growing forest sector, long term quality employment for a sustainable workforce, ecosystem services and public, educational and recreational amenities.

There is a nationwide awareness and understanding of the multiple benefits of forests. Forestry is at the centre of the circular and green economy with Irish grown timber the material of choice for the substitution of carbon intensive building products for new Irish homes. Forestry is providing a profitable diversification option for farmers, with people living in rural, urban and suburban communities feeling a sense of connection and pride in their local forests and woodlands, and the many benefits that they provide. Legacy environmental issues associated with past forestry practices are being successfully addressed, building on improvements already made through enhanced sustainable forest management practices. The Irish landscape now features a rich variety of diverse, resilient and healthy trees, woods and forests, established for multiple purposes and delivering multiple benefits for the environment, economy and society on both public and private land.

2.3 Draft Plan Overview

This Draft IFSIP acts as the enabler 'Implementation Plan' to achieve Ireland's Forest Strategy's overarching objectives, for the first rolling five-year period of 2023-2030. The purpose of the Draft IFSIP is to implement the overarching objectives specified in the IFS through its detailed Forest Action Plan and Forestry Programme for the period 2023-2027.

³ Accessed at <https://www.gov.ie/en/publication/forestry-policy-and-strategy/#shared-national-vision-for-trees-and-forests> on 14 October 2022

The relationship between both is described below in Figure 1.

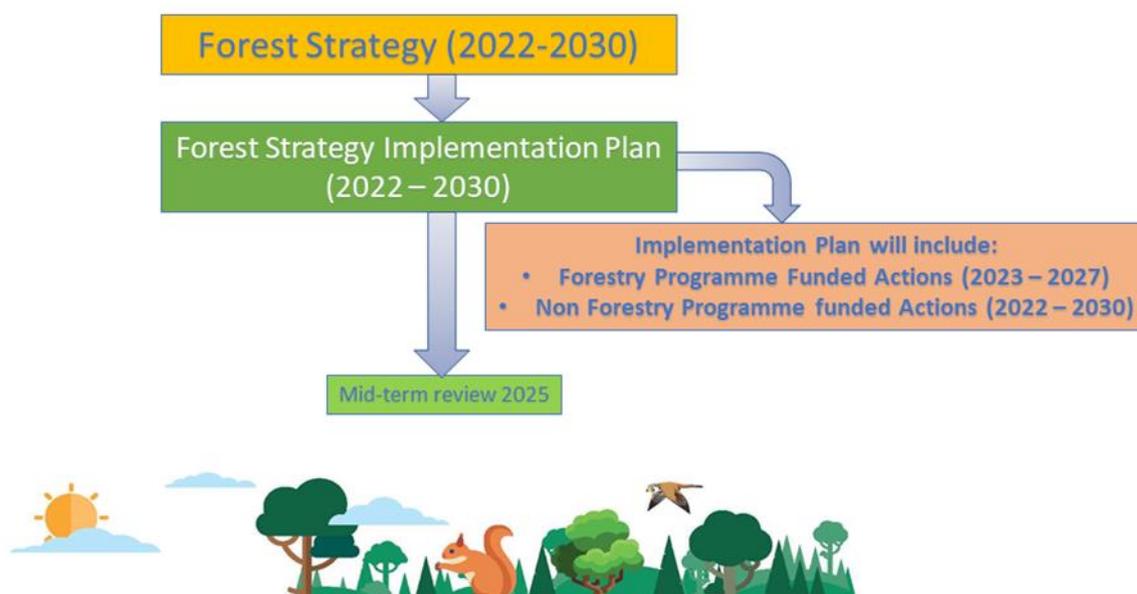


Figure 1: Relationship Between the Forest Strategy (2022-2030) and Ireland's Forest Strategy Implementation Plan (2023-2030) Source: (DAFM, 2022)

The Draft IFSIP seeks to radically and urgently expand the national forest estate on both public and private land in a manner that will deliver lasting benefits for climate change, biodiversity, wood production, economic development, employment and quality of life. The IFS sets out the principles to address the potential future expansion of the national forest estate and this Draft IFSIP describes the Actions, Interventions, Measures and Requirements to deliver the Strategy.

The Forest Strategy Implementation Plan contains a detailed Forest Action Plan, which includes the actions for each of the Enablers and Value Area Goals of the Forest Strategy. These are broken down by indicative timeframes, leads, key stakeholders and by what means the action will be implemented. A significant proportion of these actions will be implemented through the next Forestry Programme for the period 2023 – 2027. The Forestry Programme will be the primary means by which the Vision and the Strategy are delivered on in the immediate to short term. It was created in alignment with Ireland's Forest Strategy and as such, contains a list of definitive measures and interventions as its main delivery mechanism. A copy of the Forestry Programme 2023-2027 is included within Appendix 1 of the FSIP

2.4 Background

The Forest Service of DAFM is responsible for ensuring the development of forestry within Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis, which is compatible with the protection of the environment. In order to do so, the DAFM has developed Ireland's Forest Strategy (IFS) that aims to act as an over-arching guide to improve upon all areas of Irish Forestry to 2030. The manner in which the over-arching objectives listed in the IFS are to be met is detailed within the Draft IFSIP, through a number of planned Actions, Interventions and Measures with the proposed allocation of funds to each priority area. The Draft IFSIP will be implemented in the short-term, over the next rolling five-year period.

The Draft Implementation Plan and Forest Strategy are the first pairing of their kind in Ireland, previously the forestry sector had been guided by Forestry Programmes that were updated on six-year intervals.

The current Forestry Programme 2014-2020 received approval to be extended to the end of 2022 by the European Commission, in accordance with CAP and State aid transition requirements. A new Forestry Programme is therefore required from January 2023 to the end of 2027. The Draft Ireland's Forestry Strategy Implementation Plan will do so by acting as the enabler for a forthcoming strategy, the IFS. The Draft Implementation Plan and Forest Strategy will be based upon the best practice of sustainable forest

management, that has been improved upon by evident management in the previous Forestry Programme 2014-2020, as extended.

The purpose of the Draft IFSIP, which is subject of this AA report, is to set out in detail the manner in which short-term sustainable forest management practices will be developed and targets will be met, across the Draft Plan area and Plan period of 2023-2030. This will include greater detail on best practices for such and conservation efforts, inclusive to the nature and extent of Actions, Interventions and Measures included. The overall relationship and framework for the development of the Shared National Vision, Draft IFS and Draft IFSIP is displayed in Figure 2.

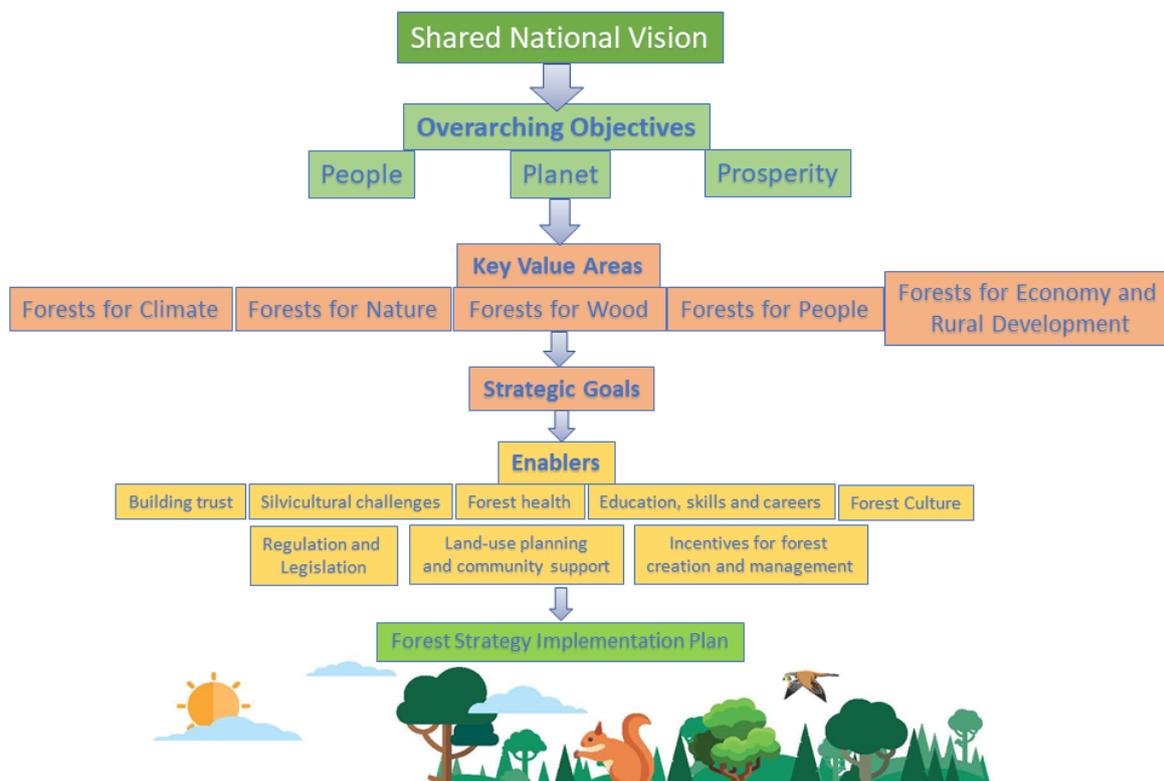


Figure 2: Framework for the Development of the Shared National Vision, Ireland's Forest Strategy and Implementation Plan Source: (DAFM, 2022)

2.5 Composition of the Draft Ireland's Forest Strategy Implementation Plan

The Draft IFSIP contains a detailed Forest Action Plan and a Forestry Programme. The Forest Action Plan includes the Actions for each of the Enablers and Value Area Goals of the Forest Strategy. These are broken down by indicative timeframes, leads, key stakeholders and by what means the Action will be implemented.

The specific Goals that have been identified in the Forest Strategy for each of the five Value Areas and of which the Forest Action Plan are based upon include:

- **Forests for Climate:** The shared vision for 2050 is one where trees and forests will be seen as a symbol of the transformational changes that were needed to address the climate emergencies of the 2020's.
- **Forests for Nature:** Supporting nature and biodiversity will be a key driver in forest expansion and forest management, delivering a greater range of ecosystem services and protecting our natural heritage.
- **Forests for Wood:** The ambition set out in the shared national vision is that Irish grown timber will be the material of choice for new Irish homes by 2050, and that Ireland will have the timber resource to meet this material need.

- **Forests for People:** The ambition in the shared national vision is that communities will feel a sense of connection and pride in their local forests, so it is important we extend the meaningful multi-benefits of trees and forests to communities right across Ireland.
- **Forests for Economy and Rural Development:** The ambition set out in the shared national vision is that forestry is at the centre of the circular and green economy; is supporting a thriving forest sector; and is providing long term quality employment, ecosystem services, and public, educational and recreational amenities.

These Goals have been underpinned by a number of strategic and interconnected areas of focus of particular relevance to Ireland that evolved during the development of the vision and strategy, through the extensive Project Woodland consultation and engagement processes with both the public and stakeholders. These strategic areas of focus, as listed below, are aligned with each of the Goals in the Action Plan, to ensure a balanced approach to delivering the multiple benefits from trees and forests and will also provide a way to measure progress with implementation.

1. **Planning, Engagement and Co-Creation:** Expanding forestry at scale through a plan-led and integrated land-use approach that will deliver multiple benefits for climate, wood, nature, people and economic and rural development, and involves stakeholders in plan creation and implementation.
2. **Public Access and Community Involvement:** Increasing and improving public access to forestry, by agreement, to provide people with more opportunity for connection with nature and recreational, health and well-being, and educational pursuits.
3. **Regulation, Legislation and Incentives:** Making it much easier for public and private landowners to get involved in creating and managing forests that deliver multiple benefits, by simplifying the regulatory framework and targeting incentives to deliver the desired benefits.
4. **Value Creation:** Taking full advantage of the opportunities created through the EU Green New Deal and the circular economy to build a thriving and profitable forest industry that drives innovation, creates good jobs and makes Irish-grown wood and wood products a material of choice for sustainable and low carbon construction.
5. **Ecosystem Services, Resilience, Restoration, and Legacy Issues:** Creating and managing forests that become major carbon sinks, are resilient to climate change, support biodiversity and contribute to a healthy and high-quality environment and ecosystem services.
6. **Forest Management:** Ensuring forests become climate resilient, are managed according to the principles of sustainable forest management and the principle of the right trees in the right places for the right reasons with the right management, with the aim of achieving forest certification.
7. **Building Capacity:** An expanding forest estate at scale will need a skilled workforce and support for education, research, innovation, promotion, information management and knowledge structures to drive economic, social and environmental value creation.
8. **Institutional arrangements and Implementation Structures:** Strong and effective implementation, monitoring and reporting structures will be put in place to oversee, guide and track the implementation of the strategy, supported by a set of outcome-based indicators. Stakeholders will have direct input into this process and future governance and implementation structures.

Each of the Actions are listed in the Forest Action Plan as having ‘*Forestry Programme*’ or ‘*Non-Forestry Programme*’ as their implementation vehicle. A significant proportion of these Actions will be implemented through the next Forestry Programme for the period 2023 – 2027.

The Forestry Programme will be the primary means by which the Vision and the Strategy are delivered on in the immediate to short term. It was created in alignment with the IFS and as such, contains a list of definitive Measures and associated Interventions as its main delivery mechanisms. All of the Measures and Interventions supported in the Programme have the principles of Sustainable Forest Management at their core. This Programme has a duration of 5 years, in accordance with the CAP programming period. The Forestry Programme will be 100% funded via the national exchequer and State Aid Approved.

An overview of the Interventions set out within the Draft IFSIP's Forestry Programme are described as follows.

Interventions 1 and 2 aim to increase forest cover whilst also delivering ecosystem services with environmental and climate benefits. Every hectare planted during the 2023 – 2030 period could contribute to Ireland's emissions targets in 2030 and 2050. Forest cover in Ireland of 11.6% is low compared to the EU average of 38%, therefore there is significant potential to expand Ireland's forest cover and grow the sector in terms of its economic, social and environmental contribution to society and rural communities in particular. It is important that this increase is done in a sustainable manner, where planting takes place in appropriate areas with the most suitable species.

These Interventions will be delivered through a revised Afforestation Scheme with:

- A target of at least 8,000ha per annum broken down by 12 forest types.
- A 20% mandatory broadleaf component for all conifer forest types.
- An increased annual broadleaf target of 35% of total annual planting.
- New Forest Types are proposed – Forests for water, Amenity forests and Neighbourwoods, Seed Orchards, Continuous Cover Forestry and Emergent Woodland/Rewilding.
- Native Tree Area Scheme - new legislation was signed into law in 2022, which removes the licensing requirement for the planting of small native forests. It is proposed to allow landowners to avail of the exemption for the creation of small native forests up to one hectare and native forests for water protection through a scheme which it is intended to offer through the Draft IFSIP.
- Continuation of the Woodland Environmental Fund – this offers currently €1,000 per ha top up payment by a company to the landowner for Native Forests.
- Potential contribution through private investment such as voluntary carbon credits may provide further opportunities.
- Pilot agroforestry projects which will be funded to allow for exploration of systems other than silvopastoral which is currently the only form of agroforestry offered through the Afforestation Scheme.

Intervention 3, Infrastructure and Technology Investments aims to support sustainable development of access to the national forest estate for economic, protective and social purposes. The primary objective of the Intervention in relation to roads is to enable access to forests at a reasonable cost, to ensure optimal engineering and environmental performance of forest infrastructure and to integrate forest roads and access infrastructure with other biodiversity enhancement features and protective measures in forests. In the field of technology, it aims to provide support to forestry contractors involved in harvesting and to nurseries to ensure a continuity of plant supply for the forest industry. The use of circular economy principles and the use of recycled materials, low carbon input materials and inputs will be encouraged.

Intervention 4, Sustainable Forest Management, aims to provide support to forest owners to manage their forests in a sustainable way with the potential to deliver ecosystem services plus environmental and climate benefits. In light of climate change and biodiversity loss there is an urgent need for adaptive forest restoration and ecosystem-based management approaches that strengthen the resilience of Ireland's forests. Forest management practices that preserve, restore and provide opportunities for forests to provide corridors that enhance biodiversity, leading to more resilient forests that can deliver on their socio-economic and environmental functions. The Measures proposed under this Intervention include the continuation of some Schemes that are currently offered with the addition of some new elements and new Schemes such as the Environmental Enhancement Scheme which aims to encourage forest owners to manage their forests with a silvicultural system that enhances Archaeology, Water Quality or Habitats/Species.

Intervention 5 aims to support forest owners to be able to recognise the full potential of their forest and become active forest managers. Needs Analysis highlighted the requirement for training for forest owners to enable them to recognise the full potential of their forest and become active forest managers. Absence of a well-defined career path in the private forestry sector and a lack of interest in forestry as a career by the younger generation were also raised as concerns. Professional development among foresters can be achieved

through targeted training and Continuous Professional Development encouraging a lifelong learning approach. Advisory services by Teagasc and promotional campaigns aimed at promoting forestry in Ireland will also be supported under this Intervention.

The proposed overall objective of Intervention 6, Open Forest Measure: Social, cultural & heritage forests is to provide support for existing Social, Cultural and Heritage forests. Needs analysis show that there is a clear need to increase the accessibility of our forests and for the creation of additional amenities and recreational facilities, recognising and highlighting the increasing multifunctional role that forests should play. It is hoped to deliver this through the expansion of the current Neighbourhood Scheme and the addition of Heritage Forest and Forest Classroom Measures.

Intervention 7 Climate Resilient Reforestation aims to provide supports at reforestation that incentivise species and structural diversity. Many forests in Ireland have been established and managed under an even-aged management structure. The EU Forest Strategy and the draft Vision statement of the new Forest Strategy for Ireland identify the need for a greater balance between even-aged plantation forests, forests managed under closer to nature silviculture such as Continuous Cover Forestry, and semi-natural forest. This Intervention aims to address this balance at reforestation stage.

The overall objective of Intervention 8 Reconstitution is to restore and retain forest land and forest ecosystems following significant damage by natural causes. This Intervention will contribute to the costs of restoring forest potential as a result of damage, or potential damage, from disease outbreaks. The Intervention will also support the removal and destruction of trees infected by contagious pathogens, or trees likely to be so infected. Support may also be considered towards the restoration of forests damaged by other natural causes, catastrophic events and/or climate change-related events, such as frost, wind, deer, grey squirrel and vole, where more than 20% of the forest potential has been damaged.

Given the scale of ambition of the IFS and the range of actors involved in its implementation, not all of the Actions outlined in the Forest Action Plan can be addressed through the mechanism of the Forestry Programme. These are listed in the Action Plan as being implemented through non-Forestry Programme means. Delivery of these Actions will require a wide collective effort and it will be important to ensure that there is a shared responsibility, collaboration and ownership approach across all Government Departments, agencies and private sector organisations. Identifying the specific implementation pathways, funding mechanisms and timings for these Non-Forestry Programme Actions is an Action in itself and will be a key early deliverable under the Forest Strategy.

2.6 Draft Plan Area

The DAFM's Forest Service is responsible for ensuring the development of forestry within the Republic of Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment. The Draft IFSIP is a national level plan and thus the plan area is the entirety of the Republic of Ireland.

2.7 Draft Plan Programme

The Draft Implementation Plan will be updated by DAFM every five years, in accordance with the provisions of the Forest Strategy, setting out how the forest sector will be developed over the next eight -year period and allowing for the short-medium term achievement of the Actions set out in the Forest Action Plan and achievement of the Interventions and Measures in the Forestry Programme. This Draft Implementation Plan will be based upon the best practice of sustainable forest management, that has been improved upon by evident management in the previous Forestry Programme.

2.8 Overarching Guiding Principles of the Draft IFSIP

2.8.1 Guiding Principles of the IFS that overarch the Draft IFSIP

As outlined in Section 2.5, the IFS's overarching objectives are rooted in the three pillars of sustainability as follows:

1. PEOPLE – Involve and reward local landowners and communities in co-creating plans for forest expansion while increasing and improving access, by agreement, to forests for the benefit of people’s health and wellbeing;
2. PLANET – Grow forestry’s contribution as a sink and store of carbon while strengthening its resilience to climate change, the bioeconomy and its contribution to a healthy and high quality environment; and
3. PROSPERITY – Grow the economic, employment and social value of forestry at national and local levels by expanding forestry’s leadership role in developing the new circular and green economy and making wood a material of choice for building.

Specific Strategic Goals have also been identified in the IFS for each of the five value areas listed to guide the Draft IFSIP:

1. Forests for Climate;
2. Forests for Nature;
3. Forests for Wood;
4. Forests for People; and
5. Forests for Economy and Rural Development.

These goals have been underpinned by a number of strategic and interconnected areas of focus of particular relevance to Ireland that evolved during the development of the Shared National Vision and IFS, through extensive Project Woodland consultation and engagement processes with both the public and stakeholders. The strategic areas of focus (listed below) are aligned with each of the goals in the Forestry Action Plan within the Draft IFSIP, to ensure a balanced approach to delivering the multiple benefits from trees and forests and will also provide a way to measure progress with implementation. The Strategic Areas for Action have been identified as:

1. Planning, Engagement and Co-Creation;
2. Public Access and Community Involvement;
3. Regulation, Legislation and Incentives;
4. Value Creation;
5. Ecosystem Services, Resilience, Restoration, and Legacy Issues;
6. Forest Management;
7. Building Capacity; and
8. Institutional arrangements and Implementation Structures.

Eight Interventions with an overall Objective and a detailed suite of Measures and Requirements have been provided within the Draft IFSIP spanning the following themes:

1. Forest Creation;
2. Agroforestry
3. Infrastructure and Technology Investments;
4. Sustainable Forest Management;
5. Developing Skills and Empowering People for Sustainable Forest Management;
6. Open Forests;
7. Climate Resilient Reforestation; and
8. Reconstitution.

3. General Approach to Appropriate Assessment

3.1 Introduction

This section provides details on the adopted methodology with sources of guidance, legislation and information gathered to inform the preparation of this report. The Appropriate Assessment Stage 1 and Stage 2 are detailed in Section 5 and 6 of this report.

Any relevant guidance and data sources which were referenced during the preparation of this report are listed below:

3.2 Guidance and Data Sources

- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision);
- Appropriate Assessment under Article 6 of the Habitats Directive; Guidance for Planning Authorities. Circular National Parks and Wildlife Service (NPWS) 1/10 and PSSP 2/10;
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2021⁴);
- Communication from the Commission on the precautionary principle. European Commission (2000);
- Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC (European Commission, 2007);
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011);
- Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2018); [hereafter referred to as MN 2018];
- Office of the Planning Regulator Practice Note PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021);
- The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report. NPWS (2019);
- The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O’Neil. NPWS (2019); and
- The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report (2019). Edited by: Deirdre Lynn and Fionnuala O’Neill (2020) Environmental Protection Agency - Ireland’s Environment. An Integrated Assessment 2020 Article 12 web tool. Species trends at Member State Level. Legislative Background.

The requirements for Screening for AA and AA of implications for European sites, are set out in Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477 of 2011). AA is a process required under Article 6(3) of the EU Habitats Directive As transposed by the abovementioned Regulation.

⁴ European Commission (2021) - Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Accessed at https://ec.europa.eu/environment/nature/natura2000/management/pdf/methodological-guidance_2021-10/EN.pdf on 14 October 2022

All plans and projects which are not directly connected with or necessary to the management of a European site, but which either individually or in combination with other plans or projects, are likely to have a significant effect on “a European site”, require an AA of these effects to determine if they will adversely affect the integrity of these sites. This report details the AA Screening and AA of the Draft IFSIP.

The AA screening process scrutinises the plan or project to determine if there are likely significant effects either individually or in combination with other plans or projects, on a European site. European sites are part of the Natura 2000 network and include those designated as Special Areas of Conservation (SAC), Candidate SACs or Special Protection Areas (SPA). This AA Screening and Stage 2 AA describes the outcome of this analysis in respect of the Draft IFSIP.

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are termed the *Qualifying Interests* (QIs) for SACs and termed *Special Conservation Interests* (SCI) for SPAs of each site. *Conservation Objectives* for the site are defined for these QIs and SCIs.

A key requirement of the Habitats Directive is that the effects of any plan or project, which is not directly connected with or necessary to the management of a European site, but which alone, or in combination with, other plans or projects, are likely to have a significant effect on a European site, should be assessed before any decision is made to allow that plan or project to proceed. The obligation to undertake a screening for AA, and if necessary, an AA, derives from Article 6(3) of the Habitats Directive (92/43/EEC) and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances.

Article 6(3) of the Habitats Directive states:

“Any plan or project not directly connected with, or necessary to, the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only having ascertained that it will not adversely affect the integrity of the site concerned and if appropriate, after having obtained the opinion of the general public”.

The competent authority is required to carry out a screening for AA, and if necessary, an AA, as per Article 6(3) of the Habitats Directive. If the competent authority determines that the plan or project will adversely affect the integrity of a European site, it may only authorise that plan or project by following the Article 6(4) procedure. The Article 6(3) procedure is outlined as follows:

Stage 1 – Screening for Appropriate Assessment – to assess, in view of best scientific knowledge, if the project or plan, individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.

Stage 2 – Appropriate Assessment – This is required if it cannot be excluded, on the basis of objective information, that the project or plan, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The AA must include a final determination by the competent authority as to whether or not a proposed project would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest.”

Stage 3 – Assessment of alternative solutions – the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage 4 – Assessment where no alternative solutions exist and where adverse impacts remain – an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

3.3 Approach to Screening Process

In order to comply with the requirements of Article 6(3) of the EU Habitats Directive, the process of Screening for AA was undertaken at an early stage in the drafting of the Draft IFSIP. The AA Screening has assessed the potential for the Draft IFSIP to result in likely significant effects on any European sites within the Natura 2000 network, either alone or in combination with other plans and projects.

In order to provide a focus for the overall AA process all qualifying features of European sites, including Annex I habitats, Annex II species and Annex I bird species were reviewed for the potential for likely significant effects arising from implementation of the Draft IFSIP.

Any aspects of the Draft IFSIP determined as having the potential for likely significant effects on European sites and/or their qualifying features, require further analysis within the Stage 2 AA.

3.4 Purpose of the Appropriate Assessment Process

The overall purpose of the AA process is to ensure that the Draft IFSIP does not result in any adverse effects on the integrity of any European sites in view of the conservation objectives of the site(s). This AA has been prepared having regard to EU and National legislative requirements as outlined above. The responsibility for carrying out the AA lies with DAFM as the competent authority.

4. Natura 2000 Sites in Ireland

4.1 Introduction

In accordance with the DEHLG Guidance (2010), this report takes into account the potential impact the Draft IFSIP may have on a European site and, additionally, the potential for transboundary impacts where the Draft IFSIP has the potential to impact on European sites outside the Member State territory. The report incorporates both the Stage 1 AA screening and Stage 2 AA.

As per text within the Draft IFSIP, it shall apply to the entire territory of the Republic of Ireland with interventions and measures applicable to all forests, existing and future, and all supporting and connected habitats as well all persons, groups and bodies involved in the forestry process.

Given the national scale of the Draft IFSIP, there exists the potential for likely significant effects on much of the Natura 2000 network which comprises of 439 SACs and 165 SPAs. Considering the Zone of Influence (ZoI) of the Draft IFSIP, assessment of each qualifying feature of every European sites is considered a task which would not benefit the AA process or that it could potentially obfuscate the process. In order to provide focus to this AA, the report firstly considers all Annex I habitats, Annex II species and Annex I Bird species that are QIs and SCIs of the Natura 2000 site network. Focusing on QIs, SCIs (or key receptors as referred in this report) and their threats and pressures allows the report to identify content within the Draft IFSIP which could affect a QI or SCI at any site within Ireland's territory and for adjacent territories.

Under Article 17 of the Habitats Directive and Article 12 of Birds Directives, Member States are required to provide an update on the conservation status of each protected habitat and species, their pressures, threats and conservation measures every six years. Whilst the Article 17 and Article 12 reporting mechanisms cover national status of these species and habitats, the pressures and threats and general issues facing the QIs, and SCIs would be applicable for general assessment at national scale for all European sites for which they are qualifying features. Therefore, when in preparing this report Article 17 and Article 12 reporting were reviewed, with the purpose to identify the QIs and SCIs that have forestry listed in the pressure and threats section or in the summary text. In addition to review of Article 17 and Article 12 reporting, a review was carried out of national reports from NPWS, including the Irish Wildlife Manuals, and of published scientific literature. This broad review was carried out in order to establish a robust list of pressures and threats to QIs and SCIs which might arise from forestry. An analysis of the forestry pressure and threats for each key receptor can be found as per below:

- Annex I habitats can be found in Section 4.6;
- Annex II species can be found in Section 4.7; and
- Annex I bird species can be found in Section 4.8.

The AA process then proceeds to examine how the Draft IFSIP could potentially lead to likely significant effects on respective QIs and SCIs through the use of the precautionary principle and the source-pathway-receptor assessment.

4.2 European Sites

European sites comprise of SACs and SPAs and are concerned with protecting their specific QIs and SCIs respectively.

A ZoI has been identified for this AA process. The ZoI is the geographical area over which a plan could affect the receiving environment in a way that could have a significant effect on the QIs of an SAC or SPA site. The ZoI is established using the Source-Pathway-Receptor framework and takes into consideration the national scale of the Draft IFSIP. Given that the Draft IFSIP is national in scale, all European sites within the Republic of Ireland and relevant sites and receptors in Northern Ireland were considered as part of the AA Screening.

Of the 439 SACs designated for one or more of the 59 Annex I habitat types present in Ireland (16 of these Annex I habitat types are designated as ‘priority’ habitats i.e., habitat types in danger of disappearance and whose natural range mainly falls within the territory of the European Union). Of the 26 SACs which are designated due to the presence of an Annex II species.

There are 165 SPAs in Ireland designated for the protection of endangered wild birds including listed rare and vulnerable species, regularly occurring migratory species, and for the wetland habitat that support such species.

4.2.1 Northern Ireland

The Republic of Ireland shares a land border with Northern Ireland from the west at Donegal/Derry to the east at Down/Louth. For the purposes of this AA report, any SAC and SPA sites within 15km of the border have been included within the assessment for potential likely significant effects. There are 26 SACs and five SPAs located within 15km of the Republic of Ireland/Northern Ireland border.

Figure 1 shows the locations of SACs and SPAs within the Republic of Ireland and Northern Ireland. Spatial boundary data for the European site network was obtained from the NPWS database (RoI)⁵ and the Open Data Source NI (NI)⁶ and is the most up-to-date available data.

Table 1 European Sites in Ireland and Northern Ireland

Site	Ireland	Northern Ireland (Total)	Northern Ireland (within 15km)
SAC	439	58	26
SPA	165	16	5

⁵ NPWS Protected Sites Data. Accessed at <https://www.npws.ie/maps-and-data/designated-site-data> on August 2022

⁶ Open Data Source NI. Accessed at <https://www.opendatani.gov.uk/> on August 2022

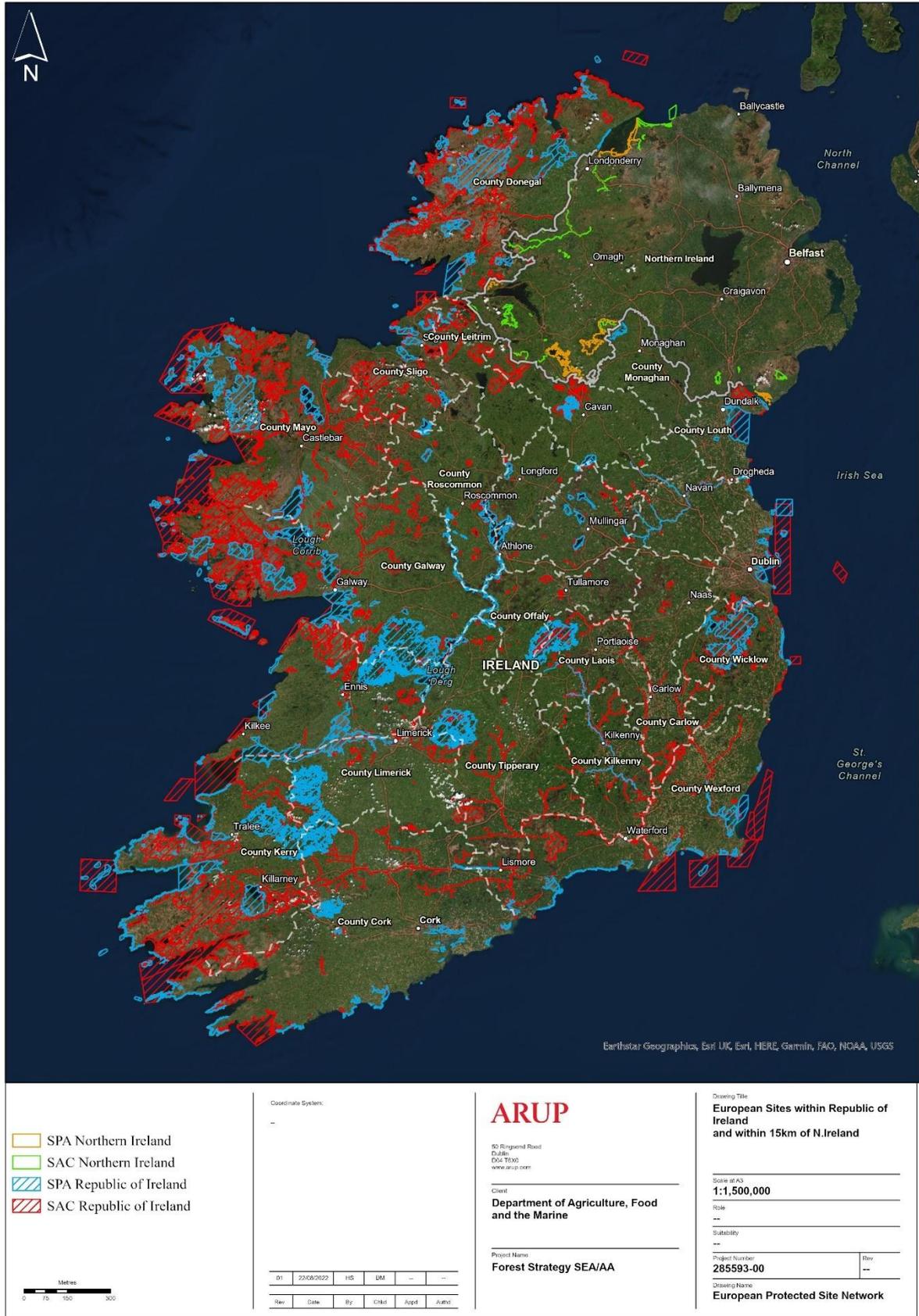


Figure 3 SAC & SPA Site Network within the Republic of Ireland and within 15km of the Northern Ireland Border.

4.3 Conservation Objectives

The conservation objectives (COs) of the 439 SACs and 154 SPA sites within the Republic of Ireland are focused primarily on maintaining or restoring the favourable conservation status of the habitats and species of interest (i.e., the qualifying features). Many of the European sites have site-specific conservation objectives (SSCOs), which focus on the specific populations of the qualifying habitat or species at that site by setting targets for appropriate attributes. The maintenance of habitats and species of European sites at favourable conservation status will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Detailed site synopses for each European site are available from the NPWS website⁷. In Ireland ‘generic’ COs have been prepared for all European sites. Generic COs which have been developed by NPWS encompass the spirit of site-specific COs in the context of maintaining and restoring favourable conservation condition as follows:

- For SACs: “To maintain or restore the favourable conservation condition of the Annex I habitats and/or Annex II species for which the SAC has been selected” and;
- For SPAs: “To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA”.

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue for the foreseeable future; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

4.4 Conservation Status and Threats and Pressures to EU Protected Habitats and Species

4.4.1 Introduction

Under Article 11 of the Habitats Directive, Member States are required to report on the conservation status of the natural habitats and species in the Annexes. Per Article 17, Member States are required to report on the conservation status, pressures, threats and conservation measures both taken and recommended to achieve or retain favourable conservation status. The most recent Article 17 reporting was published in 2019 for the period 2013-2018¹²¹³. Member States are obliged to give an update on the conservation status for Annex I habitats and Annex II species throughout the Member State, irrespective whether the species is a qualifying interest of a designated site or not.

Member States must identify pressures and threats to the Annex I habitats and Annex II species that may have an impact on the conservation status of a designated habitat or species using a standard set of criteria. A threat is defined as an “*Activity expected to have an impact on a species/habitat type in the future*”⁸, and a

⁷ NPWS Conservation Objectives

⁸ DG Environment. 2017. Reporting under Article 17 of the Habitats Directive: Explanatory notes and guidelines for the period 2013-2018. Brussels. Pp 188. Accessed at <https://circabc.europa.eu/sd/a/d0eb5cef-a216-4cad-8e77-6e4839a5471d/Reporting%20guidelines%20Article%2017%20final%20May%202017.pdf> on 01 September 2022

pressure is defined as an “*Activity impact a species/habitat type during the reporting cycle*”⁸. A summary of the main pressures and threats to both habitats and species is provided online on the European Online Agency⁹. Forestry is listed as a pressure and threat to approximately 30% of habitats assessed and 15% of species assessed as part of the Article 17 reporting.

Article 12 of the Birds Directive requires Member States “*to report about the progress made with the implementation of the Birds Directive. The Article 12 report contains information on status and trends of bird populations together with information on main pressures and threats. The report further contains information related to the impact of the Natura 2000 network and conservation measures*”¹⁰.

The threats and pressures for EU protected habitats and species are listed under several categories, of which there is a specific pressure and threat category relating to forestry (this is expanded upon in Section 4.4.2). The overarching pressure and threats categories are:

- Agriculture;
- Forestry;
- Extraction of resources (minerals, peat, non-renewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use of residential, commercial, industrial and recreation infrastructure and areas;
- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures and other human intrusions;
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures, no pressures and pressures from outside the Member State.

National reports on specific habitats or species or groups of habitats or species, prepared by NPWS and known as Irish Wildlife Manuals, were, where available, also assessed, as was published scientific literature. Habitats and/or species that are recorded as having a forestry related pressure or threat, whether the category of pressure/threat is low, medium or high have been presented within this AA.

⁹ European Environment Agency Article 17 National Summary Dashboards, Main pressures and threats. Accessed at <https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards/main-pressures-and-threats> on 14 October 2022

¹⁰ DG Environment. 2017. Reporting under Article 12 of the Birds Directive: Explanatory notes and guidelines for the period 2013-2018. Brussels. Pp 63. Accessed at <https://circabc.europa.eu/d/a/workspace/SpacesStore/08565ed6-40ee-499f-98a7-fb730dfb78/Article%2012%20report%20format%202013-2018.pdf> on 01 September 2022

4.4.2 Forestry Related Pressures & Threats

Article 17 Habitats Directive

Within the Article 17 reference material¹¹ forestry activities occupy their own category. A number of forestry related pressures and activities, such tree thinning, clear-cutting, forestry activities generating pollution to surface or ground water, amongst others, are detailed with corresponding conservation measures. A full list of the forestry pressures, threats and conservation measures is provided in Appendix A.

The 2019 Article 17 Report for Habitats¹² and Species¹³ provides detail on the Annex I habitats and Annex II species that are vulnerable to pressures and threats from forestry. A review of these has been carried out in respect of each Annex I habitat and Annex II species. Annex I habitats are listed in Table 2 with Annex II species listed in Table 3. The conservation status of each habitat and species, in combination with the relevant forestry related pressures and threats, were identified following a review of the Article 17 reporting^{12,13}. Only species listed as a qualifying interest of an SAC are considered in this AA report.

Article 12 Birds Directive

Article 12 of the Birds Directive requires Member States to report on the status of bird populations, and similar to the Article 17 reporting discussed above, to list the main pressures and threats each Annex I species faces. Article 12 reporting for the 2013-2018 period provides detail on the specific pressures and threats from forestry and forestry related activities. The conservation status of each Annex I species, its status residential status in Ireland, the number of SPA sites designated for that species and the specific forestry related pressures and threats they face are listed in Table 4. Only species listed as a qualifying interest of an SPA are considered in this AA report.

4.5 Current State of Ireland's Protected Habitats & Species

4.5.1 Introduction

The current state of Ireland's protected habitats and species is predominantly under threat from anthropogenic effects. From both a global and national perspective, nature is being adversely affected with many key habitats and species such as peatland, grassland and woodland habitats, reported to be under threat¹⁴. In addition, species that depend on these habitats are vulnerable to changes such as habitat loss and fragmentation. Forestry impacts approximately 30% of the protected habitats and over 15% of the species detailed within the Article 17 reporting^{12,13}. Under both the Habitats Directive and the Birds Directive, Member States are required to report on the status of protected habitats and species. Both reporting processes are discussed in Section 4.5.2 and Section 4.5.3 below.

4.5.2 Habitats Directive Reporting

SACs cover approximately 13,500km² of Ireland with 53% of this found in the terrestrial and freshwater environments¹⁵. Within the 439 SAC sites in RoI, 58 Annex I habitats are listed as the QI of at least one designated site, 13 of which have been designated as priority habitat. Priority habitats¹⁶ include, but are not limited to, lagoons, blanket bog, *Cladium* fens, bog woodland and Yew woodland.

As mentioned above EU member states report the status of its protected habitats. The European Environment Agency reports¹⁷ the proportion of habitats assessed as being affected by one or more pressures/threats from

¹¹ European Environment Agency. Central Data Repository – Reference portal for reporting under Article 17 of the Habitats Directive - [List of pressures and threats with specific guidance on the use of distinct pressure and measure codes](#) on 14 October 2022

¹² NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill

¹³ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill

¹⁴ (Environmental Protection Agency 2020) Ireland's Environment. An Integrated Assessment 2020

¹⁵ NPWS Protected Sites – Special Areas of Conservation. Accessed at <https://www.npws.ie/protected-sites/sac> on 23/08/22

¹⁶ Priority habitats are those “which are considered to be in danger of disappearing within the EU territory” taken from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report

¹⁷ The European Environmental Agency, Main pressures and threats. Available on <https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards/main-pressures-and-threats>

broad pressure categories. Statistics show Agriculture as the most prominent pressure category, with 71.9% of habitat assessment reporting it as a pressure/threat. Forestry is listed as the 5th largest with 30.51% of habitat assessment reporting it as a pressure/threat.

Article 17 reports detail the conservation status, pressures and threats of each of the Annex I habitats and Annex II species for which SACs are designated and provide a rating of low, moderate and high to each pressure and threat. An analysis of the Article 17 reports has found that the below habitats and species are most vulnerable (medium to high pressure/threat category) to forestry and/or forestry related activities:

- Annex I habitats that can be impacted by with forestry activities, and most likely to be highly impacted, include all freshwater habitats, upland habitats including active blanket bog and heath, *Molinia* meadows and native woodlands; and
- Annex II species that can be potentially adversely affected by forestry activities include the plant species Killarney fern (*Vandenboschia speciosa*), marsh saxifrage (*Saxifragus hirculus*), slender naiad (*Najas flexilis*) and slender green feather moss (*Hamatocaulis vernicosus*). The freshwater pearl mussel (*Margaritifera margaritifera*), Atlantic salmon (*Salmo salar*) and Kerry slug (*Geomalacus maculosus*) are also linked to forestry activities.

There are 58 Annex 1 habitats in total recorded within Ireland and 73 Annex II species. A full list of the Annex I habitats can be found in Table 2 and Annex II species can be found in Table 3. Both tables list the conservation status, the number of SACs/SPAs for which it is a qualifying feature and the Article 17 Forestry related pressure and threat.

4.5.3 Birds Directive Reporting

Under the Birds Directive, Annex I species are the designated interest features of SPA sites. Within the SPA network, over 80% are designated for species that belong to either breeding seabird or wintering water bird groups. Several offshore islands are included in the designations and the vast majority of wintering waterbird SPA sites are found within estuarine areas. Several lakes are designated due to the presence of breeding wildfowl such as pochard (*Aythya ferina*) and common scoter (*Melanitta nigra s. str.*).

Under Article 12 of the Birds Directive (2009/147/EC) Member States are required to report on the status of Annex I species, whether they occur within or outside SPA sites. Ireland reported on the trends in bird populations in 2019¹⁸ showing the short term and long term population trends for breeding and wintering species. The outcome of the Article 12 reporting shows that while breeding bird populations in each of the trend categories remain stable, several species are in decline. Several species of wintering birds and breeding waders are also in decline as a result of pressures such as intensifying agricultural activities and the from the effects of climate change which are contributing to changes in species range. Bird species such as hen harrier (*Circus cyaneus*) and merlin (*Falco columbarius*) have been in a declining status since 2010 (Amber listed¹⁹ on the Birds of Conservation Concern in Ireland (BOCCI) 4th Edition²⁰)

Annex I bird species that could be impacted by forestry activities are found within SPA sites located inland and are represented by species such as hen harrier, corncrake (*Crex crex*) and merlin. These species are more commonly found within upland and grassland habitats which historically have been favoured areas for commercial forestry.

An analysis of the most recent Article 12 report (2013-2018 reporting period) has found the below bird species (which are a designated feature of an SPA site) are most vulnerable (medium to high pressure/threat category) to forestry and/or forestry related activities.

- Hen harrier (QI for eight SPA sites); and
- Merlin (QI for seven SPA sites).

¹⁸ Article 12 web tool. Species trends at Member State Level. Accessed at <https://nature-art12.eionet.europa.eu/article12/report?period=3&country=IE> on 24 August 2022

¹⁹ Categories that depict an unfavourable conservation status in Europe, but not necessarily global concern.

²⁰ Gilbert, Stanbury and Lewis (2020) Birds of Conservation Concern in Ireland 4: 2020–2026

A full list of the Annex I bird species found in Ireland, their current conservation status and whether they are listed as subject to forestry related pressures and threats can be found in Table 4.

The European Environment Agency reports the proportion of species assessed as being affected by one or more pressures/threats from broad pressure categories. Statistics show the extraction of resources as the most prominent pressure category, with 38.33% of species assessment reporting it as a pressure/threat. Forestry was reported as a threat/pressure in 15% of species assessments. Pressure categories such as agriculture, the development and operations of transport systems, extraction and cultivation of biological living resources and alien and problematic species were all listed as having a larger proportion of threats/pressure to species assessment than the forestry category.

Table 2 The Conservation Status, Forestry Related Pressures and Threats of Annex I Habitats within the Republic of Ireland

EU Habitat Code	Habitat	EU Priority Habitat	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Forestry Related Pressure	Article 17 (2019) Forestry Related Threat
Coastal Habitats						
1110	Sandbanks which are slightly covered by sea water all the time	No	Favourable	2	None	None
1130	Estuaries	No	Inadequate	19	None	None
1140	Mudflats and sandflats not covered by seawater at low tide	No	Inadequate	42	None	None
1150	Coastal Lagoons	Yes	Bad	25	None	None
1160	Large shallow inlets	No	Bad	22	B23 Forestry activities generating pollution to surface or ground-waters (M)	B23 Forestry activities generating pollution to surface or ground-waters (M)
1170	Reefs	No	Inadequate	41	Not Assessed	Not Assessed
1210	Annual vegetation of drift lines	No	Inadequate	24	None	None
1220	Vegetated Shingle/Perennial Vegetation of stony banks	No	Inadequate	36	None	None
1230	Vegetated Sea cliffs	No	Inadequate	28	None	None
1310	Salicornia Mud and other annuals colonising mud and sand	No	Favourable	23	None	None
1330	Atlantic salt meadows	No	Inadequate	38	None	None
1410	Mediterranean salt meadows	No	Inadequate	33	None	None
1420	Halophilous Scrub	No	Bad	2	Not Assessed	Not Assessed
Dunes						
2110	Embryonic shifting dunes	No	Inadequate	33	None	None
2120	Marram dunes (white dunes)	No	Inadequate	46	None	None
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)*	Yes	Bad	43	None	None
2140	Decalcified fixed dunes with (<i>Empetrum nigrum</i>)*	Yes	Favourable	5	Not Assessed	Not Assessed
2150	Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)*	Yes	Inadequate	11	None	None

EU Habitat Code	Habitat	EU Priority Habitat	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Forestry Related Pressure	Article 17 (2019) Forestry Related Threat
2170	Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	No	Inadequate	11	None	None
2190	Humid dune Slacks	No	Inadequate	15	None	None
21A0	Machairs (* in Ireland)	No	Inadequate	19	None	None
Freshwater Habitats						
3110	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	No	Bad	32	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (H)	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (H)
3130	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletalia uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i>	No	Inadequate	9	B23 Forestry activities generating pollution to surface or ground waters (M)	B23 Forestry activities generating pollution to surface or ground waters (M)
3140	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	No	Bad	18	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (M)	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (M)
3150	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation	No	Inadequate	9	B23 Forestry activities generating pollution to surface or ground waters (H)	B23 Forestry activities generating pollution to surface or ground waters (H)
3160	Natural dystrophic lakes and ponds	No	Inadequate	10	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water	B23 Forestry activities generating pollution to surface or ground waters (H) B27 Modification of hydrological conditions, or physical alteration of water

EU Habitat Code	Habitat	EU Priority Habitat	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Forestry Related Pressure	Article 17 (2019) Forestry Related Threat
					bodies and drainage for forestry (including dams) (H)	bodies and drainage for forestry (including dams) (H)
3180	Turloughs*	Yes	Inadequate	45	None	None
3260	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i>	No	Inadequate	21	B23 Forestry activities generating pollution to surface or ground waters (M)	B23 Forestry activities generating pollution to surface or ground waters (M)
3270	Rivers with muddy banks with <i>Chenopodium rubi</i> p.p. and <i>Bidention</i>	No	Favourable	1	None	None
Heath and Scrub						
4010	Northern Atlantic wet heaths with <i>Erica tetralix</i>	No	Bad	39	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)
4030	European dry heaths	No	Bad	48	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)
4060	Alpine and Boreal heath	No	Bad	33	None	None
5130	<i>Juniperus communis</i> formations on heaths or calcareous grasslands	No	Favourable	22	None	None
Grasslands						
6130	Calaminarian grassland of the <i>Violetalia calaminariae</i>	No	Inadequate	33	None	None
6210	Semi-natural dry grasslands and scrubland dacies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites)	No	Bad	33	None	None
6230	Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) *	No	Bad	9	None	None

EU Habitat Code	Habitat	EU Priority Habitat	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Forestry Related Pressure	Article 17 (2019) Forestry Related Threat
6410	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	No	Bad	14	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)
6510	Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)	No	Bad	3	Not Assessed	Not Assessed
6430	Hydrophilous tall-herb fringe communities of plains and of the montane to alpine levels	No	Bad	10	None	None
Peatlands						
7110	Active raised bog*	Yes	Bad	51	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)
7120	Degraded raised bogs still capable of natural regeneration	No	Bad	53	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (M)
7130	Blanket Bog (* if active bog)	Yes	Bad	50	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)
7140	Transition mires and quaking bogs	No	Bad	16	B01 Conversion to forest from other land uses, or afforestation (H)	B01 Conversion to forest from other land uses, or afforestation (H)
7150	Depressions on peat substrates of the <i>Rhynchosporion</i>	No	Bad	63	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)	B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)
7210	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	Yes	Inadequate	17	None	None
7220	Petrifying springs with tufa formation (<i>Cratoneurion</i>)*	Yes	Inadequate	19	None	None
7230	Alkaline fens	No	Bad	38	None	None
Rocky Habitats						
8110	Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	No	Inadequate	14	None	None

EU Habitat Code	Habitat	EU Priority Habitat	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Forestry Related Pressure	Article 17 (2019) Forestry Related Threat
8120	Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)	No	Inadequate	3	None	None
8210	Calcareous rocky slopes with chasmophytic vegetation	No	Inadequate	14	None	None
8220	Siliceous rocky slopes with chasmophytic vegetation	No	Inadequate	18	None	None
8240	Limestone pavement*	Yes	Inadequate	25	None	None
8310	Caves not open to the public	No	Favourable	9	None	None
8330	Submerged or partially submerged sea caves	No	Favourable	12	None	None
Woodlands						
91A0	Old sessile oak (<i>Quercus petraea</i>) woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	No	Bad	40	None	None
91D0	Bog woodland*	Yes	Favourable	11	None	None
91E0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)*	Yes	Bad	25	None	None
91J0	<i>Taxus baccata</i> woods of the British Isles*	Yes	Bad	5	None	None

4.6 Habitats

4.6.1 Introduction

Given the number of SAC sites within the Republic of Ireland and the lack of geographic specificity within the current Draft IFSIP, all Natura 2000 sites could potentially be affected by the implementation of the Draft IFSIP. In this case, an analysis of the 439 SACs, their QIs and the COs would prove lengthy and could obfuscate any analysis. In an effort to streamline the assessment, all annexed habitats have been grouped into broad categories likely to be impacted by the same activity or pathway, as shown in Table 2, and assessed in the interest of providing an accessible analysis of the potential risks of likely significant effects. Any forestry related pressures and threats identified from Article 17 reports applies to habitats inside and outside of the Natura 2000 site network. National reports, such as Irish Wildlife Manuals, and published scientific literature have also been reviewed to identify any further pressures and threats from forestry on Annex I habitats.

This section of the report outlines the Annex I habitats that are in a bad or inadequate status with a corresponding forestry related pressure and threat as per the Article 17 2019 reports, national reports and published scientific literature. Annex I habitats that are currently most vulnerable to forestry related activities have been expanded upon below. A review of the habitat status, the relationship between habitat and forestry and requirements to achieve favourable conservation status are listed in their respective categories below.

4.6.2 Freshwater Habitats

Ireland is home to eight Annex I freshwater habitats, six of which are in bad or inadequate status¹².

As listed within Table 2, the following Annex I habitats are currently in either ‘Bad’ or ‘Inadequate’ conservation status and are listed as having a forestry related pressure or threat of either medium or high category:

- 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletea uniflorae*);
- 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*;
- 3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.;
- 3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation;
- 3160 Natural dystrophic lakes and ponds; and
- 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.

Analysis of the Article 17 report identifies only two pressures and threats for the aforementioned freshwater habitats that relate to forestry. These are: B23: forestry activities generating pollution to surface or ground waters; and B27: Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams). Whilst forestry related activities will not be the sole contributor to the status of the aforementioned Annex I habitats, they do present significant pressures and threats to their conservation status. Activities such as clear-felling, drainage and fertilisation impact these Annex I habitats through pollution of hydrological connections and the alteration of waterbodies from forestry related drainage.

Historically, upland habitats, which occur alongside freshwater lakes such as acid oligotrophic lakes, were targeted for commercial forestry²¹. Planting, felling and modifications to the receiving habitat resulted in degradation of peatlands and connecting freshwater habitats, including acid oligotrophic lakes. Ponds or pools supporting acid oligotrophic habitats can be lost through damage and degradation of peatland. Clear felling activities impact water quality through increases in nutrient, sediment and dissolved organic matter, particularly the case where forests are on peatland. Furthermore, conifer forests on peatland that undergo fertilisation have shown higher levels of pollutants within receiving waterbodies. Further impacts on water

²¹ Renou-Wilson F, Byrne KA (2015) Irish peatland forests: lessons from the past and pathways to a sustainable future. Restor Boreal Temp For 13:321

quality from commercial forestry is as a result of the slow decomposition of conifer needles, branches and roots leading to a loss in organic matter and nutrients.

Freshwater habitats, including the Annex I habitats listed above, can be hydrologically connected to commercial forestry via streams, ditches, rivers and artificial drains created from activities such as agriculture and forestry, as well as natural overland and subsurface pathways. The water quality of these waterbodies and their connecting habitats can deteriorate through release of sediment and nutrients as well as impacts from acidification. Moreover, artificial drains created from forestry can modify the natural hydrological regime²² of the area with wet and peat soils drying out, potentially resulting in erosion.

Measures have been introduced through DAFM guidance to reduce the impacts of forestry on sensitive habitats, including freshwater systems²³, by way of introduction of water setbacks²³ between the watercourse and area planted, suitable site selection and buffer zones between the planted area and a sensitive site such as an SAC/SPA²⁴. Native woodland afforestation near freshwater habitats is also subject to several measures prior to planting including site selection (natural drainage systems and elevation), soil suitability and water setbacks²⁵.

4.6.3 Peatlands

The upland landscape of Ireland supports a number of Annex I habitats including blanket bog (7130), transition mires and quaking bogs (7140), depressions on peat substrates of the *Rhynchosporion* (7150), wet heath (4010) and dry heath (4030), all often occurring in mosaic with one another. Active raised bogs (7110) and degraded raised bog (7120) are found across the lowland landscape. For the purposes of this assessment, these habitats shall be grouped under the term ‘peatlands’.

Peatland habitats in the uplands cover approximately 17.6% of the Irish landscape and dominate the western and northern seaboard covering the counties of Donegal, Leitrim, Sligo, Mayo, Galway, Clare, Kerry and Cork. Designated active and degraded raised bogs account for approximately 2324ha land area²⁶ across 53 SAC sites, scattered across Roscommon, Sligo, Mayo, Galway, Offaly, Laois, Westmeath, Roscommon, Tipperary, Meath, Longford and Cavan. Peatlands require particular characteristics that aid in the formation of peat. Typical factors that contribute to peat forming habitats are waterlogged soils with a low pH, low nutrient and oxygen availability which contribute to a reduced decomposition rate.

In total, approximately 211 SAC sites are designated for the presence of a peatland habitat (active raised bogs, degraded raised bogs, blanket bog, transition mire, *Rhynchosporion* depressions, wet heath and dry heath) and accounts for half the nation’s SAC sites. According to the Irish Peatland Conservation Council (IPCC), 49% of all endangered birds in Ireland occur on peatlands, with most recorded as breeding²⁷. Peatland habitats are a rare habitat in Europe with a unique assemblage of species and structure and function. Active peatlands sequester carbon dioxide²⁸ slowly from the atmosphere and store it within the peat layers. When degraded, peatlands can be a significant source of carbon dioxide release.

Historically in Ireland, commercial afforestation was targeted in the upland environment which, in addition to peat extraction, has led to issues such as direct replacement of bog habitat with forestry and consequent drainage of bog, and heath habitats leading to changes in hydrology and species composition.

²² Laine, Jukka & Vasander, Harri & Sallantausta, Tapani. (2011). Ecological effects of peatland drainage for forestry. *Environmental Reviews*. 3. 286-303. 10.1139/a95-015.

²³ Department of Agriculture, Food and the Marine (2018) *Forests & Water – Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021*.

²⁴ Forest Service (2015) *Forestry Standards Manual*. Department of Agriculture, Food and the Marine.

²⁵ Forest Service (2018) *Woodland for Water: Creating new native woodlands to protect and enhance Ireland’s waters*. Department of Agriculture, Food and the Marine

²⁶ Department of Arts, Heritage and the Gaeltacht (2018) *National Raised Bog Special Areas of Conservation Management Plan 2017-2022*. Accessed at [https://www.npws.ie/sites/default/files/files/FOR%20UPLOAD%20Plan\(WEB_English\)_05_02_18%20\(1\).pdf](https://www.npws.ie/sites/default/files/files/FOR%20UPLOAD%20Plan(WEB_English)_05_02_18%20(1).pdf) on 14/09/2022

²⁷ O’Connell, C. A., Madigan, N., Whyte, T. & Farrell, P. (2021) *Peatlands and Climate Change Action Plan 2030*. Irish Peatland Conservation Council, Co. Kildare.

²⁸ NPWS (2012) *National Peatland Strategy*. National Parks and Wildlife Service. Accessed at <https://www.npws.ie/sites/default/files/general/Final%20National%20Peatlands%20Strategy.pdf> on 14 September 2022

The pressures and threats from forestry do not alone contribute to the ‘bad’ status of these habitats (all are at ‘bad’ status), but they do frequently occur in combination with pressures and threats such as inappropriate agricultural practices and wildfires.

Forestry, as part of wider suite of interacting and cumulative pressures and threats, has led to changes in the hydrological regime which naturally supports peatlands, to species composition changes, to susceptibility to wildfires and to the spread of non-native invasive species such as Rhododendron (*Rhododendron ponticum*)¹². Popular commercial forestry species such as Sitka spruce (*Picea sitchensis*) can self-seed from commercial forestry, spreading onto peatland habitats, thereby contributing to overall habitat degradation.

Conifer forests, with lodgepole pine (*Pinus contorta*) and Sitka spruce being the predominant species, can be seen throughout the western seaboard and upland areas of Ireland. Both are non-native species to Ireland and were introduced due to their favourable growth patterns and timber provision. Commercial forestry species in conjunction with forestry drainage patterns have contributed to altering hydrological systems including the water table. Where commercial plantation has occurred in these situations this has resulted in species changes through the loss of hydrophilous species such as *Sphagnum* thereby creating unfavourable peatland habitats.

The conversion of land to forest is cited as a medium pressure and a high threat to all designated peatland habitats and specifically includes already afforested land, connecting forestry roads and artificial drains created to allow enhanced forest growth. Whilst there is a decreasing trend¹² of commercial forestry within these habitats¹², there are continued forestry practices and lack of restoration management meaning that in many cases legacy issues have to be addressed.

Several projects are currently underway to address these legacy issues, such as Coillte Nature’s Wild Western Peatlands²⁹ and the EU LIFE programme Wild Atlantic Nature³⁰. Both projects are targeting specific locations across the north and west of the country, with Coillte’s project taking place in Derryclare in Connemara and Wild Atlantic Nature taking place on specific sites across Donegal, Mayo, Sligo and Galway.

Several guidelines have been introduced by Forest Service to avoid the inappropriate planting of peatland habitats such as the avoidance of planting on peat soils (greater than 50cm depth), sites 300m above sea level in the West of Ireland and sites 400m above sea level in the East of Ireland³¹. Additionally, Forest Service Circulars (10/2010 and 18/2011) precluded afforestation of large areas of upland sites that contain sensitive habitats, including peatlands. In addition, Forestry Programme 2023-2027 will no longer provide funding for unenclosed lands described as Grant Premium Category 1.

4.6.4 Grasslands – Molinia Meadows

Molinia meadows designated under the Habitats Directive are those found on traditionally nutrient poor soils including calcareous, peat or clay-silt laden soils. Any of these soil types require a fluctuating supply of water to contribute to the indicative species that grow in Molinia meadows. Often used in agriculture for hay meadows or pasture for stock, this habitat can be found on lowland and upland habitats widely distributed in Ireland but with most found in the north and west. The habitat is rare in the east³². Despite being found on nutrient poor soils, Molinia meadows are species rich grasslands, supporting up to 40 flora species including the plant devils bit scabious (*Succisa pratensis*) which is the main food plant for the Annex II species marsh fritillary (*Euphydryas aurinia*).

Molinia meadows are typically managed for agriculture through grazing for cattle or for hay production. The temperate climate of Ireland often contributes higher levels of rainfall which can contribute to waterlogged soils, in turn reducing the availability of some Molinia meadows to be cultivated for hay. In some instances, Molinia meadow habitat has been modified and converted into forestry or more intensive agricultural uses. The 2019 Article 17 report indicated that the loss of Molinia meadows was due to agricultural intensification, forestry, and abandonment and predicted that the impact of these activities is due to continue¹².

²⁹ Coillte Nature – Wild Western Peatlands Project .Accessed at <https://www.coillte.ie/coillte-nature/ourprojects/wildwesternpeatlands/>

³⁰ Wild Atlantic Life Nature. Accessed at <https://www.wildatlanticnature.ie/>

³¹ Forest Service (2015) Land Types for Afforestation. Department of Agriculture, Food and the Marine.

³² Martin, J.R., O’Neill, F.H. & Daly, O.H. (2018) The monitoring and assessment of three EU Habitats Directive Annex I grassland habitats. Irish Wildlife Manuals, No. 102. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

Conversion of *Molinia* meadow to forestry can result in the alteration of the hydrological regime through the construction of associated artificial drains. Potential impacts from this can result in complete loss of habitat as *Molinia* meadows are converted to forestry, loss of indicator species through disturbance from planting, shading through trees and the alteration of water table levels. Many typical and indicator species attributed to the *Molinia* Meadow classification are dependent on light and water availability, with changes in either function having an impact on the species richness. Additionally, commercial afforestation could potentially lower the water table, increase shade and/or present the opportunity for the afforested species to encroach onto adjacent habitat³³ if spread is not managed.

Considering DAFM guidance which excludes locations such as SACs and habitats such as peatlands for afforestation, the land availability for afforestation has been reduced. As a result, marginal habitats, including *Molinia* meadows outside SACs or within adjacent SACs could be subject to further afforestation pressure as the demand for timber and wood products increases.

4.6.5 Low Category Pressures and Threats

Further research revealed that low category pressures and threats are not always included in the Article 17 reports, such as for turloughs, however these should still be considered in the NIR assessment and future licence applications. A range of documents including Irish Wildlife Manuals published by NPWS were reviewed and where they presented forestry related low category pressures and threats, this was collated. Estuaries (1130), Drift Lines³⁴ (1210), Turloughs* (3180), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (7210)³⁵, Old oak woodland (91A0), and Alluvial woodland (91E0)³⁶ are not reported to have medium or high category pressures and threats within Article 17 reports, however low category pressures and threats were reported in national reports such as the Irish Wildlife Manuals from NPWS.

The introduction of biocides, pesticides, hormones, chemicals, and nutrients into the environment through forestry was identified as a common pressure or threat found to affect turlough and woodland habitats through diffuse pollution of surface water and groundwater resources^{37,38}. Human activities such as historical drainage practices, forest planting on open ground and the pollution of surface and groundwater resources was found to impact fen habitats. Activities that happen directly adjacent to fens can alter conditions and make it less suitable for species that depend on this habitat e.g., through drainage and/or nutrient run-off³⁹.

Potential changes in aquatic sediment regimes, caused by commercial forestry operations increasing sediment material deposited into waterbodies, may also cause impacts to estuaries downstream of the plantations⁴⁰.

A change in habitat dynamics may also be triggered by forestry on sand dune habitats. These can manifest in impacts on the hydrological regime of dune systems⁴¹ with condition of habitat also being impacted by increased scrub encroachment and seed banks of non-native species compromising the natural structure impacting the extent and condition of the habitat⁴².

³³ J.R. Martin, F.M. Devaney, F.H. O'Neill & A. Delaney (2013) BEC Consultants Irish Semi-natural Grasslands Survey: Annual Report No.5: Leinster

³⁴ Scally, L., Pfeiffer, N. and Hewitt, E. (2020) The monitoring and assessment of six EU Habitats Directive Annex I Marine Habitats. Irish Wildlife Manuals, No. 118. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

³⁵ O Connor, Á. (2017) Conservation objectives supporting document: Turloughs* and Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidens* p.p. vegetation. Conservation Objectives Supporting Document Series. National Parks and Wildlife Service, Dublin.

³⁶ O'Neill, F.H. & Barron, S.J. (2013) Results of monitoring survey of old sessile oak woods and alluvial forests. Irish Wildlife Manuals, No. 71. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland

³⁷ O'Neill, F.H. & Barron, S.J. (2013) Results of monitoring survey of old sessile oak woods and alluvial forests. Irish Wildlife Manuals, No. 71. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

³⁸ O Connor, Á. (2017) Conservation objectives supporting document: Turloughs* and Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidens* p.p. vegetation. Conservation Objectives Supporting Document Series. National Parks and Wildlife Service, Dublin.

³⁹ Long, M.P. & Brophy, J.T. (2019) Monitoring of sites and habitat for three Annex II species of whorl snail (*Vertigo*). Irish Wildlife Manuals, No. 104. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

⁴⁰ Scally, L., Pfeiffer, N. and Hewitt, E. (2020) The monitoring and assessment of six EU Habitats Directive Annex I Marine Habitats. Irish Wildlife Manuals, No. 118. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

⁴¹ Tim Ryle, Anne Murray, Kieran Connolly & Melinda Swann (2009) Coastal Monitoring Project 2004-2006. A Report to the National Parks and Wildlife Service, Dublin.

⁴² Delaney, A., Devaney, F.M, Martin, J.M. and Barron, S.J. (2013). Monitoring survey of Annex I sand dune habitats in Ireland. Irish Wildlife Manuals, No. 75. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Table 3 Annex II Species, Conservation Status and Forestry Related Pressures and Threats.

EU Species Code	Species	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Identified Pressure relating to Forestry	Article 17 (2019) Identified Threat relating to Forestry
Plants					
6985	Killarney fern	Favourable	18	None Identified	None Identified
1528	Marsh saxifrage	Favourable	5	B27 Modification of hydrological conditions, or physical alternation of water bodies and drainage for forestry (including dams) (M)	B27 Modification of hydrological conditions, or physical alternation of water bodies and drainage for forestry (including dams) (M)
1833	Slender naiad	Inadequate	24	B23 Forestry activities generating pollution to surface or ground waters (M)	B23 Forestry activities generating pollution to surface or ground waters (M)
6216	Slender green feather moss	Favourable	8	None Identified	None Identified
1395	Petalwort (<i>Petalophyllum ralfsii</i>)	Favourable	20	None Identified	None Identified
1376	Maérl (<i>Lithothamnium oralloides</i>)	Bad	0	None Identified	None Identified
1377	Maerl (<i>Phymatholithon calcareum</i>)	Bad	0	None Identified	None Identified
1400	White cushion moss (<i>Leucobryum glaucum</i>)	Favourable	0	None Identified	None Identified
1409	Sphagnum genus (<i>Sphagnum spp.</i>)	Inadequate	0	None Identified	None Identified
1413	Lycopodium group (<i>Lycopodium spp.</i>)	Inadequate	0	None Identified	None Identified
1378	<i>Cladonia</i> subgenus <i>cladina</i> (<i>Cladonia (cladina) subsp.</i>)	Inadequate	0	None Identified	None Identified
Molluscs					
1013	Geyer's whorl snail (<i>Vertigo geyeri</i>)	Bad	14	None Identified	None Identified
1014	Narrow mouthed whorl snail (<i>Vertigo angustior</i>)	Inadequate	13	None Identified	None Identified
1016	Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>)	Inadequate	7	None Identified	None Identified
1024	Kerry slug	Favourable	7	None Identified	None Identified

EU Species Code	Species	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Identified Pressure relating to Forestry	Article 17 (2019) Identified Threat relating to Forestry
1029	Freshwater pearl mussel	Bad	19	B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (H) B23 Forestry activities generating pollution to surface or ground waters (H)	B27 Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (H) B23 Forestry activities generating pollution to surface or ground waters (H) B01 Conversion to forest from other land uses, or afforestation (excluding drainage) (H)
1990	Nore pearl mussel (<i>M. Margaritifera durrovensis</i>)	Unknown	0	None Identified	None Identified
Crustacean					
1092	White-clawed crayfish (<i>Austropotamobius pallipes</i>)	Bad	15	None Identified	None Identified
Invertebrate					
1065	Marsh fritillary	Inadequate	0	None Identified	None Identified
1095	Sea lamprey (<i>Petromyzon marinus</i>)	Bad	12	None Identified	None Identified
1096	Brook lamprey (<i>Lampetra planeri</i>)	Favourable	10	None Identified	None Identified
1099	River lamprey (<i>Lampetra fluviatilis</i>)	Unknown	10	None Identified	None Identified
5046	Killarney shad (<i>Alosa killarnensis</i>)	Favourable	0	None Identified	None Identified
1103	Twaite shad (<i>Alosa fallax</i>)	Bad	5	None Identified	None Identified
5076	Pollan (<i>Coregonus pollan</i>)	Bad	3	None Identified	None Identified
1106	Atlantic salmon	Inadequate	26	B23 Forestry activities generating pollution to surface or ground waters (M)	B23 Forestry activities generating pollution to surface or ground waters (M)
Amphibian					
6284	Natterjack toad (<i>Epidalea calamita</i>)	Bad	0	None Identified	None Identified
1213	Common frog (<i>Rana temporaria</i>)	Favourable	0	None Identified	None Identified

EU Species Code	Species	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Identified Pressure relating to Forestry	Article 17 (2019) Identified Threat relating to Forestry
1223	Leatherback turtle (<i>Dermochelys coriacea</i>)	Unknown	0	None Identified	None Identified
Mammals					
1303	Lesser horseshoe bat (<i>Rhinolophus hipposideros</i>)	Inadequate	41	None Identified	None Identified
1309	Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	Favourable	0	None Identified	None Identified
5009	Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	Favourable	0	None Identified	None Identified
1317	Nathusius' pipistrelle (<i>Myotis daubentonii</i>)	Unknown	0	None Identified	None Identified
1322	Natterer's bat (<i>Myotis natterei</i>)	Favourable	0	None Identified	None Identified
1314	Daubenton's bat (<i>Myotis daubentonii</i>)	Favourable	0	None Identified	None Identified
1330	Whiskered bat (<i>Myotis mystacinus</i>)	Favourable	0	None Identified	None Identified
1326	Brown long-eared bat (<i>Plecotus auritus</i>)	Favourable	0	None Identified	None Identified
1331	Leisler's bat (<i>Myotis nattereri</i>)	Favourable	0	None Identified	None Identified
1334	Mountain hare (<i>Leptus timidus</i>)	Favourable	0	B01 Conversion to forest from other land uses, or afforestation (M)	B01 Conversion to forest from other land uses, or afforestation (M)
1355	Otter (<i>Lutra lutra</i>)	Favourable	45	None Identified	None Identified
1357	Pine marten (<i>Martes martes</i>)	Favourable	0	None Identified	None Identified
Marine Mammals					
1364	Grey seal (<i>Halichoerus grypus</i>)	Favourable	10	None Identified	None Identified
1365	Harbour seal (<i>Phoca vitulina</i>)	Favourable	13	None Identified	None Identified
1345	Humpback whale (<i>Megaptera novaeangliae</i>)	Unknown	0	None Identified	None Identified
1349	Common bottlenose dolphin (<i>Tursiops truncatus</i>)	Favourable	0	None Identified	None Identified
1350	Common dolphin (<i>Delphinus delphis</i>)	Favourable	0	None Identified	None Identified
1351	Harbour porpoise (<i>Phocoena phocoena</i>)	Favourable	2	None Identified	None Identified
2027	Killer whale (<i>Orcinus orca</i>)	Unknown	0	None Identified	None Identified

EU Species Code	Species	Conservation Status	No. of SACs for which it is a qualifying feature	Article 17 (2019) Identified Pressure relating to Forestry	Article 17 (2019) Identified Threat relating to Forestry
2029	Long-finned pilot whale (<i>Globicephala melas</i>)	Favourable	0	None Identified	None Identified
2030	Risso's dolphin (<i>Grampus griseus</i>)	Favourable	0	None Identified	None Identified
2031	Atlantic white-sided dolphin (<i>Lagenorhynchus actus</i>)	Favourable	0	None Identified	None Identified
2032	White-beaked dolphin (<i>Lagenorhynchus albirostris</i>)	Favourable	0	None Identified	None Identified
2034	Striped dolphin (<i>Stenella coeruleoalba</i>)	Favourable	0	None Identified	None Identified
2035	Cuvier's Beaked whale (<i>Ziphius cavirostris</i>)	Favourable	0	None Identified	None Identified
2038	Sowerby's beaked whale (<i>Mesoplodon bidens</i>)	Favourable	0	None Identified	None Identified
2618	Minke whale (<i>Balaenoptera acutotostrata</i>)	Favourable	0	None Identified	None Identified
2621	Fin whale (<i>Balaenoptera physalus</i>)	Favourable	0	None Identified	None Identified
5020	Blue whale (<i>Balaenoptera musculus</i>)	Unknown	0	None Identified	None Identified
2624	Sperm whale (<i>Physeter macrocephalus</i>)	Favourable	0	None Identified	None Identified
5033	Northern bottlenose whale (<i>Hyperoodon ampullatus</i>)	Unknown	0	None Identified	None Identified
2619	Sei whale (<i>Balaenoptera borealis</i>)	Unknown	0	None Identified	None Identified
Vagrants					
1348	Northern bottlenose whale (<i>Eubalaena glacialis</i>)	Not Assessed	0	None Identified	None Identified
2027	False killer whale (<i>Pseudorca crassidens</i>)	Not Assessed	0	None Identified	None Identified
2037	True's Beaked whale (<i>Mesoplodon mirus</i>)	Not Assessed	0	None Identified	None Identified
2622	Pygmy sperm whale (<i>Kogia breviceps</i>)	Not Assessed	0	None Identified	None Identified
5029	Beluga/white whale (<i>Delphinapterus leucas</i>)	Not Assessed	0	None Identified	None Identified
5034	Gervais' Beaked whale (<i>Mesoplodon europaeus</i>)	Not Assessed	0	None Identified	None Identified
1102	Allis shad (<i>Alosa alosa</i>)	Not Assessed	0	None Identified	None Identified
1320	Brandt's bat (<i>Myotis brandtii</i>)	Not Assessed	0	None Identified	None Identified

4.7 Species

4.7.1 Introduction

Given the number of SAC sites within the Republic of Ireland and the lack of geographic specificity within the current Draft IFSIP, all Natura 2000 sites could potentially be affected by the implementation of the Draft IFSIP. In this case, an analysis of the 439 SACs, their QIs and the COs would prove lengthy. In an effort to streamline the assessment and to provide an accessible analysis of the potential risks from the implementation of the Draft IFSIP, only annexed II species that have been identified to have a forestry pressure and threat have been assessed. It must be noted that this is a broad analysis of the designated species based primarily on Article 17 reporting. Evidence provided of the effects of forestry related activities in the Article 17 reports applies to species inside and outside of the Natura 2000 site network. National reports, such as NPWS Irish Wildlife Manuals, and published scientific literature have also been reviewed to furnish any further pressures and threats from forestry on Annex II species listed as QIs of SACs in Ireland.

This section of the AA report outlines the Annex II species that are in a bad or inadequate status with a corresponding forestry related pressure and threat as per the Article 17 2019 reports, national reports and published scientific literature. Annex II species that are currently most vulnerable to forestry related activities have been expanded upon below. A review of the species status, the relationship between species and forestry and requirements to achieve favourable conservation status are listed in their respective categories below.

4.7.2 Marsh Saxifrage

Restricted to upland habitats in Sligo and Mayo (it is a QI of six SACs), this plant species is found within blanket bog and is noted as one of the rarest flowering plants in Ireland⁴³. Marsh saxifrage requires a wet environment to grow, such as mineral flushes that occur in blanket bog and function as a food source. The species has been in a decreasing trend for a number of years, formerly found across several counties in the north, now restricted to Sligo and Mayo. Dependent on the peatland environment it inhabits, negative impacts to blanket bog subsequently affect the conservation status of marsh saxifrage.

Threats to blanket bog habitats, previously discussed in Section 4.6.3, include afforestation, peat extraction, erosion and burning. Drainage and irrigation operations from forestry related infrastructure present the greatest pressure and threat to marsh saxifrage, as this contributes to hydrological changes that reduces suitability of supporting conditions. The 2019 Article 17 reporting identifies locations at Bellacorick Bog SAC and the Ox Mountains Bogs SAC¹³ where hydrological changes due to drainage activities for forestry has reduced the water table⁴⁴.

Conservation measures suggested within the Article 17 reporting include removal of forestry-related artificially installed drainage and irrigation. This would include drain blocking in exploited forestry and peat bog areas adjacent to marsh saxifrage thereby raising local water table level. Habitats affected by hydrological changes, both inside and outside of the area where marsh saxifrage is found, are a key target area for restoration in order to restore conditions that would support marsh saxifrage.

Although upland habitats have been targeted for forestry less in recent years (due to the introduction of environmental requirements⁴⁵ from the Forest Service and updated forestry standards²⁴), these areas are subject to legacy issues associated with historical commercial afforestation and therefore effects on marsh saxifrage continue to exist.

4.7.3 Slender Naiad

Slender naiad is a rare freshwater plant species found in lakes, rivers and pools, and is the main indicator plant species of the annex habitat 3130 – Mixed *Najas flexilis* lake habitat of which there are 24 SACs that

⁴³ Muldoon, C.S., Waldren, S. & Lynn, D. (2015) Monitoring recommendations for Marsh Saxifrage (*Saxifraga hirculus* L.) in the Republic of Ireland. Irish Wildlife Manuals, No. 88. National Parks and Wildlife Service, Department of the Arts, Heritage and the Gaeltacht, Ireland.

⁴⁴ Perrin, P.M., Roche, J.R., Barron, S.J., Daly, O.H., Hodd, R.L., Muldoon, C.S. & Leyden, K.J. (2013). National Survey of Upland Habitats (Phase 3, 2012-2013), Site Report No. 10: Ox Mountains Bogs cSAC (002006), Cos. Mayo and Sligo. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

⁴⁵ Forest Service (2016) Environmental Requirements for Afforestation. Department of Agriculture, Food and the Marine.

list it as a QI. Slender naiad typically requires high water clarity, depths of up to 2m, pH between 6.0 and 9.0., and phosphate rich silty sediment⁴⁶. Its distribution in Ireland is within freshwater habitats to west of Ireland with the core regions occurring in Galway, Donegal and Kerry. As discussed in Section 4.6.2, freshwater habitats are subject to pressures and threats from afforestation, and by association so are the plants and species that grow within and are indicators of those habitats. Article 17 reporting points to evidence that drainage associated with forestry presents a significant pressure in five catchments where slender naiad exists.

A decline in the water quality of freshwater habitats can have a knock on effect on slender naiad due to increases in sediment, dissolved organic matter and/or from acidification. Hydrological changes contributing to fluctuations in water level can hamper growth patterns of slender naiad⁴⁷. Increases in nutrient load, potentially from fertilisation of afforestation and/or the contribution of dissolved organic matter from leaf litter or pine needles can incur algal blooms, should the right conditions occur. Algal blooms are indicative of declines in water quality and can negatively affect slender naiad presence and abundance.

Conservation measures such as the reversal of drainage impacts on the receiving environment and the restoration of the natural hydrological regime in addition to reduction of pollution from forestry can contribute to improving the conservation status of this slender naiad.

4.7.4 Freshwater Pearl Mussel

Freshwater pearl mussel are one of the longest living organisms in Ireland, found in clean fast-flowing rivers and some lakes. The species requires clean, well-oxygenated water to thrive, often found burrowed between boulders and pebbles in the sandy substrate of upland rivers. Individuals of this species have been found to live for over 120 years⁴⁸ and is a QI in 19 SACs⁴⁹.

The declining status of the species has been as a result of several factors such as pearl fishing, pollution, acidification, organic enrichment, siltation, river engineering and declining salmon stocks. The mussel has a symbiotic relationship with Atlantic salmon, spending the larval stage attached to the gills of salmonoid fish. Changes to the receiving freshwater habitat in addition to the surrounding habitat, which is more commonly upland peatland habitats, can have a knock-on effect on freshwater pearl mussel.

Within Article 17 reporting, the conservation status of the species is reported as 'bad', with the species having this status for the past three reporting cycles (2007, 2013 and 2019). Various activities associated with forestry, listed below, are identified as pressures and threats:

- Impacts to water quality can include heavy sedimentation⁵⁰ that can occur through forest thinning, clearance and clear-felling operations where the soils surface is disrupted and exposed to erosion, potentially causing the transportation of particles into the water⁵¹;
- Increases in the nutrient load can impact the hydrological regime of riverine system which may be as a result of tree felling where conifer needles, branches and roots are slow to dissolve¹² contributing to increases in nutrients such as nitrates⁵²; and

⁴⁶ I. D. M. Gunn & L. Carvalho (2020). Slender Naiad (*Najas flexilis*) Habitat Quality Assessment. CRW2018_27. Scotland's Centre of Expertise for Waters (CREW). Available online at: crew.ac.uk/publications

⁴⁷ Roden, C., Murphy, P. & Ryan, J.B. (2021) A study of lakes with Slender Naiad (*Najas flexilis*). Irish Wildlife Manuals, No. 132. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland

⁴⁸ Beasley, C., & Roberts, D. (1999). Assessing the conservation status of the freshwater pearl mussel in the North of Ireland - Relevance of growth and age characteristics. *Journal of Conchology*, 36, 53-61.

⁴⁹ NPWS Freshwater Pearl Mussel Irish SACs. Accessed at <https://www.npws.ie/research-projects/animal-species/invertebrates/freshwater-pearl-mussel/irish-sacs>

⁵⁰ Shah NW, Nisbet TR. The effects of forest clearance for peatland restoration on water quality. *Sci Total Environ*. 2019 Nov 25;693:133617. doi: 10.1016/j.scitotenv.2019.133617. Epub 2019 Jul 30. PMID: 31635007.

⁵¹ Hutton SA, Harrison SSC and O'Halloran J (2008). An Evaluation of the role of forests and forest practices in the eutrophication and sedimentation of receiving waters. Department of Zoology, Ecology and Plant Science. Environmental Research Institute. University College Cork. Water Framework Directive Western River Basin District. Programme of Measures. Forest and Water National Study. Accessed at <https://www.catchments.ie/download/forestry-and-water/?wpdmdl=1211&ind=MTQ3MjQ3NTAwNHdwZG1fRm9yZXN0IGFuZCB3YXRlcjBFdXRyb3BoaWNhdGlvb19TZWRpbWVudGF0aW9uIExpdGVyYXR1cmUgemV2aWV3IC5wZGY> on 22 September 2022

⁵² Neal, C., Reynolds, B., Neal, M., Wickham, H., Hill, L., and Williams, B.: The impact of conifer harvesting on stream water quality: the Afon Hafren, mid-Wales, *Hydrological Earth Syst. Sci.*, 8, 503–520, <https://doi.org/10.5194/hess-8-503-2004>, 2004.

- The creation of forestry roads⁵³, the movement of machinery and the use of fertilisers to bring conifers to maturity have all shown to impact water quality⁵⁴.

The eight catchment areas where the species populations are highest in number are all found within upland areas, which have blanket bog, wet heath and dry heath habitats. Each of the eight catchments are part of the Natura 2000 site network. As stated in Section 4.6.3, these upland habitats have historically been targeted for forestry, with mass plantation and cultivation activities occurring since the mid-70s. Impacts on these habitats from forestry related activities in combination with other land use such as agriculture, have resulted in hydrological regime changes, loss in species composition and declines in water quality with consequential negative impacts on freshwater pearl mussel populations.

Conservation measures have been developed in order to improve the conservation status of the species. These have been implemented through projects such as the KerryLIFE programme and a national conservation strategy developed by NPWS⁵⁵. The Plan for Forests & Freshwater Pearl Mussel⁵⁶ was drafted in 2018 by DAFM but has yet to be finalised and implemented. Article 17 reporting suggests that the Draft Plan for Forests & Freshwater Pearl Mussel was not based on the species' ecological requirements or its site-specific conservation objectives. In order to improve the conservation status of the species and help populations recover, conservation measures shall require a restoration of the hydrological regime of catchments and a reduction, with an aim to eradicate, pollution. Conservation measures that restore the surrounding habitat, such as blanket bog restoration can also have positive impacts on freshwater pearl mussel populations.

4.7.5 Atlantic Salmon

Atlantic salmon are a QI of 26 SACs across Ireland, found in freshwater lakes systems their connecting rivers and estuarine areas. Atlantic salmon are a euryhaline species, a term which means they can tolerate living in varying degrees of salinity. The species lifecycle starts and ends in freshwater lakes and rivers, but they spend the bulk of their adult life in the marine ecosystem. Despite having the ability to tolerate changes in salinity, the species faces pressures and threats from changes in water quality, which as per the Article 17 reporting, can be as a result of pollution from agricultural production, domestic waste water treatment systems and forestry. Changes in water quality can be attributed to both rural diffuse and point-source pollution.

As stated in Section 4.6.2, forestry related activities can contribute to the overall health of freshwater habitats, with activities such as clear-felling, drainage works and fertilisation contributing to changes in water quality. Changes in the levels of dissolved organic matter, nutrients and sediment can impact the life cycle of Atlantic salmon. Studies on Atlantic salmon in afforested catchments show that the density and biomass of juvenile species were significantly lower in streams draining from afforested catchments and that the tolerance to changes in water quality was much lower than that found in other species⁵⁷.

The HYDROFOR project, a collaboration project between the EPA and DAFM, , investigated the effects of coniferous forests and forestry operations on Ireland's surface water quality and aquatic ecology. Research between 2014-2020 found that the impacts of acidification from forestry on upland catchments contributes to water quality changes, with evidence showing that higher acidity levels can impact aquatic macroinvertebrates, thereby impacting on the food-web for species such as Atlantic Salmon. Freshwater

⁵³ L. Kuglerová, E.M. Hasselquist, R.A. Sponseller, T. Muotka, G. Hallsby, H. Laudon Multiple stressors in small streams in the forestry context of Fennoscandia: the effects in time and space *Sci. Total Environ.*, 756 (2021), Article 143521

⁵⁴ Mary Kelly-Quinn, Michael Bruen, Simon Harrison, Mark Healy, John Clarke, Tom Drinan, Hugh B. Feeley, Joanne Finnegan, Conor Graham, John Regan, Sean Blacklocke. Research 169: HYDROFOR: Assessment of the Impacts of Forest Operations on the Ecological Quality of Water. 2016. Accessed at <https://www.epa.ie/publications/research/water/research-169-hydrofor-assessment-of-the-impacts-of-forest-operations-on-the-ecological-quality-of-water.php>

⁵⁵ NPWS Freshwater Pearl Mussel Conservation Measures. A Strategy for the Conservation of the Freshwater Pearl Mussel in Ireland September 2011. Accessed at: <https://www.npws.ie/research-projects/animal-species/invertebrates/freshwater-pearl-mussel/conservation-measures>

⁵⁶ Department of Agriculture, Food and the Marine (2018) Draft Plan for Forests & Freshwater Pearl Mussel in Ireland.

⁵⁷ Harrison, S.S.C., Hutton S., Baars, J.-R., Cruikshanks, R., Johnson, J., Juhel, G., Kirakowski, T., Matson, R., O'Hal loran, J, Phelan, P. and Kelly-Quinn, M. 2014 Contrasting impacts of conifer forests on brown trout and Atlantic salmon in headwater streams in Ireland. *Biology and Environment: Proceedings of the Royal Irish Academy* 2014 DOI: 10.3318/ BIOE.2014.20

lakes can have higher levels of heavy metals and dissolved organic carbon, as well as lower levels of dissolved oxygen, with the greatest impact seen in catchments that were subject to forest clear-felling⁵⁸.

The impacts of forestry activities, in combination with agriculture activities and domestic waste water treatment has contributed to changes in water quality and consequently a negative impact on Atlantic salmon abundance.

4.7.6 Low Category Pressures and Threats

Further research revealed that low category pressures and threats are not always included in the Article 17 reports, however these should still be considered in the NIR assessment and future licence applications. A range of documents including Irish Wildlife Manuals published by NPWS were reviewed and where they presented forestry related low category pressures and threats, this was reviewed for assessment. Killarney fern (6985), slender green feather moss (6216), Geyer's whorl snail (1013), narrow mothed whorl snail (1014), Desmoulin's whorl snail (1016), Kerry slug (1024), pollan (5076), lesser horseshoe bat (1303), and otter (1355) are species not reported to have medium or high category pressures and threats within Article 17 reports, however, low category pressures and threats were reported in national reports such as the Irish Wildlife Manuals from NPWS.

The introduction of biocides, pesticides, hormones, chemicals, and nutrients into the environment was a common pressure or threat found to affect Killarney fern, pollan, otter and aforementioned snail species, through diffuse pollution of surface water and groundwater resources^{59,60,61}.

There is the potential for large scale planting to impact on the hydrological regime and drainage of adjacent areas, thereby causing impact on Killarney fern, slender green feather moss, and whorl snail species^{62,63,64}.

The Kerry slug may be impacted by forestry changing the dynamics of their habitat. This would occur by the formation of a dense canopy (often found within commercial plantations), the growth of many species of bryophytes and lichens on the rocks and boulders on which Kerry slug depends becoming inhibited by that dense canopy, and therefore the habitat becoming unsuitable for Kerry slug⁶⁵.

Otter and lesser horseshoe bat both have low category pressures and threats related to commercial forestry including the use of infrastructure required for planting and harvest^{61,66}. These can drive the fragmentation of habitat and direct habitat loss for these species.

⁵⁸ Mary Kelly-Quinn, Michael Bruen, Simon Harrison, Mark Healy, John Clarke, Tom Drinan, Hugh B. Feeley, Joanne Finnegan, Conor Graham, John Regan, Sean Blacklocke. Research 169: HYDROFOR: Assessment of the Impacts of Forest Operations on the Ecological Quality of Water. 2016. Accessed at <https://www.epa.ie/publications/research/water/research-169-hydrofor-assessment-of-the-impacts-of-forest-operations-on-the-ecological-quality-of-water.php>

⁵⁹ Long, M.P. & Brophy, J.T. (2019) Monitoring of sites and habitat for three Annex II species of whorl snail (*Vertigo*). Irish Wildlife Manuals, No. 104. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

⁶⁰ Ní Dhúill, E., O'Neill, F.H. & Hodd, R.L. (2022) Monitoring and assessment of Killarney Fern (*Vandenboschia speciosa* (Willd.) Kunkel) in Ireland, 2015–2018. Irish Wildlife Manuals, No. 133. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

⁶¹ NPWS (2009) Threat Response Plan: Otter (2009-2011). National Parks & Wildlife Service, Department of the Environment, Heritage & Local Government, Dublin

⁶² NPWS (2008) All-Ireland Species Action Plan - Killarney Fern - *Trichomanes speciosum*.

⁶³ Christina Campbell, Nick Hodgetts & Neil Lockhart (2013) *Hamatocaulis vernicosus* (Mitt.) Hedenäs (Slender Green feather-moss) in the Republic of Ireland. Article 17 Report Backing Document 2013. National Parks and Wildlife Service, Dublin.

⁶⁴ Moorkens, E.A. & Killeen, I.J. (2011) Monitoring and Condition Assessment of Populations of *Vertigo* *geyeri*, *Vertigo* *angustior* and *Vertigo* *mouli* *nsiana* in Ireland. Irish Wildlife Manuals, No. 55. National Parks and Wildlife Service, Department of Arts, Heritage and Gaeltacht, Dublin, Ireland.

⁶⁵ Department of Environment, Heritage, and Local Government (2010) Threat Response Plan: Kerry Slug *Geomalacus maculosus*

⁶⁶ NPWS & VWT (2022) Lesser Horseshoe Bat Species Action Plan 2022-2026. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

Table 4 Article 12 Reporting on Bird Species

Species Name	BOCCI Status	Residential Status in Ireland	No. of SPA sites for which this is a qualifying feature	Forestry Related Pressure per Article 12 Reporting	Forestry Related Threat per Article 12 Reporting
Arctic tern (<i>Sterna paradisaea</i>)	Amber	Breeding	16	None	None
Balearic shearwater (<i>Puffinus mauretanicus</i>)	Red	Passage	0	None	None
Barnacle goose (<i>Branta leucopsis</i>)	Amber	Wintering	22	None	None
Bar-tailed godwit (<i>Limosa lapponica</i>)	Red	Wintering	24	None	None
Bewick's swan (<i>Cygnus columbianus bewickii</i>)	Red	Wintering	3	None	None
Black-headed gull (<i>Chroicocephalus ridibundus</i>)	N/A	Breeding	19	None	None
Black-tailed godwit (<i>Limosa limosa</i>)	Red	Wintering	25	None	None
Black-throated diver (<i>Gavia arctica</i>)	Amber	Wintering	1	None	None
Chough (<i>Pyrrhocorax Pyrrhocorax</i>)	Amber	Breeding	18	None	None
Common gull (<i>Larus canus</i>)	N/A	Breeding	21	None	None
Common scoter	N/A	Wintering	8	None	None
Common tern (<i>Sterna hirundo</i>)	Amber	Breeding	13	None	None
Cormorant (<i>Phalacrocorax carbo carbo</i>)	N/A	Breeding	22	None	None
Corncrake	Red	Breeding	10	None	None
Corn bunting (<i>Emberiza calandra</i>)	N/A	Breeding	22	None	None
Curlew (<i>Numenius arquata arquata</i>)	N/A	Wintering	19	None	None
Dunlin (<i>Calidris alpina schinzii</i>)	Red	Breeding and Wintering	6	None	None
Eider (<i>Somateria mollissima</i>)	N/A	Breeding	1	None	None
Golden eagle (<i>Aquila chrysaetos</i>)	Red	Breeding	0	Medium	Medium
Golden plover (<i>Pluvialis apricaria</i>)	Red	Breeding and Wintering	36	None	None
Great northern diver (<i>Gavia immer</i>)	Amber	Wintering	4	None	None

Species Name	BOCCI Status	Residential Status in Ireland	No. of SPA sites for which this is a qualifying feature	Forestry Related Pressure per Article 12 Reporting	Forestry Related Threat per Article 12 Reporting
Great skua (<i>Catharacta skua</i>)	N/A	Breeding	0	None	None
Greenland white-fronted goose (<i>Anser albifrons flavirostris</i>)	N/A	Wintering	29	None	Medium
Grey partridge (<i>Perdix perdix</i>)	N/A	Breeding	0	Medium	Medium
Hen harrier	Amber	Breeding	8	High	High
Kingfisher (<i>Alcedo atthis</i>)	Amber	Breeding	2	None	None
Lapwing (<i>Vanellus vanellus</i>)	N/A	Wintering	23	None	None
Leach's storm petrel (<i>Hydrobates leucorhous</i>)	Red	Breeding	1	None	None
Little gull (<i>Hydrocoloeus minutus</i>)	Amber	Passage	0	None	None
Little tern (<i>Sternula albifrons</i>)	Amber	Breeding	8	None	None
Marsh harrier (<i>Circus</i>)	Amber	Breeding	0	None	None
Mediterranean gull (<i>Larus melanocephalus</i>)	Amber	Breeding	0	None	None
Merlin	Amber	Breeding	7	Medium	Medium
Nightjar (<i>Caprimulgidae</i>)	Red	Breeding	0	None	None
Peregrine (<i>Falco peregrinus</i>)	N/A	Breeding	10	None	None
Red kite (<i>Milvus milvus</i>)	Red	Breeding	0	None	None
Red-necked phalarope (<i>Phalaropus lobatus</i>)	Red	Breeding	0	None	None
Red-throated diver (<i>Gavia stellata</i>)	Amber	Breeding and Wintering	6	None	None
Redshank (<i>Tringa erythropus</i>)	N/A	Breeding and Wintering	21	None	None
Ring ouzel (<i>Turdus torquatus</i>)	N/A	Breeding	0	High	High
Roseate tern (<i>Sterna dougallii</i>)	Amber	Breeding	4	None	None
Ruff (<i>Calidris pugnax</i>)	Amber	Breeding	0	None	None
Sandwich tern (<i>Thalasseus sandvicensis</i>)	Amber	Breeding	9	None	None
Short-eared owl (<i>Asio flammeus</i>)	Amber	Breeding	0	Medium	Medium
Spotted crake (<i>Porzana porzana</i>)	Amber	Breeding	0	None	None
Slavonian grebe (<i>Podiceps auritus</i>)	Red	Wintering	0	None	None

Species Name	BOCCI Status	Residential Status in Ireland	No. of SPA sites for which this is a qualifying feature	Forestry Related Pressure per Article 12 Reporting	Forestry Related Threat per Article 12 Reporting
Smew (<i>Mergellus albellus</i>)	Amber	Wintering	0	None	None
Snipe (<i>Gallinago gallinago</i>)	N/A	Breeding	0	High	High
Storm Petrel (<i>Hydrobates pelagicus</i>)	Amber	Breeding	11	None	None
Twite (<i>Linaria flavirostris</i>)	N/A	Breeding	0	Medium	None
White-tailed eagle (<i>Haliaeetus albicilla</i>)	Red	Breeding	0	None	Medium
Whooper swan (<i>Cygnus cygnus</i>)	Amber	Breeding and Wintering	22	None	None
Wood sandpiper (<i>Tringa glareola</i>)	Amber	Passage	0	None	None
Wood warbler (<i>Phylloscopus sibilatrix</i>)	N/A	Breeding	0	None	None
Yellowhammer (<i>Emberiza citrinella</i>)	N/A	Breeding	0	None	None

4.8 Bird Species

Given the number of SPA sites within the Republic of Ireland and the lack of geographic specificity within the current Draft IFSIP, all Natura 2000 sites could potentially be affected by the implementation of the Draft IFSIP. In this case, an analysis of each of the 165 SACs, their QIs and the COs would prove lengthy. In an effort to streamline the assessment, only those Annex I bird species that have been identified to have a forestry pressure and threat have been assessed in the interest of providing an accessible analysis of the potential risks from the implementation of the Draft IFSIP. It must be noted that this is a broad analysis of the Annex I species that are a QI of an SPA site based primarily on Article 12 reporting. Evidence provided of the effects of forestry related activities in the Article 12 report applies to species inside and outside of the Natura 2000 site network. National reports, such as Irish Wildlife Manuals, and published scientific literature have also been examined to furnish any further pressures and threats from forestry on Annex I species listed as QIs of SPAs in Ireland.

This section of the AA report outlines the Annex I species that are in a bad or inadequate status with a corresponding forestry related pressure and threat as per the Article 12 2019 report⁶⁷, national reports and published scientific literature. Annex I species that are currently most vulnerable to forestry related activities have been expanded upon below. A review of the species status, the relationship between species and forestry and requirements to achieve favourable conservation status are listed in their respective categories below.

4.8.1 Hen Harrier

Hen harrier are a QI of eight SPA sites, two of which support important roost sites outside the breeding season. Belonging to the raptor family, hen harrier are mostly found in Kerry, Donegal, Leitrim, Cavan, Monaghan, Galway, Limerick, Clare, Cork, Tipperary and Laois. The species prefers to breed in upland habitats, which are often heather dominated and young coniferous forestry plantations, with nests found on the ground⁶⁸. Amber listed on BOCCI, pressures and threats relating to forestry for this species include:

- B01 – Conversion to forest from other land uses, or afforestation (excluding drainage)(H);
- B03 – Replanting with or introducing non-native or non-typical species (including new species and GMOs)(H); and
- B16 – Wood Transport (M).

Hen harrier nest within coniferous forestry plantations, typically before the plantation reaches full maturity. As the forestry reaches full maturity, habitat becomes less suitable for hen harrier nesting as the volume of foliage increases to levels that restrict nesting⁶⁹. Equally, mature forests provide less food sources and also restrict the bird's ability to detect and catch their prey due to the height of mature trees. As a result, species are forced to travel further to hunt and provide for their young. During harvesting and clear-felling stages as well as forestry road construction, habitat loss, fragmentation and disturbance can occur. During nesting, these activities can cause adults to flee their nests exposing eggs or chicks to lack of food and cold. Fragmentation at forest boundaries can provide predatory animals, such as mink and pine marten, with enhanced opportunities to prey on nests of hen harrier and their ground nesting prey⁷⁰.

Licensed forests are typically replanted after harvesting, and where replanting with or introducing non-native or non-typical species occurs, the habitat change from non-forest to forest habitat is permanent. The Article 12 report notes that the second rotation of planting can be associated with low levels of breeding success¹⁸.

⁶⁷ Article 12 Reports. Annex B – Bird Species' status and trends report format (Article 12) for the period 2013-2018. Accessed at https://cdr.eionet.europa.eu/Converters/run_conversion?file=/ie/eu/art12/envxztxxq/IE_birds_reports_20191031-130157.xml&conv=612&source=remote#A098_B on 15 August 2022

⁶⁸ Birdwatch Ireland. Hen Harrier. Accessed at <https://birdwatchireland.ie/birds/hen-harrier/> on 15 August 2022

⁶⁹ NPWS (2015) Hen Harrier Conservation and the Forestry Sector in Ireland 2015. Version 3.2 Date 31/03/2015. Accessed at <https://www.npws.ie/sites/default/files/publications/pdf/HHTRP%20-%20Forestry%20-%20V3.2.pdf> on 15 August 2022

⁷⁰ Ruddock, M., Mee, A., Lusby, J., Nagle, A., O'Neill, S. & O'Toole, L. (2016). The 2015 National Survey of Breeding Hen Harrier in Ireland. Irish Wildlife Manuals, No. 93. National Parks and Wildlife Service, Department of the Arts, Heritage and the Gaeltacht, Ireland

Whilst upland land availability for afforestation has decreased due to the exclusion of soil types and the Natura 2000 site network other more marginal agricultural land may be targeted for forestry thereby impacting on the overall habitat available for the life cycle of this species. It has been identified that the expansion of commercial forestry may limit the foraging opportunities for hen harrier⁷¹. A substantial proportion of Ireland's breeding hen harrier range is associated with commercial forestry. The potential of forestry related activities to disturb or displace nesting hen harrier is minimised within the SPA network through current forestry regulation, however the potential exists for such activities to impact in areas outside but connected to the SPA network.

Collaboration has been ongoing since 2007 between the Forest Service and the NPWS in order to reduce adverse impacts on hen harrier from forestry. Measures include limiting afforestation rates at designated SPAs, requirement for a Screening for Appropriate Assessment for forestry licences, a management protocol for afforestation in hen harrier SPAs and a procedure for Assessing Afforestation Applications in hen harrier Areas. NPWS have a Hen Harrier Threat Response Plan in preparation which will aim to improve the conservation status of the species.

4.8.2 Merlin

Merlin are a member of the raptor family of birds and are a QI of seven SPA sites across Donegal, Kerry, Wicklow, Tipperary, Galway and Mayo, typically in upland locations. The species is Ireland's smallest falcon and typically uses bog areas, marginal areas between bog, and upland grassland/heath for breeding and foraging. In addition, merlin are known to nest in forestry plantations adjacent to upland habitats⁷². Forestry related activities identified in the Article 12 report as a pressure or threat to the species are:

- B09 - Clear-cutting, removal of all trees (B09)(M):and
- B03 – Replanting with or introducing non-native or non-typical species(M).

Forestry activities such as clear-felling can impact on breeding populations of merlin, as they are found to nest in mature conifers. Given the difficulties in detecting breeding merlin⁷³ this makes them particularly vulnerable to disturbance from forest operations. It is thought that due to a lack of available ground nesting habitat, commercial forestry may have allowed merlin to exploit nesting opportunities in areas with open suitable foraging habitat but where preferred ground nesting options are limited. However, once suitable nest sites are available, the extent of forest cover may subsequently have a negative effect on merlin. Continued habitat loss through replanting in addition to an increase in disturbance through the movement of machinery and personnel during replanting and thinning stages reduces ground nesting availability for merlin.

Given that the species are elusive, the full extent of breeding populations are considered not to be well known. Conservation objectives are available at the seven SPA sites that have the species as a QI, with those measures relating to forestry including preventing the conversion of semi-natural habitats into forests and adaptation of forest management and exploitation practices.

4.8.3 Low Category Pressures and Threats

Further research revealed that low category pressures and threats are not always included in the Article 12 reports, however these should still be considered in the NIR assessment and future licence applications. A range of documents were reviewed and where they presented forestry related low category pressures and threats, this was assessed. Barnacle goose, Bewick's swan, common scoter, curlew, kingfisher, and whooper swan are species of bird not reported to have medium or high category pressures and threats within Article 12 reports however, low category pressures and threats were reported in a range of documents such as the Irish Wildlife Manuals from NPWS.

The primary low category impact or pressure from forestry on bird species is the direct loss of habitat through land use change. Conversion of pasture and wet grasslands to forestry plantations impacts barnacle

⁷¹ NPWS (2015) Hen Harrier Conservation and the Forestry Sector in Ireland 2015. Version 3.2 Date 31/03/2015. Accessed at <https://www.npws.ie/sites/default/files/publications/pdf/HHTRP%20-%20Forestry%20-%20V3.2.pdf> on 15 August 2022

⁷² Birdwatch Ireland. Merlin. Accessed at <https://birdwatchireland.ie/birds/merlin/> on 15 August 2022

⁷³ Lusby, J., Corkery, I., McGuinness, S., Fernández-Bellon, D., Toal, L., Norriss, D., Breen, D., O'Donail. A., Clarke, D., Irwin, S., Quinn, J. and O'Halloran, J. (2017) Breeding ecology and habitat selection of Merlin *Falco columbarius* in forested landscapes

goose, Berwick's swan, curlew, and whooper swan^{74,75}. Curlew would appear to be further impacted by a secondary effect of increased predation adjacent to forestry plantations as these provide habitat and hunting platforms for the curlew's predators⁵⁵.

The introduction of biocides, pesticides, hormones, chemicals, and nutrients into the environment was a common pressure or threat found to effect common scoter and kingfisher, through diffuse pollution of surface water and groundwater resources which may directly impact the bird or their food sources^{76,77}.

⁷⁴ Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. Irish Wildlife Manuals, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

⁷⁵ NPWS The Curlew Task Force (2019) Action for Curlew in Ireland: Conservation actions to protect and enhance the breeding population of Eurasian Curlew in Ireland in order to prevent its extinction

⁷⁶ Heffernan ML. & Hunt, J. (2022) Breeding Status of Common Scoter in Ireland, 2020. Irish Wildlife Manuals, No. 136 National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

⁷⁷ Sinéad Cummins, Jennifer Fisher, Ruth Gaj McKeever, Laura McNaghten & Olivia Crowe (2010) Assessment of the distribution and abundance of Kingfisher *Alcedo atthis* and other riparian birds on six SAC river systems in Ireland. A report commissioned by the National Parks and Wildlife Service and prepared by BirdWatch Ireland

5. Stage 1 Screening for AA

5.1 Introduction

In accordance with the DEHLG Guidance (2010), this AA Screening takes into account the potential impact the Draft IFSIP may have on a European site by reviewing Annex I habitats, Annex II species and/or Annex I bird species, hereafter known as a Key Receptor, and, additionally, the transboundary impacts where the draft Plan has the potential to impact on European sites outside the Member State territory.

Guidance from Ireland⁷⁸ and the European Commission⁷⁹ has suggested that the following criteria relating to the nature of the proposal may be used in helping to determine if a plan is likely to have significant effects. These include:

- size and scale;
- disturbance;
- land-take;
- distance from the Natura 2000 site or key features of the site;
- resource requirements (water abstraction etc.);
- emissions (disposal to land, water or air);
- excavation requirements; (potential loss of area);
- transportation requirements;
- duration of construction, operation, decommissioning, etc.;
- other.

Irish guidance (DEHLG, 2010) gives examples of effects that are likely to be significant include the following:

- any impact on an Annex I habitat;
- causing reduction in the area of the habitat or Natura 2000 site;
- causing direct or indirect damage to the physical quality of the environment (e.g., water quality and supply, soil compaction) in the Natura 2000 site;
- causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g., increased noise, illumination and human activity);
- causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site; and
- interfering with mitigation measures put in place for other plans or projects.

These criteria are particularly suited to screening individual projects, as detail on the receiving environment will be available for analyses.

⁷⁸ Department of the Environment, Heritage and Local Government (DEHLG, (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf

⁷⁹ European Commission (2021) Assessment of plans and projects significantly affecting Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC https://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm European Commission (2019) Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN_art_6_guide_jun_2019.pdf

The aim of the Habitats and Birds Directives are to maintain or restore at Favourable Conservation Status (FCS) the specified habitats and species protected under each Directive. The defined habitats and species of ‘Community Interest’ are sub-divided by protection measures that apply to them under Annexes of the Habitats Directive. These are:

- Annex I: Specified habitats for which SAC are to be identified;
- Annex II: Specified species for which SAC are to be identified;
- Annex IV: Species in need of strict protection; and
- Annex V: Species for which the exploitation may be subject to management measures.

The ‘integrity’ of a site involves the ecological functions that a site is designated for, the species and habitats within and their structure, function and populations. The Specific Site Conservation Objectives (SSCOs) aims to maintain or promote the favourable status of that site and also provide indicators for determining likely significant effect. Per Article 17 of the Habitats Directive, each Member State is required, on a 6-year basis, to report the status of their EU protected habitats and species. In 2019 Ireland published their most recent report to the European Commission.

5.2 Conservation Objectives

As noted above, maintaining or restoring the favourable conservation status of habitats and Species of Community Interest (SCI) is a legal obligation of each Member State. The SSCO for each European site and SCI define their conservation condition. Given the number of European sites that could potentially be impacted by the implementation of the Draft IFSIP, it is not practical to list the Conservation Objectives of each site in the screening report, but rather these have been collated for the purposes of the assessment. The aim of all SSCO is to:

- To maintain or restore the favourable conservation condition of the qualifying interest i.e., Annex I habitat(s) and/or Annex II species for which the SAC has been selected; and
- To maintain the bird species of special conservation interest for which the SPA has been listed at favourable conservation status.

This AA Screening of the Draft IFSIP has taken into consideration the potential to impact upon the achievement of Conservation Objectives at this more general level in the first instance. NPWS is the legal body responsible for the management of European sites and SCIs. SSCO for 109 SACs and 36 SPAs have been published to date.

5.3 Assessment

The potential threats from the Draft IFSIP on European sites cannot at this stage be confirmed based on the level of detail available however, they may be inferred particularly in relation to impacts to sensitive habitats and species e.g., ancient woodlands, river catchments, freshwater pearl mussel etc. The types of impacts can include:

- Direct and indirect effects;
- Short and long-term effects;
- Planting and felling;
- Construction of forestry related infrastructure such as forest roads, operational and decommissioning effects; and
- Isolated, interactive, indirect and cumulative effects.
- The likely potential effects that have the potential to occur through the implementation of this Draft IFSIP may include:
- Loss/Reduction of habitat area;

- Disturbance to habitats, important ecological features and hydrological regime;
- Habitat/Species fragmentation;
- Reduction in species density;
- Species mortality; and
- Changes in key indicators of conservation value (e.g., decrease in water quality/quantity).

5.4 Potential effects of the Draft IFSIP

A summary of the main potential ecological impacts that could arise from the implementation of the Draft IFSIP are presented below and are used in the impact prediction.

5.4.1 Habitat Loss, Destruction, Fragmentation or Degradation to Key Receptors

The loss of habitat or its destruction occurs where there is a complete removal or change of habitat type; for example, arising from the planting of commercial forestry, forest road construction etc., on a particular habitat type e.g., grasslands. Habitat fragmentation can occur where forestry related infrastructure such as drainage, fencing, forest roads etc can cause the loss of small patches of habitat or prevents the natural movement of species within a larger landscape. This is relevant where important corridors for movement or migration are disrupted e.g., migration routes for fish species such as Atlantic salmon along river corridors which have been affected by hydrological changes due to forestry and/or the movement of species across a large landscape as a result of fencing. Habitat degradation can occur where the quality of habitat and/or its functions is diminished. This can potentially occur where forestry related activities such as planting, and forest road construction and operation could introduce an invasive species through the movement of machinery and people or through contamination through fertiliser use. This would arise from poor management during planting and construction.

5.4.2 Disturbance to Key Receptors

Disturbance to Key Receptors can potentially occur where there is an increase in noise levels or movements as a result of forestry related activities. This would include noise and movement by both machinery and humans which can occur during any forestry related activities. Machinery movement including those required for forest road construction, planting, felling, thinning and fertilising stages, and human movement associated with the aforementioned activities or recreation, can potentially disturb key receptors such as hen harrier and merlin from their resting/nesting places and dissuade species from foraging in an area where these activities are taking place. As a result, a species' range and habitat can be directly impacted. Any forestry activity in proximity to functionally linked land supporting QIs, and SCIs has therefore the potential to cause disturbance to Key Receptors.

5.4.3 Indirect Effects to Key Receptors

Indirect effects can potentially include a change in availability of nutrients and light, an increase in the vulnerability of the site to other new threats such as invasive alien species, changes to water quality and water movement and changes to habitat or species as a result of inadequate or inappropriate training to those involved in forestry. These indirect effects have the potential to occur during any forestry related activity including the afforestation process and throughout the lifetime of a forestry.

Changes in the availability of nutrients and light could potentially occur during planting, thinning and harvesting stages, impacting the ability of some plant species such as marsh saxifrage to grow, as well as indirectly affecting the predation capabilities of hen harrier.

Changes to water quality and/or water movement could potentially occur during all stages of the afforestation process through either point and/or diffuse pollution and new or altered drainage patterns. The whole lifecycle of forestation including planting, felling and fertilising can potentially impact dissolved organic carbon, pH and flow within waterbodies. The construction of forestry roads and related infrastructure, such as the installation of culverts, bridges and drains can cause the release of suspended solids into watercourses and impact the natural hydrological regime of the watercourse both where immediately adjacent to the source and downstream.

Insufficient training on ecological sensitivities and risks to Key Receptors delivered to those involved in the forestry process can have a potential impact on Key Receptors. This is particularly the case where those involved are not trained in ecology, do not have sufficient ecological experience, and do not fully understand obligations under the Habitats and Birds Directive.

5.4.4 In Combination Effects to Key Receptors

A series of individual insignificant effects may ‘in combination’ produce a significant effect. It is important to note that accounting for combined impacts will often only occur over time. Within this context, all plans and/or projects which are completed, in preparation or approved but uncompleted must be considered. Where there is a series of small, but potentially adverse impacts occurring to Key Receptors, consideration should be made as to their combined impacts.

5.5 Likely Effects of the Draft IFSIP

As outlined in Section 4.5, pressures and threats are either influencing or have the potential to influence the status of Ireland’s Annex habitats and species and thereby the sites for which they are designated. Forestry related activities have, in most cases likely in combination with other pressures/threats, to the bad or inadequate status, of several habitats and species. Following review of literature and using professional judgement, the designated habitats and species that potentially face the greatest threat from the enactment of the Draft IFSIP, and consequently the sites which have these habitats or species as QIs or SCIs, are listed below. It should be noted that this is not an exhaustive list, but it is considered that the Key Receptors listed here would provide a broad representation of potential for likely significant effects across all European sites:

- Freshwater habitats (rivers and lakes);
- Peatlands;
- Molinia meadows;
- Slender naiad;
- Marsh saxifrage;
- Freshwater pearl mussel;
- Atlantic salmon;
- Hen harrier; and
- Merlin.

5.6 Assessment of Effects – Forest Action Plan

The list of Actions within the Forest Action Plan of the Draft IFSIP have been screened for Appropriate Assessment to consider any potential for likely significant effects, as documented in Table 5 below. Any actions within the Forest Action Plan that have been assessed as having the potential for likely significant effects have been brought forward to Stage 2 Appropriate Assessment in Section 7.3.1.

Table 5 Forest Action Plan Assessment of Likely Significant Effects (LSE)

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
Enabling Change						
<p>Goal – New Organisational Arrangements: <i>Establish new organisational arrangements to facilitate ongoing monitoring, reporting and implementation of the new Forest Strategy (2022-2030).</i></p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Institutional arrangements and Implementation Structures</p>						
1	Establish and operationalise the necessary governance, stakeholder engagement and communication structures and funding mechanisms needed for implementing the Forest, Strategy and Implementation Plan	2022 -2023	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Governance and communication structures do not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
2	Undertake an organisational Review of the Departments Forestry Divisions.	2022	DAFM	Stakeholder representative bodies	Non-Forestry Programme	A review of the Departments Forestry Divisions does not lie within the scope of the management or conservation of Natura 2000 Sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
3	Review the respective roles and capabilities of COFORD.	2022 - 2023	DAFM	COFORD, Stakeholder representative bodies	Non-Forestry Programme	A review of the roles and capabilities of COFORD, Teagasc and Coillte does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
4	Review the role and function of the Forest Policy Group.	2022-2023	DAFM	Stakeholder representative bodies	Non-Forestry Programme	A review of the role and function of the Forest Policy Group does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
5	Identify timings for commencement of Forest Strategy Actions including implementation vehicles for non FP measures.	2022-2023	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Timings of Forest Strategy Actions does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<p>Goal: Effective Communication</p> <p>Building on the learning outcomes of Project Woodland, public consultation and engagement will continue to be an important tool used to improve transparency, efficiency and effectiveness of regulation and in policy decision making</p> <p>Strategic Areas of Focus: Planning Engagement and Co-Creation</p>						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
It is recommended that all measures listed below as part of this Goal: Effective Communication incorporate education, training and skills development of the Appropriate Assessment theory, process and implementation.						
6	Engage with forest owners through Forestry Knowledge Transfer Groups to develop skills and expertise across the forestry sector.	2022-2023	DAFM	Stakeholder representative bodies, Teagasc	Forestry Programme Intervention 5	Engagement and knowledge transfer has the potential for likely significant effects . Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive.
7	Develop and implement a Communications and Engagement Strategy in support of the implementation of the Forest Strategy.	2023-2030	DAFM	Stakeholder representative bodies	Non-forestry programme	A Communications and Engagement Strategy does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
8	Conduct a public attitudes survey every three years to assess changing outlook on trees and forests in Ireland compared to the first public attitudes survey of 2021	2022-2030	DAFM	Stakeholder representative bodies, Teagasc,	Forestry Programme	Public surveys does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Regulatory and Legislative Processes: Establish an efficient and effective regulatory and legislative system and support structure for forestry management practices and grant-aided forestry schemes</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Institutional arrangements and Implementation Structures</p>						
9	Review, implement and build on the recommendations of the independent Regulatory Review of the existing statutory framework for the licencing of forestry activities in relation to environmental and public participation obligations.	2022-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	The Regulatory Review of the existing statutory framework has the potential for likely significant effects . Potential likely significant effects may arise from changes in the statutory framework for the licencing of forestry activities. .
<p>Goal – Land availability and Alignment of Land Uses Better integration of trees and forests with other land uses at farm, catchment and landscape level.. Create more coherence between agriculture, forest policies and biodiversity supports that result in a closer alignment between traditional agricultural activities and forestry</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Institutional arrangements and Implementation Structures</p>						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
10	Support the work of the Land use Review Group to ensure that balanced land use options inform forest establishment decisions.	2022-2024	EPA	DAFM, DECC.	Non-Forestry Programme	Given the findings of the Land Use Review are not yet published, there is potential for likely significant effects due to lack of available detail.
11	Align tree planting measures in Agri-Environment Schemes with forest creation support measures.	2022-2023	DAFM	Stakeholder representative bodies	CAP Strategic Plan; Forestry Programme.	There is potential for likely significant effects from this Action - it is unclear how this alignment will work.
See Action 79	Establishment of a number of pilot areas to develop a plan led approach to afforestation in collaboration with stakeholders. These pilot areas will help inform a national approach to plan led afforestation	2023-2030	DAFM	Stakeholder representative bodies, EPA, DHLGH, Coillte, Local Authorities	Non-Forestry Programme	The establishment of pilot areas to develop a plan led approach to afforestation has the potential for likely significant effects .
<p>Goal – Promotion and awareness. Support initiatives that deepen the understanding and cultural acceptance of forestry. Foster co-operation between landowners, to encourage and support the creation of new forests and the management of existing ones, and empower, inform and equip forest owners, farmers and other landowners and businesses to make informed decisions about forestry.</p> <p>Strategic Areas of Focus - Planning, Engagement and Co-Creation; Public Access and Community Involvement; Building Capacity; Institutional arrangements and Implementation Structures;</p>						
(See Action 6)	Engage with forest owners and foresters through Forestry Knowledge Transfer Groups to develop skills and expertise across the forestry sector.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme	Engagement with forest owners and foresters through Forestry Knowledge Transfer Groups to develop skills and expertise across the forestry sector does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
12	Implement a support scheme for existing private forests to enhance social, cultural or heritage value.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 6	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
						European sites and whether they may fall under the definition of a project or plan which might require AA Screening
13	Initiate an open call for proposals on forest promotion with the aim of raising the profile of forestry as a public good and a commercially viable enterprise.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 5	The initiation of an open call for proposals on forest promotion does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
14	Provide advice, training, and research on farm forestry and related matters.	2023-2030	Teagasc	Stakeholder representative bodies	Forestry Programme Intervention 5	The provision of advice, training and research on farm forestry and related matters has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.
15	Promote forests and forestry on the public forest estate through the provision of recreation areas, the development of visitor destinations, and knowledge transfer initiatives on the multifunctional role of forests in our society.	2023-2030	Coillte	DAFM, NPWS Stakeholder representative bodies	Non-Forestry Programme	The promotion of forests and forestry on the public forest estate through the provision of recreation areas, the development of visitor destinations and knowledge transfer has the potential for likely significant effects.
<p>Goal – Incentives for forest creation and management</p> <p>New incentives for the establishment and management of diverse, multifunctional forests that strengthen the economic viability of rural communities, protect our environment and are resilient in the face of climate change</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures;</p> <p>There is potential for likely significant effects through the implementation of this goal.</p>						
16	Implement support schemes that support redesign and, where appropriate, restoration measures at reforestation stage.	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 7	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
See Action 37	Implement support schemes to support the creation of a mix of forest types, including productive, native, closer to nature and agroforestry.	2023- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 2 Intervention 4 Intervention 6 Intervention 7	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
17	Implement support schemes for Sustainable Forest Management that deliver ecosystem services with social, environmental and climate benefits.	2023- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 2 Intervention 4 Intervention 7	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
18	Implement support schemes that support forest owners in the transition from even-aged forest management to closer to nature forestry.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 4 Intervention 7	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
<p>Goal: Sustainable Forest Management</p> <p>Develop an updated Forestry Standard for Ireland and a shared understanding of the four R's (Right tree, in the Right place for the Right reason with the Right management) as well as continued development and support for a diverse range of silvicultural systems that follow the principles of sustainable forest management.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures;</p>						
19	Develop a shared understanding of the Four R's (Right trees in the Right places for the Right reasons, with the Right management) in an Irish context.	2022-2023	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Developing an understanding of the Four R's does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
20	Update the reference standard for forest practice in Ireland.	2022-2023	DAFM	Stakeholder representative bodies	Forestry Programme Non-Forestry Programme	An update of the reference standard for forest practice has the potential for likely significant effects as it may fall under the scope of the management or conservation of Natura 2000 sites.
21	Establish a baseline for the area of forest managed under Closer to Nature forest management as a percentage of total forest area and put in place measures to increase this.	2022-2030	DAFM	Stakeholder representative bodies	Forestry Programme	Establishment of a baseline for ‘Closer to Nature’ management does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal: Forest Health</p> <p>Monitor and assess the ongoing health and condition of Irish forests contributing to the overall resilience and biodiversity of our forests and improved quality of Irish wood products and forest ecosystem services.</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity</p>						
22	Continue to implement forest reproductive material, plant health and official controls regulations.	2022-2030	DAFM	Stakeholder representative bodies	Non-forestry programme	Implementation of controls regulations does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
23	Implement forest-related recommendations in the Plant Health & Biosecurity Strategy 2020-2025.	2022-2023	DAFM	Stakeholder representative bodies	Non-forestry programme	Implementation of forest-related recommendations from the Plant Health and Biosecurity Strategy does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
24	Continue to issue advance warnings provided through the Forest Fire Danger Rating Notices and potentially develop other advance warning systems such as weather conditions favouring the spread of forests pests.	2023 - 2030	DAFM	Met Eireann, Stakeholder representative bodies	Non-Forestry Programme / Forestry Programme.	The issue of advance warnings does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
25	Support the research and development in forest genetics, forest design and forest management that aim deliver more resilient and	2023-2030	DAFM	Stakeholder Representative Bodies	Non-Forestry Programme	Support for research and development does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
	therefore sustainable forests in the face of climate change					
26	Record and assess the extent and nature of Ireland's forests, both public and private, in a timely, accurate and reproducible manner.	2023-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Recording and assessing the extent and nature of Ireland's forests does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Education, Skills and Careers</p> <p>Support for training, education and continued professional career path development, to increase the capacity and capability of the workforce available to the forestry sector. This includes support for education, training and in developing skills needed for the use of wood in construction.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures</p>						
27	Develop a national forest education strategy for Ireland	2023-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	The development of a national forest education strategy does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
28	Review and assess the training needs of those who are directly involved in submitting forestry licence applications.	2022-2023	DAFM	Foresters, Forest owners, Ecologists, Archaeologists	Non-Forestry Programme	A review and assessment of training needs has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.
29	Establish the capacity of the workforce in the sector needed to deliver on the ambitions outlined in the Forest Strategy and on national targets.	2023-2024	DAFM	Stakeholder representative bodies	Non-Forestry Programme	The establishment of capacity in the workforce does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
30	Establish forest Knowledge Transfer Groups (KTGs) to increase the standard of forest management activity amongst participating forest owners.	2023-2030	DAFM	Forest Owners, Foresters, Forest Sector Experts and Educators.	Forestry Programme Intervention 5	Establishment of Knowledge Transfer Groups (KTGs) has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.
31	Provide support for ongoing continuous professional development among forest professionals, including	2023-2030	DAFM	Foresters, forest operatives, Teagasc.	Forestry Programme Intervention 5	The provision of support for continuous professional development has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
	foresters, ecologists, forest operatives and advisors.					the Habitats Directive and in relation to risks and opportunities for nature.
32	Support for the development of a school's programme, including forest classrooms, to promote trees, forests sustainable forest management and forestry as a career option.	2023-2030	DAFM	Forest Owners, Foresters, Forest Sector Experts and Educators.	Forestry Programme Intervention 5 Intervention 6 Non-Forestry Programme	The support for the development of a school's programme, including forest classrooms does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal: New Technology, Research and Innovation</p> <p>Meet the needs and requirements of forest research and innovation in forest management, supply chain and for the use of timber in construction through a national structured approach, including support for product innovation, supported by Government policy, and building regulations</p> <p>Priority Areas for Action: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Building Capacity; Institutional arrangements and Implementation Structures; support</p>						
33	Continue to operate and fund a programme of public good competitive research for forests.	2023-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Operation and funding of programmes for research does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
34	Develop a facility for forest research and innovation with a strong focus on sustainability, circular economy and value creation.	2023-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Development of forest research and innovation centre does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
35	Explore and implement opportunities to support innovation and the development of technological tools to support sustainable forest management and performance in the forestry sector.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 3	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
36	Align with bioeconomy policy development through the development of Bioeconomy Demonstration Initiatives (Bioeconomy Districts and Living Labs)	2023-2030	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Alignment of policy does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
Forests for Climate						
<p>Goal – Forest Expansion</p> <p>A major expansion of climate resilient and healthy forests following the principles of sustainable forest management and the right trees in the right places for the right reasons with the right management.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional Arrangements and Implementation Structures;</p> <p>It is recommended that any future support scheme as part of this overall Goal should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening</p>						
37	Implement support schemes that support forest creation for a mix of forest types, including productive, native, Closer to Nature and agroforestry.	2023- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 2 Intervention 4 Intervention 7	The implementation of support schemes does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
38	Provide advisory and knowledge transfer services to support landowners in the forest establishment decision.	2023-2030	DAFM	Teagasc, KTGs, Private Sector Foresters, Stakeholder representative bodies	Forestry Programme Intervention 5	The provision of advice and knowledge transfer has the potential for likely significant effects . Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.
See Action 25	Support the research and development in forest genetics, forest design and forest management that aim deliver more resilient and therefore sustainable forests in the face of climate change.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 3 Non-Forestry Programme	The Provision of research and development does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
Goal – Carbon sequestration and Storage						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
<p>Irish forests, existing and future, will be planned and managed to optimise their potential as a long-term carbon sink and store. The carbon sequestered and stored in Irish forests will be accounted for, to help to inform climate smart forestry practices. <i>Legacy impacts associated with forests on peat will be assessed and management decisions will be implemented informed by best available science.</i></p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Institutional Arrangements and Implementation Structures;</p>						
39	Continue to monitor and report on greenhouse gas emissions and removals from Irish forests.	2022-2030	DAFM	EPA, Stakeholder representative bodies	Non-forestry programme	The monitoring and reporting of greenhouse gas emissions and removals from Irish forests does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
40	Manage the age profile of the public forest estate to improve its carbon efficiency including soils.	2022-2030	DAFM	Coillte	Non-forestry programme	Age profile management of the public forest estate does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
41	Implement support schemes that improve carbon storage and sequestration through Sustainable Forest Management.	2022 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 3 Intervention 4 Intervention 7	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
42	Implement support schemes for the reconstitution of forests following significant damage by natural causes.	2022- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 8	The implementation of support for the reconstitution of forests following significant damage by natural causes has the potential for likely significant effects . Potential likely significant effects may arise where reconstitution, in the form of replanting, occurs on existing forestry planted on inappropriate sites e.g., forestry on peatland.
43	Implement redesign and habitat restoration measures for forests on peatlands based on the best available science.	2022-2030	DAFM	Coillte and Private Foresters, NPWS	Non-Forestry Programme	There is potential this action could interact with Natura 2000 sites and/or its qualifying interest features and have the potential for likely significant effects .
<p>Goal: Measuring Embodied Carbon</p> <p>Systems will be developed to measure, record, track and optimise the storage of carbon in wood products. The use of life-cycle analysis will be used to assess the embodied carbon advantages of using wood products over alternative carbon intensive products</p>						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
Strategic Areas of Focus: Forest Management; Ecosystem Services, Restoration and Legacy Issues; Value Creation						
44	DAFM will encourage alignment of its actions to support the actions in the Climate Action Plan on the Built Environment including standards, research and technologies.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme, Intervention 3 Intervention 5 Non-Forestry Programme	Encouragement of aligning actions including standards, research and technologies does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<p>Goal – Promoting Carbon Substitution</p> <p>The use of sustainable wood products and by-products from Irish forests including biomass, as alternatives to carbon intensive products to reduce the embodied carbon in our built environment, and by products including biomass to substitute fossil fuels will be supported.</p> <p>Strategic Areas of Focus: Forest Management; Ecosystem Services, Restoration and Legacy Issues; Value Creation</p>						
45	Develop materials to inform and educate Architects, building providers, Engineers, Fire Officers and the general public on developments in timber construction and the associated benefits of using timber and timber products in buildings.	2023-2030	DAFM	DHLGH, DECC, IGBC Stakeholder representative bodies	Non-forestry programme	Developing materials to inform architects and the building sector etc., does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
Forests for Wood						
<p>Goal – Supply and expansion at scale</p> <p>Continue to increase the supply of sustainable raw material from Ireland’s forest resource. A critical component will be efficient and effective licensing and regulatory procedures. Also, investment in research and development in the supply chain, prioritising the employment of innovative technologies.</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Forest Management; Ecosystem Services, Restoration and Legacy Issues; Value Creation; Institutional arrangements and Implementation Structures;</p> <p>It is recommended that any future support scheme as part of this overall Goal should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening</p>						
46	Monitor and report on forest biomass supply and demand.	2023-2030	CSO	DAFM, Stakeholder representative bodies, COFORD Council, SEAI	Non-Forestry Programme	Monitoring and reporting on forest biomass supply and demand does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
47	Implement support schemes to improve road access to forests to facilitate Sustainable Forest Management, harvesting of timber and monitoring and protection of forest resources.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 3	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
48	Implement support schemes to promote Sustainable Forest Management and improve harvest productivity through investment in forest infrastructure and technology.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 3	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
49	Implement support schemes to increase the quality and quantity of forest reproductive material and plants.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 3	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
<p>Goal – Timber and Wood Product Promotion</p> <p>Encourage and promote the increased use of wood in the construction sector, with buildings constructed from Irish timber becoming the standard. Irish wood products are envisaged as the substitute material of choice to carbon intensive building products in the construction of Irish homes.</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Building Capacity; Institutional arrangements and Implementation Structures</p>						
50	Further develop knowledge of timber as a construction material, the design of timber buildings and whole life cycle assessment of buildings among construction professionals.	2023 – 2030	DAFM	DHLGH, Stakeholder representative bodies, Third level institutions, Teagasc, COFORD.	Non Forestry Programme	Knowledge development of timber does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
51	Establishment of a forum, that includes inter departmental collaboration, to explore the development of a wood-first policy and its integration into national housing strategies.	2023-2030	DAFM/D HLGH	DECC, Local Authorities	Non-Forestry Programme	The establishment of a forum does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Product and Market Development Develop new and existing markets for supply and demand of a more diverse range of quality wood and wood products including research and development of new products from wood fibre. Strategic Areas of Focus: Planning, Engagement and Co-Creation; Value Creation; Forest Management; Institutional arrangements and Implementation Structures</p>						
52	Offer forest owners a range of support schemes to sustainably manage the potential of their forests to fulfil current and future relevant demands for wood and wood products.	2023 – 2030	DAFM	Forest owners, Foresters,	Forestry Programme Intervention 1 Intervention 3 Intervention 4 Intervention 5	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
53 (See also Action 35&36)	Support opportunities to build research and technology capacities and potential for the use of Irish-grown wood products in construction and for the bioeconomy .	2023 – 2030	DAFM/ Enterprise Ireland	Forest Products Sector, Stakeholder representative bodies, Third level institutions	Non-Forestry Programme	Research and technology for the Irish grown wood products construction and bioeconomy does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
See Action 44	DAFM will encourage alignment with actions to support the actions in the Climate Action Plan on the build Environment including standards, research and technologies,	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme, Intervention 3 Intervention 5 Non-Forestry Programme	This action does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<p>Goal – Quality Assurance and Forest Certification There is a market requirement for increased uptake and participation among private forest owners in forest certification with the overall goal of the large majority of Irish timber being certified by 2030. Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Forest Management</p>						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
54	Support the uptake of Forest Certification in the private forest sector.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 4	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
55	Support the design and development of standardised Forest Management Plans for forest owners who wish to achieve forest certification and implement support schemes to foster their uptake so as to manage forests that have a greater capacity to deliver ecosystem services, climate resilience, roundwood value and forest health vitality.	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 4	Design and development of standardised forest management plans for forest certification does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
Forests for Nature						
<p>Goal – Native Forest Expansion A major expansion of native forests and improved diversity of native tree species in new and existing forests.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p> <p>It is recommended that any future support scheme as part of this overall Goal should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.</p>						
56	Implement support schemes for the establishment of native forests and the conservation or restoration of existing and emergent forests based on ecological criteria.	2023- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 4 Intervention 6	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.
57	Implement a support scheme for small-scale native tree planting.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
58	Continue to implement the Woodland Environment Fund to facilitate the planting of native forests by providing an access point for businesses to part fund the establishment.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1	Implementation of the Woodland Environment Fund does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
59	Continue to implement the Creation of Woodland on Public Land Scheme to encourage Public Bodies to establish new native woodlands on suitable land.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry programme Intervention 1	Implementation of the Creation of Woodland on Public Land Scheme to encourage Public Bodies to establish new native woodlands on suitable land does not lie within the scope of the management or conservation of Natura 2000 sites as it considers 'suitable land' within its action. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
60	Implement silvicultural and environmental standards compatible with the protection of the environment in scheme implementation and development	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry programme Interventions 1-8	The implementation of silvicultural and environmental standards compatible with the protection of the environment encompasses the suite of documents published by the Forest Service (DAFM) such as 'Environmental requirements for afforestation', 'Land Types for Afforestation' and 'Forestry Standards Manual. These documents outline strict requirements surrounding afforestation at and/or in proximity Natura 2000 sites and their qualifying interest species. Considering the action and the published material mentioned above, it is not anticipated that this action shall pose any potential for likely significant effects to European sites.
61	Increase the level of native forests as a percentage of total forest establishment.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1	An increase in the level of native forests should adhere to the guidelines set out in the suite of documents published by the Forest Service (DAFM) which include, but are not limited to, 'Environmental requirements for afforestation', 'Land Types for Afforestation' and 'Forestry Standards Manual'. These documents outline guidelines surrounding afforestation at and/or in proximity Natura 2000 sites and their qualifying interest species. All licensed activities require a screening for appropriate assessment (AA) screening and AA Stage 2 NIS (if applicable) by the applicant and an AA by the Forest Service (if applicable). Considering the action and the published material mentioned above, it is not anticipated that this action shall pose any potential for likely significant effects to European sites.
Goal – Protecting and Restoring Natural Heritage and Ecosystem Services						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
<p>Forestry practices will safeguard and enhance the quality of Ireland’s air, water, soils, landscapes, habitats and population of protected species. This includes support and funding for the provision of non-timber ecosystem services.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p> <p>It is recommended that all actions as part of this Goal incorporate a Screening for Appropriate Assessment and Ecological Impact Assessment for any forestry activities to review the potential for likely significant effects on European sites.</p>						
62	Implement a support scheme for funding a new native forest type for the purposes of protecting water quality.	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 7	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.
63	Provide support for the promotion, protection and conservation of native and broadleaf forests and conversion of existing conifer forests to native forests, and other habitats as appropriate.	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 3 Intervention 4 Intervention 7	Provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.
64	Support the establishment and natural regeneration of native forest on post-industrial cutaway peatlands, where appropriate.	2023 – 2030	Bord na Móna, Coillte Nature.	DAFM	Bord na Móna Peatlands Rehabilitation Plans, Forestry Programme.	Supporting the establishment and natural regeneration of native forests on post-industrial cutaway peatlands, where appropriate, is not considered to lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<p>Goal – Forest Biodiversity</p> <p>Safeguard and enhance the biodiversity value of our forests in relation to water quality, habitats and species by implementing appropriate measures such as forest redesign, habitat rehabilitation or restoration.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p>						
See Action 16)	Implement a support scheme that supports redesign and, where appropriate, restoration	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 7	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
	measures at reforestation stage.					Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.
65	Implement support schemes that improve the water protection and wider biodiversity value of forests; towards reducing forests as a significant risk to water quality .	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 3 Intervention 4 Intervention 7	The implementation of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening.
66	Implement the restoration and conservation of forests in state-owned properties, particularly National Parks, Nature Reserves and state-owned Natura 2000 sites as appropriate.	2023-2030	NPWS	DAFM, Stakeholder representative bodies	Non-Forestry Programme	Implementation of restoration and conservation of forests in state-owned properties, particularly National Parks and Nature Reserves has the potential to interact with Natura 2000 sites and their qualifying interests. NPWS are identified as the lead partner and are the competent authority for the preservation and conservation of Natura 2000 sites and qualifying features within Ireland.
<p>Goal – Ancient and Long-established Woodland</p> <p>Fully identify, protect and enhance Ancient and <i>Long-established woodland</i></p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p>						
67	Support the appropriate restoration and conservation of Ancient and Long-established Woodland through funding for restoration works.	2023 – 2030	DAFM	NPWS, Coillte, Foresters and Representative bodies	Forestry Programme Intervention 4 Intervention 6	The provision of support through funding does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
68	Establish a baseline and complete the national inventory of Ancient and Long-established Woodland.	2023-2030	NPWS	DAFM, Coillte, Stakeholder representative bodies.	Non-Forestry Programme	Establishing a baseline and completing an inventory of the Ancient and Long-established woodland in Ireland funding does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
Goal – Invasive Species						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
<p>Develop, fund and implement strategies to effectively manage and control invasive species of flora and fauna, including invasive deer species, to support biodiversity and sustainability within Irish forests.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Institutional arrangements and Implementation Structures</p>						
69	Support the establishment of a National Deer Management Forum where stakeholders will be convened to develop a holistic strategy to the management of the wild deer population	2023 – 2024	DAFM	NPWS, Coillte, NGOs, Hunting and Farming Organisations	Non Forestry Programme	The support for establishment of a National Deer Management Forum does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
70	Provide funding and support to sustainably manage and control invasive species of flora and fauna to protect forests.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 4 Intervention 5 Intervention 6 Intervention 7	The provision of support through funding does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<h3>Forests For People</h3>						
<p>Goal – Promote Forest Recreation for Health & Well-Being</p> <p>Promote the use of and community involvement with our forests for outdoor leisure, recreation and connection with nature. This will include an increased focus on the physical well-being and mental health benefits of forests for our citizens.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p>						
71	Review and expand the Neighbourhood Scheme to support the creation of new public amenity forests and the enhancement of existing forests for public access, education, recreation and health and wellbeing for rural and urban communities.	2023 – 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 6	An expansion of the Neighbourhood Scheme to support the creation of new public amenity forests and enhancement of existing forests has the potential to interact with Natura 2000 sites and their qualifying interest features.

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
72	Continue to implement the Woodlands for Health nature-based intervention programme..	2023 – 2030 (TBC)	Coillte, Mental Health Ireland	Get Walking Ireland, University of Limerick, ciste na gcuntas díomhaoin/the dormant accounts fund	Woodlands for Health Programme	This action does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
<p>Goal – Access to our Forests</p> <p>Continue to improve public access and facilities in our forests with the agreement of forest owners, according to the principles of Leave No Trace.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management</p>						
73	Maintain an Open Forest Policy for on foot access to public forest estate.	2022-2030	DAFM, DHLGH Coillte	Forestry Stakeholders, Fáilte Ireland.	Non-Forestry Programme	This action does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
74	Provide targeted support for the development of public access, education and recreation in forests in or near villages, towns and cities.	2023 - 2030	DAFM	Stakeholder representative bodies, Local Council	Non-Forestry Programme Forestry Programme Intervention 6	The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Building Confidence and Trust</p> <p>Engagement with forest owners, farmers, communities and other stakeholders for more inclusive planning of forests at regional and local levels. This includes recognising and addressing issues that affect communities and working to secure a sense of ownership and pride among Irish people in their forests.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management.</p>						
75	Roll out of pre-application discussions on forest licence applications nationwide.	2023 - 2030	DAFM	Agents representing applicants for forest licences.	Forestry Programme Intervention 1	This action does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
76	Implement supports to enhance the cultural, social and heritage value of forests through a combination of methods including the creation of new access,	2022-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 6	The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
	recreational facilities and potential for eco-tourism.					
77	Facilitate and encourage forest projects developed in partnership between landowners, communities and where appropriate local authorities.	2023- 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 5 Intervention 6	Facilitation and encouragement of in-partnership projects does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.
78	DAFM to develop a new forestry customer service charter	2023 - 2024	DAFM	Stakeholder representative bodies	Non-Forestry Programme	Development of a new forestry customer service charter does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
79	Establishment of a number of pilot areas to develop a plan led approach to afforestation in collaboration with stakeholders. These pilot areas will help inform a national approach to plan led afforestation.	2023-2030	DAFM	Stakeholder representative bodies, EPA, DHLGH, Coillte, Local Authorities.	Non-Forestry Programme.	Establishment of a number of pilot areas to develop a plan led approach to afforestation in collaboration with stakeholders has the potential to interact with Natura 2000 sites and their qualifying features.
<p>Goal – Learning and Awareness</p> <p>Deliver education, learning and development opportunities for adults and children, to increase the awareness of the multiple benefits of trees and forests.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Institutional arrangements and Implementation Structures</p>						
80	Develop and implement support initiatives that aim to increase public awareness of the multi benefits of forests and the multi-functional use of the resource curriculums, training educators, forest walks, demonstrations, etc.	2023-2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 5 Intervention 6 Non-Forestry Programme	The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
Forests for Economy and Rural Development						
Goal – Value						

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
<p>Increase the overall value of Irish forests and forestry to the economy</p> <p>Strategic Areas of Focus: Value Creation</p>						
See Actions 47, 48 & 53	Invest in new technology to support timber mobilisation					Investment in new technology does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
See Action 25, 35 & 52	Implement support schemes for forest creation and management					The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
See Action 52 & 53	Support the uptake of wood and forest biobased products					The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
See Action 54 & 55	Support the uptake of Forest Certification in the private sector					The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
See Action 34-36	Develop forest research and innovation with a strong focus on sustainability and the circular and bioeconomy.					Investment in research and innovation does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Transition to a Low Carbon Economy</p> <p>The forestry sector is providing solution focused supports through sustainable attractive jobs in rural areas in the transition to a low carbon economy.. It is also supporting conditions for the development and implementation of a voluntary carbon market, which will recognise the contribution of Irish forests to carbon capture and storage.</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures</p>						
81	Taking account of the proposed EU regulatory framework for the certification of Carbon removals Ireland will examine the viability of establishing a voluntary carbon code for Ireland	2023-2024	DAFM	DECC, Stakeholder representative bodies	Non-Forestry Programme	Exploration of the introduction of the voluntary carbon code does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
82	Continue to implement the legal and regulatory framework relating to tree felling to minimise the impact of deforestation on GHG emissions, while supporting wider government policies.	2022-2030	DAFM	EPA, DECC, Stakeholder representative bodies	Non-Forestry Programme	Implementing the legal and regulatory framework relating to tree felling does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
<p>Goal – Supporting a Thriving Rural Economy</p> <p>Irish forests are providing improved income streams to forest owners, farmers and rural communities through the production and mobilisation of wood products, wood fibre and through expanding markets in the supply of sustainable construction and infrastructure materials, modern methods of construction, biomass, tourism, recreation and non-wood forest products.</p> <p>Strategic Areas of Focus: Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures</p>						
83	Provide a diverse range of grants and premiums to farmers and landowners to create and manage new and existing forests and in the mobilisation of wood products.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 2 Intervention 3 Intervention 4 Intervention 6 Intervention 7	Provision of grants and premiums does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites. Any future support scheme as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
84	Develop and implement targeted and results based support measures for the provision of non-timber ecosystem services.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 1 Intervention 2 Intervention 4 Intervention 6 Intervention 7 Payment for Ecosystem Services Premiums	Development and provision of support measures does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites Any future measures as part of this Action should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
85	Explore opportunities to effectively support and promote non-wood forest-based economic activities.	2023 - 2030	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 6	Exploring opportunities for support and promotion does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

Action	Action Description	Timeframe	Lead	Key Stakeholders	Implementation Vehicle	Appropriate Assessment LSE Review
<p>Goal – Supporting the Bioeconomy</p> <p>Individual and collective, co-operative enterprise opportunities through forestry will be developed, encouraging diversification and innovation at farm, forest and community level in support and development of the new circular and green economy.</p> <p>Strategic Areas of Focus: Planning, Engagement and Co-Creation; Public Access and Community Involvement; Regulation, Legislation and Incentives; Value Creation; Ecosystem Services, Restoration and Legacy Issues; Forest Management; Building Capacity; Institutional arrangements and Implementation Structures</p>						
86	Continue to support innovation in Ireland's forestry and timber industries	2023-2030	Enterprise Ireland	IBEC, FII, DAFM	Non-forestry programme	The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites
87	Design and implement incentives to support innovation including piloting, cooperation and demonstration in the forest and biobased sector outlined in the Bioeconomy Action Plan	2022-2023	DAFM	Stakeholder representative bodies	Forestry Programme Intervention 3 Non-Forestry Programme.	Incentives do not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites

5.7 Assessment of Likely Significant Effects (LSE) – Forestry Programme (Interventions, Measures and Requirements of the Draft IFSIP)

The list of Interventions, Measures and Requirements within the Draft IFSIP have been screened for Appropriate Assessment to consider any potential for likely significant effects, as documented in Table 6. Any Interventions, Measures and/or Requirements within the Draft IFSIP that have been assessed as having the potential for likely significant effects have been brought forward to Stage 2 Appropriate Assessment in Section 7.3.3.

Table 6 Forestry Programme Assessment of Effects in the Absence of Mitigation

Implementation Plan Text	Appropriate Assessment LSE Review
Intervention 1 - Forest Creation	
Overall Objective: To increase forest cover whilst also delivering ecosystem services with environmental, climate and biodiversity benefits at appropriate sites. All applications go through a silvicultural and environmental assessment to ensure they meet all objectives and	There exists the potential for likely significant effects on Natura 2000 sites as a result of this objective through the increase in forest cover across Ireland. Potential likely significant effects that could occur through the implementation of this overall objective include:

Implementation Plan Text	Appropriate Assessment LSE Review
<p>requirements.</p> <p>This afforestation must be consistent with climate and environmental objectives in line with sustainable forest management principles and this intervention intends to address these needs.</p> <p>The first afforestation programme was established by the Free State government in 1923 when 338 hectares of new forests were planted. At the time forest cover stood at just 1.5% of total land cover. Every year since then new forests have been added to the national estate in a continuous programme of State and EU funded afforestation. According to the latest National Forest Inventory completed in 2017, total forest cover has now reached 11.6%.⁸⁰ This steady investment has resulted in the creation of an indigenous and internationally competitive industry that supports jobs and communities across rural Ireland. Despite this success, forest cover in Ireland is far below the national target of 18%⁸¹ and well short of the EU average of 38%.</p> <p>The primary objective of the intervention is therefore to develop an internationally competitive and sustainable forest sector that provides a full range of economic, environmental and social benefits to society and which accords with the Forest Europe definition of sustainable forest management.</p> <p>This intervention must therefore encourage landowners to not just plant trees for timber but to create new forests that deliver public goods such as the protection and enhancement of water quality, the enrichment of biodiversity and creation of opportunities for recreation.</p> <p>The intervention focuses on:</p> <p>The multifunctional role of forests, focused on the economic, social and environmental functions of forests.</p> <p>A sustainable forest bioeconomy, through sustainable forest management practices.</p> <p>Financial incentives for the provision of ecosystem services (e.g., clean air, water regulation, habitats, protective function, social, cultural).</p> <p>Contributing to UN 2030 Sustainable Development Goals.</p> <p>The support of non-wood products.</p> <p>Increasing biodiversity in newly established forests.</p> <p>Increasing forest climate change resilience by the creation of mixed species forests, more broadleaves, establishing forests to be managed under Continuous Cover Forestry, regulation of wildlife densities, establishment of protected habitat patches or set aside areas, integrated landscape fire management systems.</p>	<p>Direct loss of habitat as a result of planting, felling, forest road construction other forest related activities such as drainage;</p> <p>Degradation of habitat quality as a result of planting, felling, forest road construction other forest related activities such as drainage and fertilisation;</p> <p>Disturbance to habitats and species through the planting and felling stages of commercial forestry, the movement of machinery during forest road construction, creation of drainage networks and application of fertiliser;</p> <p>Fragmentation of habitats during planting, felling and forestry related construction (forestry roads, drainage etc.);</p> <p>Other indirect effects such as diffuse and point source pollution such as sedimentation, siltation and input of dissolved organic matter to receiving watercourses that have hydrological connections to a Natura 2000 site and their QIs.</p>

⁸⁰[gov.ie](http://www.gov.ie) - Ireland's National Forest Inventory (NFI) (www.gov.ie)

⁸¹[gov.ie](http://www.gov.ie) - Forests, Products and People - Ireland's Forest Policy, a Renewed Vision (www.gov.ie)

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Increasing the uptake of agroforestry systems for biodiversity, carbon sequestration, animal welfare and the production of high quality hardwood timber. The creation of new agroforests is supported through a specific, separate intervention (Intervention 2).</p>	
<p>Measure 1: To create multi-purpose forests, where suitable and subject to appropriate environmental assessments and which also align with the three main pillars of Sustainable Forest Management, namely economic, environmental and socio-cultural. This will be delivered through a variety of grant aided actions, designed to incentivise the inclusion of the non-timber commercial services provided by forests through a Productive Forests Action.</p> <p>Actions in the Scheme will also include Native Forest Establishment, (which includes a Forests for Water Scheme), Seed Orchards, Forest Creation on Public Lands, the establishment of small-scale native forests. It is also envisaged to support emergent forests that meet the definition of a forest in accordance with the Forestry Act 2014, through support for Emergent Forests.</p> <p>Main Requirements: The scheme will be applied through the grant aiding of 12 different forest types, with premium payments made on the basis of income foregone as well as forest-environmental and other services provided by the forest owner (based on additional costs incurred by the forest owner).</p>	<p>Measure 1: Regarding Actions in the Scheme (Native Forest Establishment, Seed Orchards, Forest Creation on Public Lands and the establishment of small-scale native forests), there is potential for likely significant effects on Natura 2000 sites and their QIs.</p> <p>Potential likely significant effects that could occur through the implementation of this overall objective include:</p> <ul style="list-style-type: none"> Direct loss of habitat as a result of planting, felling, forest road construction other forest related activities such as drainage; Degradation of habitat quality as a result of planting, felling, forest road construction other forest related activities such as drainage and fertilisation; Disturbance to habitats and species through the planting and felling stages of commercial forestry, the movement of machinery during forest road construction, creation of drainage networks and application of fertiliser; Fragmentation of habitats during planting, felling and forestry related construction (forestry roads, drainage etc.); Other indirect effects such as diffuse and point source pollution such as sedimentation, siltation and input of dissolved organic matter to receiving watercourses that have hydrological connections to a Natura 2000 site and their QIs.
<p>Measure 2: The objective of the Woodland Environmental Fund (WEF) is to facilitate the planting of more native forests where suitable and subject to appropriate environmental assessments, which also align with the three main pillars of Sustainable Forest Management, namely economic, environmental and socio-cultural.</p> <p>Main requirement - Planting will be subject to the normal assessment processes and the Department facilitates the provision of additional supports from private industry.</p>	<p>Measure 2: The provision of a fund to facilitate planting of native woodlands does not lie within the scope of the management and conservation of Natura 2000 sites. It is not anticipated that this action shall pose any potential for likely significant effects to European sites.</p>
<p>Measure 3: Native Woodland Intervention for Remediation of Industrial Cutover Peatlands Pilot Scheme. The objective of the Native Forest Intervention for Remediation of Industrial Cutover Peatlands Pilot Scheme is intended to facilitate afforestation measures using native species on former industrial cutover peatlands on a pilot basis. This Pilot Scheme will facilitate native forest regeneration at landscape scale, aiming at minimum intervention, and is compatible with other forms of peatland restoration measures at this scale.</p> <p>Main Requirements: Only State bodies that own former industrial cutaway peatlands are eligible to apply under this Pilot Scheme.</p>	<p>Measure 3: Afforestation measures using native species on former industrial cutover peatlands on a pilot basis has the potential for likely significant effects on Natura 2000 sites and their QIs:</p> <p>Potential likely significant effects that could occur through the implementation of this overall objective include:</p> <ul style="list-style-type: none"> Direct loss of habitat as a result of planting and associated afforestation activities; Degradation of habitat quality as a result of planting and associated afforestation activities; Disturbance to habitats and species through planting and associated afforestation activities; and Other indirect effects through planting and associated afforestation activities.

Implementation Plan Text	Appropriate Assessment LSE Review
Intervention 2 - Agroforestry	
<p>Overall Objective: Agroforestry has been identified as an example of a farming practice that has positive effects on several environmental and climate impacts compared to agricultural land without trees.</p> <p>The overall objective of this intervention is to provide support for agroforestry and food forests. Agroforestry will require very few chemical inputs such as herbicides, insecticides or fertiliser. The amount of imported animal feed and fodder will be greatly reduced also. Tree species include broadleaved and conifers and will be assessed on a site-by-site basis. Hedgerows will be incorporated into any proposed Agroforestry sites.</p> <p>Additional costs will address protective actions and forest management tasks, such as vegetation control, pruning repair of tree shelters and ties, straightening fence posts, and monitoring of livestock / crops impact on trees. This also includes filling in and removal of dead trees.</p> <p>Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention.</p> <p>Forest Gardening (in some countries called ‘Food Forests’), will be introduced initially as a pilot project and will allow this approach to be tested under different conditions in Ireland. In all agroforestry scenarios, a minimum of 400 trees per hectare is required. This intervention will seek to maximise the benefits for the environment and may include actions that will contribute to environmental and social well-being of the community.</p> <p>Requirements will include an application process that indicates clear environmental and social benefits. Forest owners will be able to apply for funding under the schemes included in this intervention by submitting scheme specific application forms to the Department which will be based on the specific terms and conditions set out for each action that is supported under the intervention, including specified application periods</p> <p>The cover and shelter that the trees provide will greatly enhance animal welfare, in addition biodiversity above and below the soil will be greatly improved. The economic benefits will include timber products, agricultural produce and fuel substitution. The increased grazing time available to animals on agroforestry land will result in savings on animal feed and improved health</p> <p>All applications in relation to schemes that are part of this intervention will undergo a detailed evaluation by the Department (via desk and field inspections and use of the GIS-based iFORIS system), referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the</p>	<p>Silvoarable planting has the potential for likely significant effects on Natura 2000 sites and/or their QIs through direct loss of habitat through planting/felling, degradation of habitat through planting/felling, disturbance to species through planting/felling, fragmentation through planting/felling and indirect effects such as sedimentation/siltation of receiving watercourses connected to Natura 2000 sites.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>environment</p> <p>The main objectives of the scheme are to as follows.</p> <p>Establish Agroforestry as a realistic land use option for future programmes.</p> <p>Increase the economic output per land unit.</p> <p>Increase biodiversity.</p> <p>Produce high quality hardwood timber where appropriate.</p> <p>Protect water quality by reducing surface water runoff and protect erosion of riverbanks.</p> <p>Enhance the quality and diversity of landscapes.</p>	
<p>Measure 1: Silvopastoral Systems: to establish agroforestry silvopastoral systems where trees will be grown at wide spacing with grass grown in between. The grass can be cut as silage/hay or can be grazed by sheep, poultry, cattle and small pigs.</p> <p>Environmental Target: This action will allow farmers to farm in a more sustainable way. The trees will mitigate the negative effects of climate change, improve animal welfare, increase biodiversity, produce renewable energy, protect water, and produce quality timber. Agroforestry can also be used to prevent or reduce areas that are prone to wildfires</p>	<p>Measure 1: Silvoarable Systems has the potential for likely significant effects on Natura 2000 sites and/or their QIs through the potential likely significant effects identified in Section 5.4 including direct loss of habitat through planting/felling, degradation of habitat through planting/felling, disturbance to species through planting/felling, fragmentation through planting/felling and indirect effects such as sedimentation/siltation of receiving watercourses connected to Natura 2000 sites</p>
<p>Requirement for Measure 1: The trees will require tree shelters and fencing. Additional funding through the Sustainable Forest Management Intervention will be provided to shape the trees as they emerge from their shelters. The requirement for the removal of shelters and the provision of plastic mesh to protect the trees after the shelters are removed has been factored into the premium payment rates. 15% of the planting can comprise of fruit and nut trees. The use of setback areas for grazing will need to be examined on a case-by-case basis. Eligible trees species include conifers and broadleaves and will be assessed on a case-by-case basis.</p> <p>Once land is converted to agroforestry, it will be classified as forest land and the provisions of forest legislation will apply.</p> <p>The following agricultural activities will be permitted, so long as such activity is compatible with protecting the trees:</p> <p>Pasture: Grazing by sheep or young domestic stock is permitted during the spring and summer months in the early years, depending on tree growth, but trees must be protected, and tree shelters checked regularly. Thereafter, when tree shelters are replaced with plastic mesh, larger animals may be introduced.</p> <p>Fodder: Silage and hay production is permitted. It is important that appropriate machinery is used when cutting silage and/or hay so as to ensure that the trees (including stem, roots and crown) are not inadvertently damaged.</p> <p>Agroforestry must remain under forestry indefinitely and therefore is subject to a re-planting obligation</p>	<p>Potential for likely significant exists for this Requirement under Measure 1 as agroforestry ‘must remain under forestry indefinitely and therefore is subject to a replanting obligation’. Where felling and replanting activities occur there is potential for habitat loss (during the initial planting phase), degradation (deterioration of habitat quality through successive replanting), disturbance to QI species and indirect effects (such as that of diffuse pollution to receiving watercourses through sedimentation and siltation).</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 2: Silvopastoral Systems: To establish silvoarable agroforestry systems with crops of cereals, fruit and vegetables growing amongst trees. This measure will not require tree shelters as there will be no grazing. The crops will be grown amongst single trees, rows or groups of trees.</p>	<p>Measure 2: Silvoarable Systems has the potential for likely significant effects on Natura 2000 sites and/or their QIs through the potential likely significant effects identified in Section 5.4 including direct loss of habitat through planting/felling, degradation of habitat through planting/felling, disturbance to species through planting/felling, fragmentation through planting/felling and indirect effects such as sedimentation/siltation of receiving watercourses connected to Natura 2000 sites.</p>
<p>Requirements: This measure will need a clear strategic plan taking into consideration a long-term vision for the farming enterprise. Headlands for machinery will be required to allow for machines to turn at the end of each row subject to environmental setbacks. Horticultural input into training and design would be beneficial and could be incorporated into the training in Intervention 5.</p> <p>Once land is converted to agroforestry, it will be classified as forest land and the provisions of forest legislation will apply. Eligible tree species include broadleaves and conifers and will be assessed on a site-by-site basis. Fruit and nut trees can account for 20% of species planted</p> <p>All environmental setbacks required as per environmental requirements for afforestation document (Dec 2016) to protect retained habitats, waterbodies, public roads, landscapes, sensitive habitats/species & archaeology</p>	<p>There is potential for likely significant effects as a result of this requirement where 'headlands for machinery will be required to allow for machines to turn at the end of each row subject to environmental requirements'. Potential likely significant effects include habitat degradation, disturbance and indirect effects to receiving watercourses through machinery movement.</p>
<p>Measure 3: Forest Gardening: To establish carefully planned and constructed forest gardens. The objective is to provide robust, small-scale forests that provide a source of organic forest food.</p>	<p>Measure 3: Forest Gardening has the potential for likely significant effects on Natura 2000 sites and/or their QIs through the likely significant effects including direct loss of habitat through planting/felling, degradation of habitat through planting/felling, disturbance to species through planting/felling, fragmentation through planting/felling and indirect effects such as sedimentation/siltation of receiving watercourses connected to Natura 2000 sites.</p>
<p>Requirements: Fund some pilot plantations that will seek to establish which designs are most suitable to Irish conditions. Start with 1 ha limit per landowner with a national ceiling of 6ha annually. A design plan would need to be submitted with each application. Up to 40% of the trees planted could be fruit and nut trees. Once land is converted to agroforestry, it will be classified as forest land and the provisions of forest legislation will apply.</p>	<p>The funding of pilot plantations does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this requirement shall pose any potential for likely significant effects to European sites.</p>
<p>Intervention 3 - Infrastructure and Technology Investments</p>	
<p>Overall Objective: The overall objective of this intervention is to support sustainable development of access to the national forest estate for economic, protective and social purposes while having the potential to deliver ecosystem services with environmental, biodiversity and climate benefits.</p> <p>The underpinning principle for the intervention will support 'the right trees, in the right places, for the right reasons and with the right management' in order to ensure effective targeting of measures to deliver biodiversity and climate action.</p>	<p>Overall objective: In relation to roads to enable access to forests at a reasonable cost there is potential for likely significant effects to Natura 2000 sites and their qualifying interest features in the creation of forests roads:</p> <p>Potential likely significant effects that could occur during the creation of forestry roads includes habitat loss, degradation, disturbance, fragmentation and indirect effects through forestry road construction and related infrastructure such as drainage (bridges, culverts etc.).</p> <p>Potential likely significant effects could also occur during the decommissioning period of temporary bridging including degradation, disturbance and indirect effects (such as sedimentation, siltation and</p>

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<p>The primary objective of the intervention in relation to roads is to enable access to forests at a reasonable cost, to ensure optimal engineering and environmental performance of forest infrastructure and to integrate forest roads and access infrastructure with other biodiversity enhancement features and protective measures in forests</p> <p>The importance of ensuring roads contribute to the environmental benefit of forests is recognised in a measure aimed at managing surface water and road drainage by the construction of wetlands and water attenuation features. This intervention also recognises that in some areas permanent access is not required and support will be provided for temporary bridging therefore removing the requirement for in-stream works</p>	<p>changes to water quality in receiving watercourses that could potentially be connected to Natura 2000 sites).</p>
<p>Specific requirements for this intervention are: This intervention will seek to enable access to forests through the creation of new roads, the upgrade/improvement of existing access, funding of special construction works and support of other measures to ensure that forest roads contribute to multifunctional forests. Forest owners will be able to apply for funding under the schemes included in this intervention by submitting scheme specific application forms to the Department which will be based on the specific terms and conditions set out for each scheme, including specified application periods.</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan. Article 6(3) of the Habitats Directive sets out the requirement for Appropriate Assessment in relation to Natura sites.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017) European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p>	<p>There is potential for likely significant effects to Natura 2000 sites and their qualifying interest features in the creation of forests roads:</p> <p>Potential likely significant effects that could occur during the creation of forestry roads includes habitat loss, degradation, disturbance, fragmentation and indirect effects through forestry road construction and related infrastructure such as drainage (bridges, culverts etc.).</p> <p>Potential likely significant effects could also occur during the decommissioning period of temporary bridging including degradation, disturbance and indirect effects (such as sedimentation, siltation and changes to water quality in receiving watercourses that could potentially be connected to Natura 2000 sites).</p>

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<p>Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Any application for a forestry licence or consent under the Forestry Act, 2014 is regarded as a “project”. The area where the proposed activity (and ancillary operations) is to take place, is the “project area”.</p> <p>The Department of Agriculture, Food and the Marine is the competent authority in the assessment of forestry licence applications and consents and must be sure that the project meets the exacting requirements set out under Article 6(3). All forestry licence applications must undergo Appropriate Assessment screening, if following screening likely significant impacts cannot be screened out, the application proceeds to appropriate assessment before a decision is taken on whether or not to approve the project.</p>	
<p>Measure 1: Forest Road Scheme: The scheme provides opportunities for forest owners to create or improve access to forests to facilitate sustainable forest management, harvesting of timber and monitoring and protection of forest resources. It will provide a network for sustainable rural recreation and tourism.</p> <p>Development of forest roads will also provide opportunities for biodiversity enhancement by increasing habitat diversity and improving connectivity. It will facilitate other management interventions to open forest canopies. Improved design and management of ancillary drainage attenuation systems will ensure sustainable management of water resources around new road infrastructure. This will also create opportunities to increase habitat and species diversity.</p> <p>The carbon performance of forest transport will be improved via the provision of an optimal internal road network density throughout the forest estate. Funding will also be made available for co-operative roads.</p> <p>Main Requirements – Meet Scheme eligibility criteria as outlined in the scheme document.</p>	<p>Measure 1: There is potential for likely significant effects to occur during the creation of forestry roads. Potential likely significant effects includes habitat loss, degradation, disturbance, fragmentation and indirect effects through forestry road construction and related infrastructure such as drainage (bridges, culverts etc.). Potential likely significant effects of disturbance and indirect effects could also occur through the operation of forestry roads (through the movement of machinery etc.)</p>
<p>Measure 2: Additional element to Forest Road Scheme. additional measures - Ecologically Enhanced Forest Roads: The Scheme provides the opportunity for funding road projects with an enhanced emphasis on biodiversity, forest protection and water management. This will be achieved through enhanced design and construction measures and forest protection facilities.</p> <p>Eligible measures under this action include:</p> <ul style="list-style-type: none"> • Creation of forest road edge habitat comprising open habitat, scrub and then broadleaf trees • Creation of connectivity withing the forest by providing open space habitat adjoining road. • Avoidance of water hotspots in the location of the road but incorporating them into the open space component associated with the road 	<p>Measure 2: There is potential for likely significant effects from ‘special construction works and additional measures – ecologically enhanced forest roads’. Potential likely significant effects that could arise from the implementation of this measure includes habitat loss, degradation, disturbance, fragmentation and other indirect effects during construction of this measure.</p>

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<p>Measure 3: Additional element to Forest Road Scheme. Special construction works and additional measures - including constructed wetlands and water attenuation: Provide additional funding for complex forest infrastructure. Works funded under this measure will include provision of permanent Bridges, large culvert crossings, creation of roads in areas with complex terrain projects. The measure will facilitate the development of constructed wetlands and water attenuation features intended to improve management of surface water and drainage output associated with forest roads. Constructed wetlands will provide for temporary storage, stabilisation and settling of road drainage flows and over time will become biodiversity features. Water storage ponds and dams close to forest road infrastructure will provide open water sources available for firefighting. Larger storage features located away from surface obstructions will be designed to accommodate aerial firefighting in high risk areas.</p> <p>Main Requirements – Meet the eligibility criteria as outlined in the scheme documents. A cost-benefit analysis to support the project should also be provided by applicants</p>	<p>Measure 3: There is potential for likely significant effects from ‘special construction works and additional measures – including constructed wetlands and water attenuation’. Potential likely significant effects that could arise from the implementation of this measure includes habitat loss, degradation, disturbance, fragmentation and other indirect effects during construction of this measure.</p>
<p>Measure 4: Additional element to Forest Road Scheme. Engineering design support measure: The Engineering Design Support measure will provide additional funding and support for Forest Owners whose roads require an entrances from a public or the material widening of an Existing Entrance.</p> <p>Applicants are required to submit the following documentation:</p> <ul style="list-style-type: none"> Detailed plan of the forest entrance (scale 1:500); Plan of forest entrance (scale 1:2,500); Condition of public roads. (to include photos); Map with gradients of Forest Road entrance and public road; Drainage Details; Engineers Report; Proposed Haulage Route; and Relaxation from standard supporting Documents – where relevant. <p>Main requirements – Compliance with Scheme rules, Compliance with SI 39 of 2020 and Forest Entrances – requirements for Mandatory Consultation.</p>	<p>Measure 4: The provision of Engineering design support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Measure 5: Innovative forest technology scheme - Element 1: central tyre inflation systems: Direct Grant aid support for purchase and installation of Central Tyre Inflation Systems to Forestry Transport vehicles (HGV)</p> <p>The use of Central Tyre Inflation Systems is highly desirable for the protection of minor and local road systems from the effects of heavy vehicle passage.</p> <p>Main requirements – Defined business case. Provision of specific costings, and life cycle maintenance and update management plan.</p>	<p>Measure 5: The provision of innovative forest technology does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

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<p>Measure 6: Innovative forest technology scheme - Element 2: temporary forest access measure:</p> <p>Facilitate the use of temporary bridging (during construction & removal of temporary structure) in sites where permanent access is not required, subject to appropriate assessment process and located only where appropriate. . Support will also be provided for temporary road reinforcements to allow access.</p> <p>Portable, lightweight bridging systems are readily available and provide a modular, scalable and safer alternative to locally constructed temporary crossings.</p> <p>Modular systems can be carried by forwarder equipment to sites and can installed and removed with minimal site preparation or disturbance.</p> <p>Temporary bridging system can be used on forest roads to facilitate haulage without the requirement for in-stream works, such as the insertion of culverts.</p> <p>These measures are best employed via contractors or forest producer groups.</p> <p>Re-use and movement of temporary bridging and trackways may make access economically viable for smaller crops.</p>	<p>Measure 6, Element 2: temporary forest access measure has the potential for likely significant effects. Potential likely significant effects that could arise from the implementation of this measure includes habitat loss, degradation, disturbance, fragmentation and other indirect effects during construction and decommissioning of this measure.</p>
<p>Measure 7: Innovative forest technology scheme - Element 3: Forest Machinery grant: This measure will provide grant support for the purchase of new forest machinery with optimal fuel consumption and environmental performance.</p> <p>The measure will also support the purchase of cable timber extraction systems for use on steep and soft site types.</p> <p>Technological advances in these areas require regular upgrading of equipment to ensure optimal efficiency and adherence to safety requirements. This Scheme will not apply to harvesting and forwarding machines.</p>	<p>Measure 7 Element 3: Forest Machinery Grant: The provision of innovative forest technology grant scheme does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

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<p>Measure 8: Investment aid for the development of the forest tree nursery sector:</p> <p>Overview This scheme will focus on seed supply and nursery infrastructure, it will complement intervention 1 Forest Creation – FT9 and intervention 4 – seed stand management.</p> <p>This scheme is intended to assist in the development of the forest tree nursery sector, including seed collection, by grant aiding capital investments in specialised equipment, as well as technology adoption specific to forest tree production.</p> <p>Objective The objective of this intervention is to enhance the quantity, quality and diversity of domestic tree production</p> <p>Background For afforestation and reforestation targets to be realised, an indigenous supply of reproductive material and plants is required. Demand for trees for planting is expected to increase over the coming years – Climate Action Plan 2021 includes a target of 8,000ha a year, while the new Forestry Strategy for Ireland will likely include an ambition to achieve at least 18 % forest cover by 2050. The availability of more trees sourced from Ireland will give landowners and foresters greater certainty over supply and can also boost the green economy, while also reducing the phytosanitary risk associated with the international trade of both forest reproductive material and plants. As well as enhancing the quantity of trees produced, we also need to enhance their diversity in order to plant forests resilient to stresses such as pest and disease, and climate change. Stocking material should be of the highest possible quality to reduce planting losses and ensure the delivery of healthy trees thriving in the landscape.</p> <p>This intervention will help seed and tree suppliers of all sizes, from established nurseries to smaller nurseries and new entrants looking to diversify into the sector. Any public, private, or third sector organisation that will use the funding to support their production of tree seed or saplings may apply. It is intended that the measure can be used to support significant investments in expansion, automation and mechanisation of facilities and equipment. This will help to improve not only the quantity but also the quality, diversity, and biosecurity of supply.</p>	<p>Measure 8: Investment aid for the development of the forest tree nursery sector. The provision of investment aid does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Main requirements: Applicants will be able to apply for up to 50% of the costs for capital projects and equipment. The types of projects and items eligible for funding under the Grant will include, for example:</p> <ul style="list-style-type: none"> Seed collection equipment Polytunnel infrastructure / equipment Irrigation systems and infrastructure transplanting systems 	<p>Main requirements for Measure 8: Investment aid for the development of the forest tree nursery sector – Main requirements. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

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<p>Seed trays Grading machines Biosecurity investments such as water treatment and refrigeration equipment</p> <p>Where an applicant proposes investment in a fixed structure(s) (i.e., polytunnels) that requires planning permission the applicant must be in receipt of a grant of planning permission at the time of closing date for receipt of applications for the Scheme. The applicant must provide details of measures in place to protect the environment from any possible increased pressure resulting from the proposed investments. An environmental impact statement (EIA) may be requested where the Department of Agriculture, Food and the Marine is of the opinion that the works proposed to be carried out would increase pressure on the environment, in particular to environmentally sensitive areas or to a structure or area of historical or archaeological importance.</p>	
<p>Measure 9: Forest technology challenge grant: This competitive innovation measure will provide grant support for the innovation and development of technological tools to support programme delivery and sustainability. New technological applications are required to support forest establishment and design, and to manage the many different environmental and social constraints affecting operations. Preferred developments would include applications and cross sectoral spatial information support specifically targeted towards:</p> <ul style="list-style-type: none"> Mobile forest applications; Timber Transport Optimal Routing; Forest Design Support; Water Management; Forest Protection; Professional CPD management; and “Forest Pass” Cross sectoral CPD programme. 	<p>Measure 9: The provision of grant support for this measure does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Payment for Ecosystem Services Pilot Premium Structure: A new Payment for Ecosystem Services (PES) premium pilot has been developed for existing forest owners, that are out of premium payments or never received a grant payment for their forest. It is an annual per ha payment of 7 years duration.</p> <p>Forest owners when receiving approval on certain support Schemes may be able to select one (or more) options in accordance with the management practice selected. Each option will attract a flat rate payment per ha. Payments are based on additional cost incurred and payment foregone in relation to the option selected. Block 2 premiums only apply to forest owners of existing (non-grant aided or out of premium) forests with 7 premiums in total.</p> <p>PES 4 Environmental enhancement scheme – incl. action for water habitats/species (designated areas)</p>	<p>Payment for Ecosystem Services Pilot Premium Structure does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

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<p>Management of regeneration of archaeological setbacks. This includes actions that will allow landowners to draw down premiums based on archaeological sites and monuments and other built heritage within or contiguous to an existing forest. For example: Increasing the distance between the outermost extent of the archaeological site or monument and the nearest trees at the edge of a setback / exclusion zone by an early felling intervention to remove trees. Creation of a ‘forest edge’ thereafter, in the next adjacent 5m plus [perhaps 10m], by extending the area with an early felling intervention and thereafter creating undulating edges, using native tree and shrubs species for replanting. Encourage forest owners to undertake works within existing forests and during current rotations, to achieve structural changes and to improve the environmental ‘footprint’ of those forests regarding impacts on (<i>inter alia</i>) water quality. Creation or extension of an existing setback adjoining designated area, specific habitats or to benefit specific species. Creation of forest edge adjacent to specific habitats. Enhancement of habitat for specific species by planting native trees and shrubs Creation or improvement of connectivity either by planting native trees/shrubs or open areas as connectivity corridors In a conifer plot this could involve planting up to 5 lines of native broadleaf tree and shrub species. In broadleaf plot this could involve planting 5 lines of native broadleaf tree and shrub species of greater diversity (smaller, slower growing species, and/or flowering broadleaf species) and where no one species is more than 40% of the five lines. - The establishment of related access paths should also be eligible PES 6 Water protection Options / actions that will allow landowners to draw down premiums based on water protection measures. It will also allow the management of these areas if required from a water protection perspective – riparian tree planting or removal.</p>	

Implementation Plan Text	Appropriate Assessment LSE Review
Intervention 4 - Sustainable Forest Management	
<p>Overall Objective: The overall objective of this intervention is to provide support for Sustainable Forest Management with the potential to deliver ecosystem services and environmental and climate benefits. This intervention will support the development of privately and publicly owned forests. The underpinning principle for the intervention will be ‘the right trees, in the right places, for the right reasons and with the right management’ in order to ensure effective targeting of sustainable forest management measures to deliver biodiversity and climate action benefits.</p> <p>In light of climate change and biodiversity loss there is an urgent need for adaptive forest restoration and ecosystem-based management approaches that strengthen the resilience of Ireland’s forests. Forest management practices that preserve, restore and provide opportunities for forests to provide corridors and enhance biodiversity, leading to more resilient forests that can deliver on their socio-economic and environmental functions.</p> <p>All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system).</p> <p>All schemes included within this intervention are subject to the Forestry Act 2014. As such, when assessing an application for licensing and consent a regulated forest activity, DAFM undertakes an assessment of the project and (inter alia) its potential impact on the environment, to ensure that any licence issued is in keeping with the principles of SFM and the protection of the environment, including water.</p>	<p>Overall objective: The provision of support for Sustainable Forest Management has the potential for likely significant effects on Natura 2000 sites. Potential likely significant effects from this overall objective have the potential to include indirect effects to the quality of the environment during the implementation of sustainable forest management.</p>
<p>Measure 1: Forest management scheme: Element 1: Thinning, tending and agroforestry maintenance The scheme facilitates the enhancement of the environment associated with thinning and tending operations of broadleaf forests and mixed broadleaf/ conifer forest. Thinning and Tending stimulates investment through improvement, protection and development of broadleaf forest and mixed broadleaf/ conifer forest for a range of functions, including healthy tree growth, landscape improvement, biodiversity enhancement, soil protection and water protection. These aims will be achieved through improvement felling of malformed trees; felling of additional trees to release potential crop trees (PCT); pruning to improve stem quality; thinning or re-spacing to promote growth, crown development plus management and re-spacing of natural regeneration. Tending and thinning also benefits biodiversity by increasing light levels which contributes to the development of shrub and ground flora.</p> <p>This scheme also promotes the maintenance of Agroforestry by facilitating the removal of tree shelters, stakes, formative shaping. The scheme will also provide supports for new protective measures once the shelters are removed to protect the trees from damage by grazing animals.</p>	<p>Measure 1: Forest management scheme. There is potential for likely significant effects through the implementation of this measure. Potential likely significant effects from thinning, tending and agroforestry maintenance may include degradation, disturbance, fragmentation and indirect effects.</p>

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<p>Main Requirements: A fixed forest improvement grant towards the costs will be available to private land-holders or companies for projects which comply with the requirements, terms and conditions of the Forest Management Scheme.</p> <p>The scheme will comprise of three measures as follows;</p> <p>Measure 1: First Intervention grant of TBC for all broadleaf forests and all broadleaf/ conifer mixtures that meet the required eligibility criteria;</p> <p>Measure 2: Second Intervention grant of TBC for all broadleaf forests and all broadleaf/ conifer mixtures subject to eligibility criteria.</p> <p>Measure 3: Maintenance of Agroforests</p> <p>Aid for forest management under these measures will be granted solely in connection with duly justified and substantiated costs; and no over-compensation will take place.</p> <p>Support will be available for the following operations:</p> <ul style="list-style-type: none"> Improvement felling of malformed trees; Felling of additional trees to release potential crop trees (PCT); Thinning or re-spacing to promote growth; Management and re-spacing of natural regeneration. 	<p>There is the potential for likely significant effects where Measure 1, Measure 2 and Measure 3 involve the thinning of the three forest types. Potential likely significant effects include disturbance, fragmentation and indirect effects during thinning operations.</p>

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<p>Measure 2: Forest management scheme: Element 2 continuous cover forestry This scheme will provide funding for conversion of existing forests to Continuous Cover Forestry (CCF) over a 12-year transitional period. CCF is a toolbox for forest management interventions, it can be used to increase adaptive capacity and restore biodiversity and ecosystem functioning of forests.</p> <p>The intention of this silvicultural system is to facilitate the restructuring of the forest, required to provide conditions for an uneven aged and permanent forest. CCF forest management is operated on a scale of the individual tree (tree by tree silviculture) rather than on that of the stand. Production should concentrate on growing high-quality logs, usually produced from very large trees. The forest must be managed to promote natural regeneration and to positively diversify species composition while retaining deadwood, old growth trees, restoring key habitats.</p> <p>This silvicultural system improves biodiversity, soil and water quality and the landscape of the forest, while also increasing its Climate Change resilience to Biotic and Abiotic challenges while storing Carbon in the forest for perpetuity.</p> <p>The principle aim of the scheme is to increase the area of forests under CCF management systems. In doing so the scheme will fulfil the following objectives:</p> <ul style="list-style-type: none"> To enhance environmental benefits of existing coniferous forests by opening up the canopy and creating new habitats for wildlife; To create an uneven canopy structure with the aim of producing high quality, high value logs. To promote a more suitable management option in sensitive sites; To develop skills in continuous cover forestry across the forestry sector to facilitate more wider adoption. <p>These objectives will be achieved through improvement felling of poorer quality trees; felling of additional trees to release potential frame trees; pruning to improve stem quality; thinning or re-spacing to promote growth and management and re-spacing of natural regeneration.</p>	<p>Measure 2: Forest management scheme: Element 2 continuous cover forestry. This measure has the potential for likely significant effects through the conversion of existing forests to continuous cover forestry.</p> <p>Potential likely significant threats may include disturbance and indirect effects during the conversion stage.</p>
<p>Requirements:</p> <p>All sites must be capable of supporting the vigorous growth and sustainable long-term development. This must be achievable without the need for fertiliser input. Free draining mineral soils are best suited to CCF. Peats, deep peats, waterlogged sites and gleys are to be avoided. Sites not capable of growing Sitka spruce to yield Class 14 are not eligible. This criteria is productivity indicator and does not assume that the crops are Sitka spruce.</p> <p>Sites subject to severe and persistent threats that could undermine the long-term sustainability of the project (e.g., sites within a locality heavily infested with rhododendron or within a deer ‘hotspots must include a comprehensive action plan as part of the Transformation Management Plan that addresses these issues).</p>	

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<p>In general elevations above 300 metres are to be avoided as the risk of windthrow increases significantly.</p>	
<p>Measure 3: Forest management scheme: (Element 3 coppice and coppice with standards) Provision of ecosystem services and rehabilitation of poorly performing pole-stage broadleaf stands.</p> <p>Coppice and Coppice-with-standards can provide material of various sizes to supply local demand for environmentally friendly fuelwood, pulpwood and fencing material with the standards forming high value, high quality roundwood.</p> <p>This system can remediate a forest with poor form to increase its form, quality and value long term. The system also has non-market benefits such as amenity and biodiversity. This system requires greater silvicultural skill to manage to a high standard.</p> <p>Well-managed coppice can promote structural and species diversity and encourage the natural regeneration of trees and shrubs.</p> <p>Requirements: Scheme is open to suitable broadleaf sites forests that are 15 years old or greater.</p> <p>Ash is not eligible to enter the scheme due to Ash Dieback Disease (<i>Hymenoscyphus fraxineus</i>). A Management Plan is required.</p> <p>A Deer Management Plan may also be required if deer pressure is an issue.</p> <p>The main target species are oak (<i>Quercus</i>), hazel (<i>Corylus avellana</i>), sycamore (<i>Acer pseudoplatanus</i>) and Spanish chestnut (<i>Castanea sativa</i>). Forest Owners who have received Woodland Improvement Scheme for 1st and 2nd Interventions can enter this scheme.</p>	<p>Measure 3: Forest management scheme – Element 3 coppice and coppice with standards.</p> <p>There is the potential for likely significant effects through the implementation of this measure. Potential likely significant effects may include disturbance to species and indirect effects as a result of coppicing.</p>
<p>Measure 4: Forest management scheme: (Element 4: seed stand management) The Seed stand management element of the Forest Management Scheme aims to increase the availability and quality of forest tree seed through supporting the management of seed stands Broadleaf seed stands, and minor conifer seed stands, including Scots pine (<i>Pinus sylvestris</i>) and Douglas fir (<i>Pseudotsuga menziesii</i>), registered on the National List of Forest Basic Material as “Select” will be considered for funding. The maximum area eligible for funding is 5ha (10ha for oak) although the total area of the seed stand can be larger.</p> <p>Forest stands registered as “Source Identified” may be eligible where they are managed for the purpose of gene conservation.</p> <p>The scheme does allow for new seed stands to be registered on the National Register of Forest Basic Material at which point they will become eligible to apply for support. In particular, the scheme would like to encourage the registration of more sessile and pedunculate oak (<i>Quercus robur</i>) seed stands, and seed stands for minor species and understorey species, as listed under the Native Woodland Scheme.</p> <p>This will complement intervention 3, Measure 8 - Investment Aid for the Development of the Forest Tree Nursery Sector.</p>	<p>Measure 4: Forest management scheme Element 4 seed stand management. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites</p>

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<p>Main Requirements: Operations eligible under this scheme are:</p> <ul style="list-style-type: none"> provision of access paths; fencing; control of ground vegetation; ongoing maintenance (including vegetation management); non-commercial thinning/pruning to open up crowns to promote seed production; maintenance of documented record of specific operations undertaken to enhance seed production; and other related operations, as agreed with Forest Service. 	

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<p>Measure 5: Deer tree shelter, hare and deer fencing scheme</p> <p>Deer Tree Shelter can be available to protect broadleaf (ADB) parts of conifer plots and in standalone diverse conifer or broadleaf plots to ensure the forest the broadleaves trees successfully establish where they are a high risk of being damaged from deer, rabbits (<i>Oryctolagus cuniculus</i>) and hares.</p> <p>New Planting: Available for installation of Deer Tree Shelters (DTS) for new afforestation. Funding for DTS, will be available to private land-holders or companies.</p> <p>Existing Plantations: Support and standards for DTS in existing plantations are the same as for new plantations (see above). Alder (<i>Alnus glutinosa</i>) is not eligible to enter this scheme.</p> <p>Main Requirements: Deer Tree Shelters.</p> <p>Funding for DTS, will be available to private land-holders or companies.</p> <p>The option to use DTS is voluntary but can be used on all suitable sites where there is deer damage to trees.</p> <p>DTS can be used in the additional broadleaf (ADB) parts of conifer plots and in standalone diverse conifer or broadleaf plots.</p> <p>The minimum stocking where trees are in DTS is 625 trees / hectare whether this is in ADB or in diverse conifer or broadleaf plots. This is achieved at an average stocking of 4 metres X 4 metres.</p> <p>Apart from the reduced stocking level all other requirements of the plantations remain the same at Form 2 and Form 3.</p> <p>The maximum area for receipt of DTS grant is 2 hectares for FT1 to 8 This limit does not apply for broadleaves planted in ADBs.</p> <p>On-going maintenance of tree shelters will be required to ensure stakes and shelters are secure, upright and adequate weed control is carried out until trees are established. Shelters will breakdown overtime and applicants must ensure there are no litter issues.</p>	<p>Measure 5: Deer tree shelter, hare and deer fencing scheme. The provision of funding for this scheme does not lie within the scope of management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 6: Forest management plans (iPLAN scheme)</p> <p>The iPLAN scheme will promote more active forest management resulting in forests that have greater capacity to deliver eco-system services, climate resilience, roundwood value and forest health vitality than those that are not subject to forest management planning practices. Healthier and more resilient, vigorous forests are less susceptible to attack by harmful forest pests and diseases and are less inclined to suffer from storm damage. Regarding climate adaption, forests that are managed sustainably managed properly are more likely to continue to support habitats and habitats rich in biodiversity can help with pest control in both forest and agriculture systems .</p> <p>iPLAN will also encourage the greater mobilisation of timber by promoting greater planning of forest road works and harvesting activities such as on time thinning and the avoidance of clear-felling too early.</p> <p>The lack of independent forest certification within the private forest estate needs to be addressed if timber supply is to access existing markets, both at home and abroad. iPLAN will aid Forest Owners who wish to acquire Certification for their forests.</p> <p>Main requirements: All forests greater than 10 hectares established under an afforestation scheme operated by DAFM require that a Forest Management Plan (FMP) is submitted at year 12. It is proposed that once this Scheme is in place, a registered forester must submit a FMP via iPLAN on behalf of the Forest Owner.</p>	<p>Measure 6: Forest management plans (iPLAN scheme).</p> <p>There is the potential for likely significant effects through the implementation of this measure. Potential likely significant effects through the iPLAN scheme may be indirect effects to the environment through insufficient training and expertise applied to the iPLAN framework.</p>
<p>Measure 7: Native Woodland Conservation: Promoting the proactive protection and expansion of Ireland’s native forest resource.</p> <p>The aim of NWF Conservation is to promote and support the appropriate restoration of existing native and associated biodiversity. All projects under NWS Conservation must promote the appropriate native woodland type (or types) identified for the site being applied for, based on soil type, existing woodland, ground vegetation, elevation, etc. Support is provided in the form of grant payment for approved restoration works and (for private Applicants) a 7 year annual premium payment.</p> <p>NF Conservation has an overriding ecological focus, demonstrated by, for example, its emphasis on minimal site disturbance, species selection based on the most appropriate native woodland type, the use of native planting stock, and long-term ‘close-to-nature’ management. NWS Conservation also has a particular application in relation to the protection of watercourses and aquatic habitats and species.</p>	<p>Measure 7: Native Woodland Conservation: Promoting the proactive protection and expansion of Ireland’s native forest resource. There is potential for likely significant effects in the conversion of existing non-native forest to native woodland potentially causing indirect effects to the environment.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Main Requirements: Applications must meet the eligibility criteria as outlined in the scheme documents. Two funding categories NF Conservation Private High Forest NF Conservation Public Forest</p> <p>Existing ‘high forest’ native forest requiring appropriate restoration works (e.g., removal of individual or groups of non-natives, removal of invasive exotics, protection against deer and / or livestock).</p> <p>All sites will be subject to appropriate environmental assessments, which also align with the three main pillars of Sustainable Forest Management, namely economic, environmental and socio-cultural.</p>	
<p>Measure 8: Environmental enhancement scheme Encourage forest owners to manage their forests with a silvicultural system that enhances Archaeology, Water Quality or Habitats/Species</p>	<p>Measure 8: Environmental enhancement scheme. There is potential for likely significant effects found below within Main Requirements.</p>
<p>Main Requirements: Archaeology: Creation or extension of an existing setback (by means of an early felling intervention) to meet with the current minimum prescribed setbacks for newly created forests, e.g., 15m to 20m. Extension of that minimum prescribed setback/exclusion zone by 5m etc. Planting of a ‘forest edge’ adjacent to the extended setback, by establishing undulating edges using local tree and shrub species.</p> <p>Water Quality Encourage forest owners to undertake works within existing forests and during current rotations, to achieve structural changes and to improve the environmental ‘footprint’ of those forests regarding impacts on (inter alia) water quality.</p> <p>Habitats / Species – within existing forests Creation or extension of an existing setback adjoining designated area, specific habitats or to benefit specific species. Creation of forest edge adjacent to specific habitats. Enhancement of habitat for specific species by planting native trees and shrubs Creation or improvement of connectivity either by planting native trees/shrubs or open areas as connectivity corridors</p> <p>All sites will be subject to appropriate environmental assessments, which also align with the three main pillars of Sustainable Forest Management, namely economic, environmental and socio-cultural.</p>	<p>Main Requirement – Water Quality and Habitats/Species within existing forests. The requirement of this measure has the potential for likely significant effects in respect of the water quality and habitats/species where forest owners do not have the adequate or appropriate knowledge in respect of the management or conservation of Natura 2000 sites.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
Intervention 5: Developing skills and empowering the forest sector for Sustainable Forest Management	
<p>Overall Objective: Sustainable Forest Management involves balancing and delivering the multiple benefits of forests for nature, climate, wood production and people. The success of SFM depends not only on forest owners but all the forest sector and the general public.</p> <p>The Needs Analysis, conducted as part of Project Woodland, identified several requirements including the need to empower forest owners to recognise the full potential of their forest and become active forest managers. In addition, the low uptake and interest in careers in the forestry sector must be addressed to meet current and future demands. Careers in forestry will be promoted for all genders. This intervention aims to address these needs through a combination of measures including knowledge transfer groups, the provision of training through a number of different media, continuous professional development and promotion of the forestry sector for forest owners, professional foresters and DAFM inspectorate.</p>	<p>This objective does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Measure 1: Forestry knowledge transfer groups (FKTGs)</p> <p>The aim of the FKGTG scheme is to increase knowledge about all aspects of the forest sector. It aims to provide peer to peer learning to the forest sector. KTGs for forest owners will aim to target forest owners whose forests are at a similar stage so that they can share experiences and offer support in an informal setting. By increasing a forest owner's knowledge of a particular forest stage, it facilitates the making of informed decisions about their plantations and as such increases the level of sustainable forest management. The KTG have the potential to allow forest owners to increase their knowledge in blocks, each block targeting a particular forest stage. This, potentially, will remove a barrier to the mobilisation of timber and biomass.</p> <p>KTGs may also target other sectors of the forest industry such as foresters, presenting an informal way of exchanging knowledge and building on current expertise</p> <p>Requirements: The scheme comprises mandatory and optional topics. The mandatory topics cover inter alia, obligations in respect of the Water Framework, Habitats and Birds Directives; health and safety; felling decision support tool; and sustainable forestry methods and technologies. Optional topics will be determined by the interest of the group involved and the stage their forests are at. The range of topics includes first thinning, harvesting, reforestation, certification, forest improvement and non-timber benefits of forestry.</p>	<p>Measure 1: Forestry knowledge transfer groups – The establishment of Knowledge Transfer Groups (KTGs) has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.</p>
<p>Measure 2: Training call for proposals</p> <p>Main Requirements: As part of Working Group 3 of Project Woodland a Training Needs Analysis (TNA) was developed. It is envisaged that under this intervention this work will be further refined and developed, identifying and addressing training/education gaps in the industry as a whole and how best to address these gaps. The Department of Agriculture, Food and the Marine ('DAFM') will invite applications for training projects in an Open Call for Proposals for Forest Training Project.</p> <p>It is recognised that there is both a shortage of labour within the industry and skilled operatives. There is a need for apprenticeship schemes for forestry contractors, technicians, machine drivers and operators and proactive measures to encourage people into the industry. Provision of training,</p>	<p>Measure 2: Training call for proposals has the potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive that may result in indirect effects to the environment.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>continuous professional development, knowledge transfer and upskilling opportunities is a key requirement. This element will target a wide range of relevant stakeholders such as Registered Foresters, contractors, students and education providers and address a number of key stakeholders priorities</p>	
<p>Measure 3: Forest promotion</p> <p>Promotion of the forest sector and industry is required to raise awareness of the industry among the general public, to highlight the benefits of sustainably managed timber and timber products and to encourage farmers and other land owners to plant. The benefits of planting trees are encompassed in the three pillars of SFM namely environmental, social and economic. The economic benefit of planting trees whilst also providing multi-ecosystem services needs to be promoted to address the current misconception that forests with a commercial focus cannot provide other benefits. The Department of Agriculture, Food and the Marine ('DAFM') will invite applications for funding for projects which support and highlight forestry. This competitive process is open to all.</p> <p>Main Requirements: The Forest Promotion call will be made up of three elements but can be expanded to include others as required;</p> <ol style="list-style-type: none"> a. Promotion targeted at increasing planting levels especially among farmers and to encourage confidence in the industry. b. Promotion initiatives intended to increase public awareness of the social, economic, environmental and health benefits of forestry. This will aim to encourage people to use the forest resource for their enjoyment and sense of well-being. c. Promotion actions aimed at achieving higher levels of timber use and mobilisation amongst private forest owners through more active forest management. In addition, it will encourage owners to develop multifunctional uses of their resource; 	<p>Measure 3: Forest promotion - Applications for funding to projects that support and highlight forestry does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Measure 4: Continuous professional development</p> <p>Continuous Professional Development aims to ensure that a person's skills and knowledge are up to date and should link learning to practice. The forest sector now encompasses numerous disciplines and there is a need to support multi-disciplinary CPD and targeted CPD. Within the forest sector it is key that other disciplines such as ecologists, archaeologists and engineers, have an understanding of forestry. Likewise, it is key that foresters have an understanding of the requirements of these other disciplines. In addition, the forest sector requires skilled operatives and both a training and continuous professional development and upskilling programme is required.</p> <p>This intervention aims to provide CPD for the varied disciplines and operatives currently working in the forest sector. This will build on existing knowledge and skills and may cover the following areas:</p>	<p>The provision of support for continuous professional development has the potential for likely significant effects. Potential likely significant effects may arise from inadequate or inappropriate training of non-specialists specifically relating to obligations under the Habitats Directive and in relation to risks and opportunities for nature.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Forestry for non-foresters Ecology/Archaeology/Engineer for foresters Continuous Cover Forestry Invasive Alien Species – understanding of their ecology, potential impacts on forest, their management, legal obligations and development of Invasive Species Management Plans (ISMP) Harvesting biomass Health and Safety (H&S) training – accident prevention, recording and improvement of H&S in forestry</p>	
<p>Intervention 6 - Open Forests</p>	
<p>Overall Objective: The proposed overall objective of this intervention is to provide support for existing Social, Cultural and Heritage forests.</p>	<p>The provision of support does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>
<p>Specific Requirements: Requirements will include an application process that indicates clear social, cultural or heritage benefits. It is not envisaged this measure will include archaeological features. Forest owners will be able to apply for funding under the schemes included in this intervention by submitting scheme specific application forms to the Department which will be based on the specific terms and conditions set out for each scheme, including specified application periods</p> <p>In line with multifunctional forests and the overall objectives of the Programme, avoidance of herbicides and pesticides will be encouraged and the use of broadleaf, and where possible, indigenous species for new planting will be promoted. These new or enhanced forests will take a holistic approach to the environment linking in with existing hedgerows and forests where possible. Conifer, mixed and broadleaf forests will be considered on a site by site basis. Applications for new forests will be submitted through the Afforestation Scheme as mentioned in intervention 1.</p> <p>The overall aim is to provide a healthy and safe environment where families and individuals can enjoy fresh air and a peaceful environment.</p> <p>The ‘Open Forests’ intervention will enhance the cultural, social and heritage aspects of our assets within forests in a sustainable and targeted way. It will achieve this through a combination of methods including creation of new access/recreational facilities/focused enhancement measures, improving existing access and facilities, maintenance/restructuring of existing forests, enhancing existing features within forests, promoting sustainable forest management with minimum inputs. It will encourage multifunctional forests and potential for eco-tourism and fostering social inclusion in rural areas.</p> <p>The eligibility period will extend from 1st January 2023 to 31st December 2030</p>	<p>There is potential for likely significant effects as a result of the specific requirements set out for this overall objective. Potential likely significant effects that may occur through the implementation of this intervention may be direct habitat loss, disturbance to species and other indirect effects to the environment through the creation of new access, recreational facilities, focused enhanced measures etc.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 1: The Forest Classroom – Pilot Scheme To promote forests, sustainable forest management and the multifunctional role of forests through school curriculums, training ‘educators’, walks, demonstrations, information packs, websites etc.</p> <p>Increasing awareness and knowledge of forests and their associated benefits. To meet this objective, the deliverables are all centred on communication in its varied formats, resulting in increased knowledge among the general population and increased utilisation of Ireland’s forests.</p>	<p>Measure 1: This measure includes promotion and increasing awareness and knowledge. It does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Requirements: Funding projects that will promote Forests; Benefits of forest – human health and welfare, protection and regulatory functions e.g., water, forest habitats and species, economic, cultural These projects will have clearly identified objectives and deliverables.</p> <p>Individuals will be trained to act as ‘educators’ and organise forest walks and talks promoting forestry and tree planting. Details on plant numbers etc. to be provided.</p> <p>Appropriate insurance will need to be organised by forest owners. This measure will initially be set up on a pilot basis.</p>	<p>The requirements for this measure do not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 2: Neighbourwood - The Active Forest To provide forest amenities and facilities in existing forests (new forests are provided for under Intervention 1). The pandemic highlighted the need for the general public to avail of forests in order to improve their mental and physical wellbeing. By providing tracks and facilities for biking, walking, orienteering and hiking forests can play an important role in the improved health of the nation.</p> <p>The proposed scheme will provide support for the development of “close-to-home” forest or “Neighbourwoods” for public access, education, recreation and enjoyment of forests in or near villages, towns and cities.</p> <p>The objectives of the proposed scheme are: Provide increased recreational space and associated health benefits to the general public; Support the creation of new public amenity forests and forest ecosystems; Support investment in the provision of facilities to encourage greater public use of forests; Increase the educational function of forests; Support actions aimed at protecting and enhancing forests and forest ecosystems located close to population centres; Support actions aimed at protecting and enhancing forests and forest ecosystems in rural areas where local usage demand is identified; Encourage increased public participation in outdoor activities; and To improve the landscape in rural and urban areas.</p> <p>It is proposed to support approximately 10 projects under the scheme each year during the plan’s lifetime.</p> <p>Requirements: This measure will be an element of the existing ‘Neighbourwood Scheme’ with funding for enhancement of existing forests and the provision on facilities. Establishment of new forests is included in Intervention 1. Conditions as listed in Measure 2 above apply. It is proposed to support approximately 10 projects under the scheme each year during the plan’s lifetime.</p>	<p>Measure 2: Neighbourwood - The Active Forest. There is potential for likely significant effects from the expansion of the Neighbourwood Scheme to support the creation of new public amenity forests and enhancement of existing forests. Potential likely significant effects include habitat loss, degradation, fragmentation, disturbance and indirect effects.</p>
<p>Measure 3: Neighbourwood - Heartwoods To promote the benefits of forests through the utilisation of forest walks and amenities. This will be done in conjunction with other Departments. During the pandemic the number of site visits to Coillte forests alone rose by 40%. This is a clear indication on the public need for forest amenities and recreational facilities. Heartwoods will have a strong focus on health and the design will reflect the needs of the visitor. Some facilities will cater for those with mental or physical disabilities and will require expert input into their design.</p>	<p>Measure 3: Heartwoods.</p> <p>The provision of promotion does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Environmental Target: This action will utilise zero chemical or fertilizer input. It will protect existing forests. Provision of facilities whilst ensuring protection of environment and associated biodiversity.</p> <p>Requirements: New facilities and tracks created in forest areas where previously there were no facilities. Supplementing existing walks and facilities in forests which already have a recreational function. For example:</p> <p>Close collaboration with the Department of Health in promoting ‘green prescriptions’. Specially designed walks for people who have hearing, vision, physical or mental health issues.</p> <p>Improve road /track surfaces to improve access for wheelchairs, buggies and a smooth surface for toddlers and infirm individuals.</p> <ul style="list-style-type: none"> • Conditions as listed in Measure 2 above apply. <p>Appropriate insurance will need to be organised by forest owners.</p>	<p>Environmental Target and Requirements: There is the potential for likely significant effects where new facilities and tracks are created in forest areas in respect of forest sites that are part of the Natura 2000 site network.</p>
<p>Measure 4: Heritage forests - Pilot To provide protection and enhancement of cultural and heritage aspects of our forests. In many forests there are features such as holy wells, fairy trees, groves of heritage trees, geological formations or beautiful vistas. Access to these features could be enhanced through this measure.</p> <p>Requirements: Under the facilities section of the scheme tracks could be constructed to facilitate easy access to these features. Enhancement measures such as increased open space adjoining the feature or maintenance of existing open space. In some cases, suitable seating, tables or explanatory signs could be provided to facilitate the public's appreciation of these features.</p> <p>Appropriate insurance will need to be organised by forest owners.</p> <p>This measure will initially be set up on a pilot basis.</p>	<p>Measure 4: Heritage forests</p> <p>The provision of protection and enhancement of cultural and heritage aspects of forests does not lie within the scope of the management or conservation of Natura 2000 sites. It is not anticipated that this measure shall pose any potential for likely significant effects to European sites.</p>
<p>Intervention 7 - Climate Resilient Reforestation</p>	
<p>Overall Objective: The overall objective of this intervention is to increase the climate resilience of the national forest estate by increasing the proportion of forest land managed under permanent forest cover.</p> <p>The intervention is comprised of three elements of a new pilot Climate Resilient Reforestation Scheme:</p> <p>Element 1: Reforestation for continuous cover forestry Element 2: Reforestation for native woodlands Element 3: Reforestation for biodiversity and water protection</p> <p>Mandatory replant conditions are determined as per Felling and Reforestation Policy (DAFM, 2017) and are consistent with Sustainable Forest Management Principles. However, the opportunity exists to incentivise species diversity and alternative forest management systems at reforestation stage over</p>	<p>Overall objective: The increase of forest cover through Element 1, 2 and 3 all have the potential for likely significant effects. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>and above the mandatory requirements that can result in an increase in the resilience and adaptiveness of forest land to climate related threats. This is consistent with the actions envisaged under the New Forest Strategy.</p> <p>In addition to mandatory requirements set under replanting conditions, all interventions will be subject to the DAFM-Forest Service Forestry Standards, including the accepted species, origin and provenance list. Grant funding will be available for measures that ensure the successful reestablishment, such as planting, plant protection (e.g., fencing) and maintenance</p>	
<p>Measure 1: Resilient reforestation: (Element 1: Reforestation for continuous cover forestry)</p> <p>Element 1 (Reforestation for Continuous Cover Forestry) encourages the creation of forest specifically designed and laid out to be managed for quality timber production under established CCF principles / practices, thereby delivering all of the ecosystem services associated with CCF, e.g., soil and water protection, retention of forest ecosystem, landscape, etc. Species mixtures must be compatible with CCF management, and can comprise non-native, naturalised and native species, conifers or broadleaves.</p> <p>Forests managed under CCF systems offer significant opportunities for measures, which simultaneously improve forest productivity, timber production, biodiversity, carbon sink function, healthy soil properties and climate resilience.</p> <p>Due to range of climatic and environmental conditions, (exposure/wind speed, soil type), significant areas of forest land are not suitable for conversion to CCF through selective thinning. For instance, in many locations CCF transformation actions may adversely affect the stability of the forest stand leading to windthrow. In such cases, the more appropriate course of action may be to continue with the current even aged stand management approach and then, after clear-felling, re-establish these lands using a forest design which includes a diverse range of species and plans for structural diversity at establishment.</p> <p>This measure will initially be set up on a pilot basis.</p>	<p>Measure 1: Resilient reforestation – There is the potential for likely significant effects where inappropriate reforestation may occur in Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment.</p>

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<p>Requirement - Reestablishment would involve the planting of complementary conifer/broadleaf species-mixtures. Where native species are used, it is NOT necessary to adhere to the NWS framework as per Element 2.</p> <p>Intervention will be limited to free draining or wet mineral sites.</p> <p>All sites must be capable of supporting the vigorous growth and sustainable long-term development. This must be achievable without the need for fertiliser input.</p> <p>Sites subject to severe and persistent threats that could undermine the long-term sustainability of the project (e.g., sites within a locality heavily infested with rhododendron or within a deer ‘hotspots’ must include a comprehensive action plan as part of the Transformation Management Plan that addresses these issues).</p> <p>In general elevations above 300 metres are to be avoided as the risk of windthrow increases significantly.</p> <p>Two examples of species mixes are included below. These are for illustrative purposes only. Additional compatible species mixes will be incorporated at scheme design phase.</p> <p>Example 1: free draining mineral soils</p> <p>Sitka spruce (59%), Douglas fir (24%), beech or sessile oak (10%) birch (<i>Betula spp.</i>) (5%) – for drier free draining sites. Sessile oak could also be used to replace a portion of any of these species. Additional native species (e.g., rowan (<i>Sorbus aucuparia</i>)/ cherry (<i>Prunus avium</i>) / hazel / Scots pine) suited to the site also to be incorporated in small groups - these would make up to 2% of planting.</p> <p>Example 2: wet mineral soils</p> <p>Sitka spruce (59%), Norway spruce (<i>Picea abies</i>) or western red cedar (<i>Thuja plicata</i>) (24%), pedunculate oak (10%) birch (5%) – for wet mineral sites. Scots pine could also be used to replace a portion of any of these species. Additional native species (e.g., alder / cherry / aspen (<i>Populus tremula</i>) / Scots pine) suited to the site also to be incorporated in small groups - these would make up to 2% of planting.</p>	<p>Requirements: There is the potential for likely significant effects where inappropriate reforestation may occur in or in immediate proximity to Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 2: Resilient reforestation: (Element 2: Reforestation for Native Forests)</p> <p>Element 2 (Reforestation for Native Woodlands) encourages the replacement of existing conifer stands at reforestation stage, with the most appropriate native woodland type or types appropriate for that site, using the NWS Framework and the five scenarios therein(*). The site is managed to encourage the development of that native woodland type(s), on a CCF basis, for the purpose of delivering native woodland ecosystem / biodiversity and associated benefits regarding wider biodiversity within the landscape, habitat connectivity, the protection of water, etc. Wood production is permitted under this element, where compatible with the primary objective.</p> <p>(*a sixth scenario currently in development may also be added).</p> <p>This element is intended to address certain situations where the gradual conversion of non-native forest to native woodland by transformation may not be realistic due to site and stand conditions. For example, any attempt to transform an older even-aged conifer stand on peat is likely to lead to catastrophic windthrow early on in the process. In such cases, replacement may be the only viable option. Replacement is the abrupt conversion of a non-native forest to native woodland, through clear-felling and subsequent reforestation with appropriate native species.</p> <p>This measure will be initially set up on a pilot basis. This element is currently offered through the Native Woodland Conservation Scheme and will continue to be offered until the launch of this new Climate Resilient Reforestation Scheme.</p>	<p>Measure 2: Resilient reforestation – There is the potential for likely significant effects where inappropriate reforestation may occur in or in immediate proximity to Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>
<p>Requirements: The Native Woodland Scheme Framework applies.</p> <p>All reforestation sites are eligible to apply.</p> <p>In addition, sites with a high ecological priority may be eligible for an additional premium payment (PES 10) where a clear ecological benefit can be demonstrated. Such sites must include at least one of the following:</p> <p>A forest adjoining a sensitive watercourse, where native forest restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include freshwater pearl mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high-status waterbodies identified under the Water Framework Directive.</p> <p>A forest adjoining or within 1 km of a forest designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.</p> <p>A forest adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.</p> <p>A project involving the ecologically compatible development of a native forest amenity for public access and recreation, woodland interpretation and environmental education.</p>	<p>Requirements for Measure 2: Resilient Reforestation: There is the potential for likely significant effects where inappropriate reforestation may occur in or in immediate proximity to Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>Measure 3: Resilient reforestation: Element 3 (Reforestation for Biodiversity and Water Protection) Element 3 involves the creation of an undisturbed area of biodiversity comprising widely-spaced native species, with drain-blocking, within the area alongside a water setback required at reforestation stage. The aim is to create a permanent semi-natural buffer that will provide further protection to water and enhance biodiversity through the second rotation and beyond. The resulting area will then be managed where suitable and subject to appropriate environmental assessments, to retain its protective function, for instance future machine access would be restricted and invasive species such as rhododendron controlled.</p> <p>The creation of mosaics of open habitats and native scrub/forest will benefit and increase the protection of watercourses and other biodiversity features or habitats such as adjoining designated areas in terms of future forest operations. In addition, it would promote riparian restoration, increased protection of wetlands, veteran trees, hedgerows while also increasing habitat connectivity and commuting corridors.</p> <p>planting, planting supplemented by natural regeneration, or natural regeneration alone.</p> <p>Creating an attenuation area Redirecting drains Appropriate species This measure will initially be set up on a pilot basis.</p>	<p>Measure 3: Resilient reforestation – There is the potential for likely significant effects where inappropriate reforestation may occur in or in immediate proximity to Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment.</p>
<p>Requirements : The NWS framework would not apply to this element, instead a minimum of native tree species must be used in the planting. Generally limited to plots no greater than 5 ha in size. Potential examples include, but not limited to:</p> <p>adjoining unplanted setbacks installed alongside watercourses, in order to reinforce the protection of water. at a larger scale in situations where water sensitivities are high (e.g., within freshwater pearl mussel catchments or alongside high status objective waterbodies at risk of decline due to forestry, under the Water Framework Directive).</p> <p>Adjoining European sites to enhance and protect qualifying interests or species of conservation interest. Adjoining other designated sites. Enhancing commuting corridors for species such as bats and facilitating access to foraging areas.</p> <p>Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums requires landowners to include specific measures, which are assessed by Department Inspectors. These includes a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation.</p>	<p>Measure 3 Requirements: There is the potential for likely significant effects where inappropriate reforestation may occur in or in immediate proximity to Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment.</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used. The schemes proposed include targeted measures relating to specific planting requirements for water protection, in areas of high pollution impact potential for phosphorus for example; specific requirements relating to the retention of habitat; the creation of biodiversity features such as ponds; the preservation of retained habitat, including support for environmental and ecological surveys at the application stage and the opening of private planted areas for citizen science an education. Plants used must also comply with a strict, prescribed list of species, origins and provinces.</p> <p>The replanting condition and other statutory obligations are determined as part of granting of the felling license Under the Forestry Act, 2014, S.I 191 of 2017. Measures proposed in this intervention are in addition to statutory obligations and are specially addressed at increasing species diversity and structural diversity over and above what would ordinarily be stipulated under the replanting condition. The requirements as set out in the Forestry Standards Manual will apply across each of the elements, and will include important:</p> <p>A prescribed list of species/provenance and origin for the planting material used, thus ensuring suitably adapted and appropriate forest reproductive material.</p> <p>Forest design, including the use of appropriate and compatible species mixtures.</p> <p>A commitment to a forest design which maintains the level diversity of planting and a forest design which is aimed at achieving structural diversity.</p> <p>Management of invasive species by way of an invasive species management plan</p>	
<p>Intervention 8 - Reconstitution</p>	
<p>Overall Objective: The overall objective of this intervention is to restore and retain forest land and forest ecosystems following significant damage by natural causes. It will contribute to the costs of restoring forest potential as a result of damage, or potential damage, from disease outbreaks. The intervention will also support the removal and destruction of trees infected by contagious pathogens, or trees likely to be so infected. Support may also be considered towards the restoration of forests damaged by other natural causes, catastrophic events and/or climate change-related events, where more than 20% of the forest potential has been damaged.</p> <p>This intervention will be aimed at forests where significant damage has occurred. Significant damage for the purposes of the intervention will mean death or irremediable damage of 20% or more of the trees in the relevant plantation covered by the one contract number or forest block. Calculation of the 20% damage threshold will be by area where significant damage has occurred. It will also include the removal of host species for diseases such as rhododendron in the spread of Phytophthora ramorum. Reconstitution measures will include removal of infected material or host species where required and replanting where appropriate.</p> <p>It is also envisaged that the schemes under this intervention will be tailored to address specific threats and will form part of an integrated pest management control response. A reconstitution and underplanting scheme currently exists for forests affected by Ash Dieback Disease.</p>	<p>Overall Objective: There is the potential for likely significant effects where inappropriate reforestation may occur in Natura 2000 sites. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>In the case of aid for the prevention of damage to a forest from plant pests, the risk of the occurrence of the plant pest will be supported by scientific evidence.</p> <p>Support under Forest Reconstitution will be available to private forest holders only.</p>	
<p>Measure 1: Reconstitution scheme</p> <p>Objective:</p> <p>To support the restoration of forest potential arising from damage by natural events and the introduction of protective infrastructure in forests;</p> <p>The development and promotion of forestry through the incorporation of practices that restore, preserve and enhance biodiversity;</p> <p>Specific objectives are dependent on occurrences of pest and disease outbreaks and other natural occurrences.</p>	<p>Measure 1: Reconstitution Scheme - There is the potential for likely significant effects as stated above in the overall objective. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>
<p>Requirements</p> <p>Requirements will be consistent with the intervention objectives, namely, they will apply to planted forests significantly affected by tree mortality and irreversible damage or deformation by supporting the replacement of affected trees arising from occurrences of pest and disease outbreaks and other natural occurrences.</p> <p>Reconstitution of the forest with plants of acceptable quality, provenances and species.</p> <p>All works will conform to the requirements of the Forest Creation intervention and associated forestry and environmental requirements.</p>	<p>Measure 1: Reconstitution Scheme – Requirements: There is the potential for likely significant effects as stated above in the overall objective. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>
<p>Measure 2 Reconstitution and Underplanting (Ash Dieback) Scheme Objective:</p> <p>To encourage the active management of ash plantations in the context of the control and spread of Ash Dieback Disease.</p> <p>To promote the vigorous growth of ash through thinning to realise as much of the potential value of the crop as possible.</p> <p>Where appropriate in young plantations and in cases of high disease infection, to support the removal of the affected ash crop and replacement with alternative species.</p> <p>To build resilience and diversity into plantations and possibly identify tolerant or resistant individuals</p> <p>Eligibility - The intervention will be open to all private forest owners in Ireland. Individual schemes will be restricted to specific forest types/ages classes/other criteria dependent on occurrences of pest and disease outbreaks and other natural occurrences</p> <p>Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums require landowners to include specific measures, which are assessed by Department Inspectors. These include a suite of mandatory measures relating to biodiversity,</p>	<p>Measure 2: Reconstitution and Underplanting (Ash Dieback Scheme) There is the potential for likely significant effects as stated above in the overall objective. Potential likely significant effects that may occur through the implementation of this measure are species disturbance and indirect effects to the environment</p>

Implementation Plan Text	Appropriate Assessment LSE Review
<p>environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard to establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used. The schemes proposed include targeted measures relating to specific planting requirements for water protection, in areas of high pollution impact potential for phosphorus for example; specific requirements relating to the retention of habitat; the creation of biodiversity features such as ponds; the preservation of retained habitat, including support for environmental and ecological surveys at the application stage and the opening of private planted areas for citizen science an education. Plants used must also comply with a strict, prescribed list of species, origins and provinces.</p>	

5.8 Assessment of In Combination Effects with Other Plans or Projects

The assessment of in-combination effects with other plans or projects is a requirement of Article 6(3) of the Habitats Directive wherein “*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives*”. This section aims to consider the policy and framework within which the Draft IFSIP is being developed and to identify at this early stage any possible in-combination effects of the Draft IFSIP with other projects and plans. There exists the potential for many other plans and/or projects to interact with or have the potential to combine pressures and threats, however, the in-combination assessment is a matter of applying a practical and realistic approach.

The following approach has been adopted to adequately address the above requirement:

- Identify plans/projects that might act in combination;
- Identify the types of impacts that might occur;
- Define the boundaries of the assessment;
- Identify pathways for impact; and
- Impact prediction and assessment.

Table 7 below outlines the policies, plans and projects which have been reviewed and assessed for potential in-combination effects.

Table 7 In-Combination Effects with Other Plans or Projects

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
European Union Level		
<p>8th Environmental Action Programme (EAP) to 2030</p> <p>Guides European environmental policy until 2030, supporting the climate action objectives of the European Green Deal. It’s overarching aim is to ‘ensure wellbeing for all, while staying within the planetary boundaries.’</p>	<p>Improved habitat and species protection;</p> <p>Improvements to environmental quality; and</p> <p>Climate resilience</p>	<p>To support the Green Deal to 2050 the EAP has six priority objectives including: restoring biodiversity and enhancing natural capital/ ecosystems; achieving greenhouse gas reduction targets and for the EU to be climate neutral by 2050; enhancing adaptiveness and increasing resiliency to the effects of climate change; decoupling economic growth from resource use and therefore degradation of the environment; aiming for a zero-pollution environment; and reducing pressures on the environment and the climate from consumption/production. The Draft IFSIP is broadly aligned with the actions identified in the EAP and green deal.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP</p>
<p>EU Green Deal</p> <p>The deal will transform the EU into a modern, resource-efficient and competitive economy, aiming for no net emissions of greenhouse gases by 2050 and to decouple economic growth from resource use.</p>	<p>Improved habitat and species protection;</p> <p>Improvements to environmental quality; and</p> <p>Climate resilience</p>	<p>A number of actions have been assigned through the EU Green Deal, relevant to the Draft IFSIP are the EU Biodiversity Strategy to 2030, development of a Zero Pollution Action Plan, and the EU Forest Strategy for 2030. The Draft IFSIP is broadly aligned with the actions identified in the green deal and would be</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
		<p>expected to give rise to positive in combination effects.</p> <p>It is anticipated that there is potential for positive in-combination effects.</p>
<p>EU Forest Strategy for 2030</p> <p>The strategy builds on the EU Biodiversity Strategy to 2030 and will contribute to achieving the EU’s greenhouse gas emission reduction target of at least 55% by 2030 and climate neutrality by 2050.</p>	<p>Improved habitat protection, restoration, and improvement;</p> <p>Disturbance to habitats/species;</p> <p>Climate resilience; and</p> <p>Growth to sustainable bioeconomy.</p>	<p>The EU Forest Strategy has two main themes to it. The first is to protect the EU’s last remaining primary and old-growth forests, while promoting re/afforestation and sustainable forest management. The second aim of the strategy is to promote sustainable bioeconomy including sustainable use of wood-based resources for bioenergy and ecotourism. The Draft IFSIP is broadly aligned with the actions outlined in the strategy and would be expected to give rise to positive in combination effects.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Land Use, Land-Use Change and Forestry (LULUCF) Regulation (EU 2018/841)</p> <p>The Regulation includes greenhouse gas emissions and removals from LULUCF into the 2030 climate and regulation framework.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Alterations to ecosystem services;</p> <p>Disturbance to habitats/species; and</p> <p>Climate change mitigation</p>	<p>The Draft IFSIP is aligned with the LULUCF and sits within its framework and so there is no potential for in-combination effects.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Farm to Fork Strategy</p> <p>Strategy is at the core of the European Green Deal with an aim to make food systems fair, healthy, and environmentally friendly.</p>	<p>Improved habitat and species protection;</p> <p>Improvements to environmental quality; and</p> <p>Climate resilience</p>	<p>The strategy is to ensure that the food chain, covering food production, transport, distribution, marketing and consumption, has a neutral or positive environmental impact, preserving and restoring the land, freshwater and sea-based resources on which the food system depends; helping to mitigate climate change and adapting to its impacts; protecting land, soil, water, air, plant and animal health and welfare; and reversing the loss of biodiversity.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Zero Pollution Action Plan</p> <p>The action plan requires among other commitments, that by 2030, the EU should reduce:</p> <p>by 25% the EU ecosystems where air pollution threatens biodiversity;</p> <p>by 50% nutrient losses, the use and risk of chemical pesticides, the use of the more hazardous ones, and the sale of antimicrobials for farmed animals and in aquaculture;</p> <p>by 50% plastic litter at sea and by 30% microplastics released into the environment</p>	<p>Improved habitat and species protection;</p> <p>Improvements to environmental quality; and</p> <p>Climate resilience</p>	<p>The primary purpose of the plan is to improve ecosystem health by reducing pollution, in the aim of improving the ability of ecosystems to provide services such as carbon sequestration and decontamination. The Draft IFSIP is agreeable with the Zero Pollution Action Plan.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
<p>Common Agricultural Policy (CAP)</p> <p>A key agricultural policy with the main objectives of ensuring a decent standard of living for farmers and the provision of stable and safe food supply at affordable prices for consumers. The CAP through various iterations is the principal policy that drives agricultural management throughout the European Union. It recognises the economic and rural importance of agriculture through a system of subsidies and support programmes.</p>	<p>Improved habitat and species protection; Improvements to environmental quality; Climate resilience; Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; and Introduction or spread of invasive species.</p>	<p>Agriculture and forestry often compete for the same resources, and agriculture poses a significant pressure on habitats and species. The current CAP incorporates sustainable ambitions, in line with the EU Green Deal. Spatial planning and land use change under the Draft IFSIP has the potential to cause in-combination effects.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>
<p>European Union Biodiversity Strategy to 2030</p> <p>Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy as per the Convention on Biological Diversity.</p>	<p>Improved habitat and species protection; Improvements to environmental quality; Climate resilience; and Reduced disturbance to habitats/species.</p>	<p>The primary purpose of the strategy is to halt the loss of habitat and species. The most relevant target to the Draft IFSIP is to increase the contribution of forestry to biodiversity, integrating biodiversity needs into forest management plans. This aligns with some of the aims of the Draft IFSIP and so there is potential for positive in-combination effect.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Environmental Liabilities Directive (LED)</p> <p>This directive puts into practice the 'polluter pays' principle. Its aim is to encourage operators to take greater care to prevent damage in the first place, by following a precautionary approach.</p>	<p>Improved habitat and species protection.</p>	<p>The Directive defines "environmental damage" as damage to protected species and natural habitats, damage to water and damage to soil. No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality and protect habitats and species.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>Energy 2020 – A strategy for competitive, sustainable, and secure energy</p> <p>Sets out three key requirements of energy supply; Security, competitiveness and sustainability. It also sets out targets to increase the share of renewable energy to at least 20% of EU's consumption and to improve energy efficiency by at least 20%.</p>	<p>Habitat loss or destruction; Habitat fragmentation or degradation; Alterations to ecosystem services; Disturbance to habitats/species; and Climate change mitigation</p>	<p>The Draft IFSIP has an aim to increase sustainable production of forest-based biomass to meet renewable energy targets. This target aligns with the Energy 2020 strategy however, there is acknowledgement that this has the potential to increase pressures on land-use change and so the Energy 2020 strategy encourages second generation biofuels. There is potential for in-combination adverse effects through indirect land use change.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>
<p>The Renewable Energy Directive (2009/28/EC)</p> <p>Policy for the production and promotion of energy from renewable sources in the EU to implement 2020 strategy. The national 2020 target for Ireland is to</p>	<p>Habitat loss or destruction; Habitat fragmentation or degradation; Alterations to ecosystem services; Disturbance to habitats/species; and Climate change mitigation.</p>	<p>The Draft IFSIP shares the common goal for increasing sustainable sources of renewable energy. There is potential for in-combination adverse effects through indirect land use change.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
source 16% from renewable resources (i.e., 40% electricity, 12% heat and 10% transport).		It is anticipated that there is potential for negative likely significant in-combination effects.
The EU Policy Framework for Climate and Energy in the period from 2020 to 2030 Sets targets for the period 2020 to 2030: Target of 27% renewable energy in the EU; Increase energy efficiency by 27% by 2020; and A 40% cut in greenhouse gas emissions compared to 1990 levels	Habitat loss or destruction; Habitat fragmentation or degradation; Alterations to ecosystem services; Disturbance to habitats/species; and Climate change mitigation.	The Draft IFSIP shares the common goal for increasing sustainable sources of renewable energy. There is potential for in-combination adverse effects through indirect land use change. It is anticipated that there is potential for negative likely significant in-combination effects.
Energy Road Map 2050 This roadmap does not set specific energy targets at this point but does aim to achieve an 80% to 95% reduction in greenhouse gases compared to 1990 levels by 2050.	Habitat loss or destruction; Habitat fragmentation or degradation; Alterations to ecosystem services; Disturbance to habitats/species; and Climate change mitigation.	The key aim of the Roadmap is a guide to a low carbon Europe. This plan is complimentary to elements of the Draft IFSIP and so it is unlikely that adverse in-combination effects will be had. The potential for likely significant in-combination effects is not anticipated.
Irish National Level		
National Development Plan (NDP) 2021-2030 The National Development Plan sets out the investment priorities that will underpin the implementation of the National Planning Framework (NPF). This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; and Introduction or spread of invasive species.	The NDP is a high level budgetary and finance document which identifies priorities for capital investment. Given the nature of the capital investment the majority of the projects referenced and funded under the NDP have been or will be subject to EIA/AA. The NDP does not confer planning, it identifies strategic need. No potential for in-combination effects. The potential for likely significant in-combination effects is not anticipated.
National Planning Framework (Ireland 2040 Our Plan) The National Planning Framework is a long-term strategy focussing on ensuring compatibility between future growth of cities/ towns within Ireland alongside environmental sustainability. The framework also includes the National Development Plan 2021-2030.	Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; and Introduction or spread of invasive species.	National Policy Objective 52 through 65 ensure the resilience of our natural resources and cultural assets. Specifically Objective 59 to “Enhance the conservation status and improve the management of protected areas and protected species...” The plan has been subject to AA and includes clear policy on avoidance of impacts to European sites. The potential for likely significant in-combination effects is not anticipated.
Regional Spatial and Economic Strategies (RSES) The RSES sets out the strategic regional development framework for the Region, with a primary aim to implement Project Ireland 2040 - the National Planning Framework, at the regional tier of Government and to support the	Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; and Introduction or spread of invasive species.	The RSES includes clear policy and supporting actions to avoid and minimise impacts on European sites. This includes commitments to only implement the policy base within the carrying capacity of the receiving environment as greater detail is known through the planning hierarchy.

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
achievement of balanced regional development.		<p>The RSES has been subject to AA and includes clear policy on avoidance of impacts to European sites.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>Climate Action Plan 2021</p> <p>The Plan provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and net-zero emissions by 2050. It lists the actions needed for each sector of the economy and will be updated annually.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Alterations to water quality and/or water movement;</p> <p>Introduction or spread of invasive species;</p> <p>Alterations to air quality; and</p> <p>Climate resilience.</p>	<p>The plan focusses on energy, transport, waste, agriculture and buildings. The plan includes new governance structures necessary to implement changes and sets out specific targets for each sector. The main direction of the plan is positive and there is potential for positive in combination effects as it supports long term resilience to climate change.</p> <p>Potential for in-combination effects as it sets out actions which are similar to the Draft IFSIP through targets for sectors such as land use planning and agriculture, and renewable energy. Many of the policies are aligned with sectoral plans which include mitigation to avoid adverse effects.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>National Adaptation Framework (NAF)</p> <p>The NAF sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. It builds on the previous National Climate Change Adaption Framework 2012.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Alterations to water quality and/or water movement;</p> <p>Introduction or spread of invasive species;</p> <p>Alterations to air quality; and</p> <p>Climate resilience.</p>	<p>The NAF is a high-level framework and does not identify specific locations, adaption measures or projects. It is likely that adaption approaches and details will be implemented via lower level adaption plans and strategies that have been or will be subject to EIA/AA. The NAF does not confer planning, it identifies strategic need. No potential for in-combination effects.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>Biodiversity Action Plan 2017-2021</p> <p>Ireland's third iteration of the Biodiversity Action Plan (BAP), for conserving and restoring Ireland's biodiversity covering the period 2017 to 2021.</p> <p>The aims are to achieve Ireland's Vision for Biodiversity through addressing issues ranging from improving the management of protected areas to increasing awareness and appreciation of biodiversity and ecosystem services.</p>	<p>Improved habitat and species protection.</p> <p>Reduced disturbance to habitats/species;</p> <p>Improvements to water quality and/or water movement; and</p> <p>Control of spread of invasive species.</p>	<p>The BAP is aimed at environmental protection and improvement to ecosystem services. As such, there is potential for positive in-combination effects with the Draft IFSIP.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Prioritised Action Framework for Natura 2000 (2021-2027)</p> <p>This plan identifies the range of actions needed to help improve the status of Ireland's habitats and wildlife within the Natura 2000 site network.</p>	<p>Improved habitat and species protection.</p> <p>Reduced disturbance to habitats/species;</p> <p>Improvements to water quality and/or water movement; and</p> <p>Control of spread of invasive species</p>	<p>No risk of likely significant in-combination effects as this plan is entirely positive in its actions with the core aim to protect and improve Natura 2000 sites.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
<p>National Energy and Climate Plan (NECP) 2021-2030</p> <p>This Plan builds on previous national strategies and sets out in detail the objectives regarding the five energy dimensions together with planned policies and measures to ensure that objectives are achieved. In June 2019, the government agreed to support the adoption of a net zero target by 2050 at EU level, and to pursue a trajectory of emissions reduction nationally which is in line with reaching net zero in Ireland by 2050.</p>	<p>Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; Introduction or spread of invasive species; Alterations to air quality; and Climate resilience.</p>	<p>The NECP was prepared to incorporate all planned policies and measures that were identified up to the end of 2019 and which collectively deliver a 30% reduction by 2030 in non-emissions trading system (ETS) greenhouse gas emissions.</p> <p>As this Plan collates existing policies and measures, it was not subject to an AA since the individual policies and measures will have been if appropriate.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>Climate Action and Low Carbon Development Act 2015</p> <p>The Act provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy; to establish a body to be known as the National Expert Advisory Council on Climate Change; and to provide for matters connected therewith.</p>	<p>Habitat loss or destruction; Habitat fragmentation or degradation; Disturbance to habitats/species; Alterations to water quality and/or water movement; Introduction or spread of invasive species; Alterations to air quality; and Climate resilience.</p>	<p>The Act declares that nothing within it will affect existing or future obligations of the State under the law of the European Union, including the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>Food Wise 2025</p> <p>Food Wise 2025 strategy identifies significant growth opportunities across all subsectors of the Irish agri-food industry. Growth projection includes increasing the value added in the agri-food, fisheries and wood products sector by 70% to in excess of €13 billion.</p>	<p>Habitat loss or destruction; Habitat fragmentation or degradation; Species mortality; Alterations to water quality and/or water movement; Disturbance to habitats / species</p>	<p>The Strategy was subject to an AA and SEA, where the strategic nature of the Strategy was acknowledged and that its subsequent implementation will be assessed at other stages where spatial and temporal detail will be set out.</p> <p>There is potential for in-combination impacts as intensification of the forestry sector is promoted under both Food Wise 2025 and the Draft IFSIP.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>
<p>Food Vision 2030 - A World Leader in Sustainable Food Systems</p> <p>This ten-year strategy is the successor to the current Food Wise 2025 plan and aims to make Ireland a world leader in Sustainable Food Systems over the next decade. This strategy aims to increase the value of Irish agri-food exports from €14.2 billion in 2020 up to €21 billion by 2030.</p>	<p>Indirect effects (land-use changes and intensification)</p>	<p>The strategy aims to achieve this intensification through sustainable steady value growth in a climate smart, environmentally sustainable agri-food sector. The AA concluded that the adoption of Food Vision 2030 would not have significant adverse effects on the integrity of any Natura 2000 sites. However, indirect impacts on Natura 2000 sites through land use change and intensification of land use from both the Draft IFSIP cannot be ruled out.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
<p>Our Rural Future: Rural Development Policy 2021-2025</p> <p>The vision of this policy is for a thriving rural Ireland which is integral to our national economic, social, cultural and environmental wellbeing and development.</p>	<ul style="list-style-type: none"> • Habitat loss or destruction; • Habitat fragmentation or degradation; • Disturbance to habitats/species; • Species mortality; • Alterations to water quality and/or water movement; • Alterations to air quality; and • Introduction or spread of invasive species. 	<p>The Policy is a high-level framework and does not identify specific locations, adaption measures or projects. It is likely that the measures will, in due course, be subject to Screening for AA based on detailed operational plans and programmes based on accurate geographic information which is not included within the Policy.</p> <p>The Policy does not confer planning, it identifies strategic need.</p> <p>The potential for likely significant in-combination effects is not anticipated</p>
<p>Action Plan for Rural Development (2019)</p> <p>Action Plan for Rural Development sets out the Government’s approach for rural places in Ireland to grow and adapt through supportive measures which encourage innovation and build on the existing strengths of rural communities in Ireland.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Species mortality;</p> <p>Alterations to water quality and/or water movement;</p> <p>Alterations to air quality; and</p> <p>Introduction or spread of invasive species.</p>	<p>The Action Plan for Rural Development includes over 230 actions focussed on developing the rural economy. As forestry is predominately undertaken in rural areas and promotes rural employment there are direct synergies between the Action Plan and the Draft IFSIP.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects</p>
<p>Nitrates Directive (91/676/EEC) and the Nitrates Action Programme (NAP)</p> <p>This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further pollution. The NAP is Ireland’s response to implementing the directive.</p>	<p>Habitat degradation;</p> <p>Disturbance to habitats/species;</p> <p>Alterations to water quality and/or water movement;</p> <p>Reduction of nutrient enrichment and pollution; and</p> <p>Alteration to air quality.</p>	<p>Ireland’s fifth NAP is currently in draft and undergoing consultation.</p> <p>No risk of likely significant in-combination effects from the Directive is anticipated as the primary purpose of it is to improve environmental quality. Furthermore, it is noted that the latest update to the NAP is undergoing AA and an NIS is in preparation. This will ensure appropriate mitigation is included to prevent significant in-combination effects from occurring.</p> <p>The potential for likely significant in-combination effects is not anticipated</p>
<p>National Peatlands Strategy</p> <p>The National Peatlands Strategy 2015-2025 was developed to provide a long-term strategy for the management of peatlands for their social, environmental and economic well-being.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Alterations to water quality and/or water movement; and</p> <p>Alterations to air quality.</p>	<p>The National Peatland Strategy sets out a cross-governmental approach to managing issues that relate to peatlands including compliance with relevant national and international environmental legislation, agreements, plans and policies; climate change; forestry; water quality; flood control; energy; nature conservation and restoration; land use planning; and agriculture. Given the actions set out in the strategy, no in combination effects are predicted.</p> <p>The potential for likely significant in-combination effects is not anticipated</p>
<p>National Raised-Bog Management Plan</p> <p>The current NPWS programme for the restoration of raised bogs throughout Ireland, as detailed within the National Raised Bog Management Plan, will</p>	<p>Improved habitat and species protection;</p> <p>Improvements to environmental quality;</p> <p>Climate resilience; and</p> <p>Reduced disturbance to habitats/species</p>	<p>No risk of likely significant in-combination effects will result as the primary purpose of the plan is to restore raised bog sites including those that form part of the Natura 2000 site network.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
<p>deliver ecological benefits for both the raised bog habitats and watercourses downstream of these bogs by implementing a program of restoration and condition improvement.</p>		<p>The potential for likely significant in-combination effects is not anticipated</p>
<p>All Ireland Pollinator Plan (AIPP) 2021-2025</p> <p>The All-Ireland Pollinator Plan for 2021-2025 is a new five-year road map that aims to help bees, other pollinating insects and our wider biodiversity.</p>	<p>Improvements to environmental quality; and</p> <p>Increased biodiversity.</p>	<p>The AIPP 2021-2025 has 186 actions spread across six objectives that are centred around making public and private lands more pollinator friendly. There is potential for positive in-combination effects with the Draft IFSIP.</p> <p>It is anticipated that there is potential for positive in-combination effects with the Draft IFSIP.</p>
<p>Catchment based Flood Risk Assessment and Management (CFRAM) Programme, under the EU Floods Directive</p> <p>The Office of Public Works (OPW) is responsible for the implementation of the Floods Directive 2007/60/EC which is being carried out through a Catchment based Flood Risk Assessment and Management (CFRAM) Programme. As part of the directive Ireland is required to undertake a Preliminary Flood Risk Assessment, to identify areas of existing or potentially significant future flood risk and to prepare flood hazard and risk maps for these areas. Following this, Flood Risk Management Plans (FRMPs) are developed for these areas setting objectives for managing the flood risk and setting out a prioritised set of measures to achieve the objectives. The CFRAM programme is currently being rolled out and Flood Risk Management Plans have been prepared. These plans have been subject AA.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Alterations to water quality and/or water movement;</p> <p>Disturbance; and</p> <p>In-combination impacts within the same scheme</p>	<p>CFRAM Studies and their product Flood Risk Management Plans, have undergone AA. Any future flood plans will have to take into account the design and implementation of water management infrastructure as it has the potential to impact on hydro morphology and potentially on the ecological status and favourable conservation status of water bodies. The AA of the CFRAMs considered the potential for impacts from hard engineering solutions and how these might affect hydrological connectivity and hydro morphological supporting conditions for protected habitats and species.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>River Basin Management Plans under the Water Framework Directive (2000/60/EC)</p> <p>The primary purpose of this Directive and the various pieces of national legislation that have enacted through the implementation of River Basin Management Plans, is to achieve good status for all water bodies, with no deterioration in water body status. The RBMP sets out the PoM to achieve the objectives of the WFD.</p>	<p>Improved Water Quality;</p> <p>Improved habitats; and</p> <p>Increased resilience in habitats and species.</p>	<p>The primary purpose of the Directive is to improve ecological status and includes achievement of objectives of the Habitats and Birds Directives. The second cycle River Basin Management Plan 2018-2021 was published together with a NIS including mitigation to offset negative effects. The same process would be required for the RBMP 2022-2017 which is in preparation.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>National Implementation Plan for the Sustainable Development Goals (2018-2020)</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p>	<p>The core aims of the Plan are positive, however there is the potential for indirect impacts via land use change and</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
<p>Published in response to the 2030 Agenda for Sustainable Development and identifies four strategic priorities to guide implementation:</p> <p>awareness: raise public awareness of the SDGs</p> <p>participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals</p> <p>support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation</p> <p>policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence</p>	<p>Improved ecosystem services;</p> <p>Improvements to environmental quality and protection; and</p> <p>Climate resilience.</p>	<p>this has the potential for in-combination effects with the Draft IFSIP.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>
<p>Project Ireland 2040</p> <p>The National Planning Framework is a long-term strategy for the next 20 years and it will focus on ensuring compatibility between future growth of cities/ towns within Ireland alongside environmental sustainability. It is intended that the National Planning Framework will both provide the focus to guide and inform future planning and set the framework for integrated investment decisions.</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Species mortality;</p> <p>Alterations to water quality and/or water movement;</p> <p>Alterations to air quality; and</p> <p>Introduction or spread of invasive species.</p>	<p>It is a policy of the National Planning Framework to ensure the resilience of our natural resources and cultural assets. Linkage to wider policies such as for European sites under the Birds and Habitats Directives and the Water Framework Directive is recognised and the need to set high level planning policies in protecting and making responsible use of our natural environment. The plan has been subject to AA and includes clear policy on avoidance of impacts to European sites.</p> <p>The potential for likely significant in-combination effects is not anticipated.</p>
<p>National Landscape Strategy (NLS) 2015-2025, under the Council of Europe's European Landscape Convention (ELC)</p> <p>The NLS is used to ensure compliance with the ELC and to establish principles for protecting and enhancing it while positively managing its change.</p>	<p>Improved protection of landscape character.</p>	<p>The Strategy provides high level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions.</p> <p>It is likely that the plans, policies and programmes designed to implement the Strategy will, in due course, be subject to Screening for AA based on detailed operational plans and programmes based on accurate geographic information which is not included within the Statement.</p> <p>The Policy does not confer planning, it identifies strategic need.</p> <p>The potential for likely significant in-combination effects is not anticipated</p>
<p>Culture 2025</p> <p>Culture 2025 is a Framework Policy to 2025 which sets the vision for the future of culture and the arts in Ireland and prioritises actions. It recognises the diverse and multi-faceted nature of culture in Ireland and the contribution of</p>	<p>Habitat loss or destruction;</p> <p>Disturbance of species; and</p> <p>Introduction or spread of invasive species.</p>	<p>There is potential for in-combination impacts due to increased recreational use of protected sites, and indirect impacts due to land use change. However, at a project level EIA/AA will be required and any mitigation necessary will be included.</p>

Plan/ Program/ Policy	Key Types of Impacts	Potential for In-combination Effects
'culture' to sense of self, national identity, and the arts.		The potential for likely significant in-combination effects is not anticipated
<p>National Renewable Energy Action Plan</p> <p>The NREAP is produced as a requirement of the Renewable Energy Directive and sets out Ireland's "national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020".</p>	<p>Habitat loss or destruction;</p> <p>Habitat fragmentation or degradation;</p> <p>Disturbance to habitats/species;</p> <p>Species mortality;</p> <p>Alterations to water quality and/or water movement;</p> <p>Alterations to air quality; and</p> <p>Introduction or spread of invasive species.</p>	<p>This plan was not subject to AA, but some actions arising out of it have since been subject to AA owing to judicial review.</p> <p>The plan is positive in that its aims are to accelerate the uptake on renewable energy, thereby reducing the dependence on fossil fuels. The Draft IFSIP will contribute to reaching the targets set out within the NREAP and as such the plans are complementary. There is potential for indirect impacts from land use change.</p> <p>It is anticipated that there is potential for negative likely significant in-combination effects.</p>

5.9 AA Screening Conclusion

This AA Screening concludes that significant effects are likely or that sufficient uncertainty remains, to indicate that an appropriate assessment should be carried out for the Draft IFSIP. It must be noted that the screening process for the potential for likely significant effects on all European sites and their qualifying features has been carried out through consideration of QIs and SCIs at a national scale. The Annex I habitats, Annex II species and Annex I bird species listed in Section 4 have been identified as Key Receptors that are most vulnerable to forestry related pressures and threats due to how they have and are being impacted by forestry related activities and related to their current conservation status.

6. Stage 2 Appropriate Assessment of the Draft IFSIP

6.1 Introduction

This assessment has assessed the potential for adverse effects on the integrity of European sites which might arise from the Draft IFSIP. This has been done by assessing the effects on QIs and SCIs with respect to their conservation objectives, structure and function. The QIs and SCIs have been considered in the form of Annex I habitats, Annex II species and Annex I bird species, referred to as Key Receptors in this report.

Following on from the Screening for AA, this section sets out the elements of the Draft IFSIP that have the potential to give rise to likely significant effects on these Key Receptors and considers these in further detail. Where considered necessary to avoid adverse effects on the integrity of any site, and in accordance with the precautionary principle, mitigation is proposed.

The primary aim of the Draft IFSIP is to expand Ireland's forest estate and with it increase their role in addressing climate and biodiversity targets at National and EU level. The avoidance of impacts to the Natura 2000 network and each site's qualifying interests has been at the forefront of discussions in the development of the Draft IFSIP.

The principal effect of the Draft IFSIP relates to this increase in the forest estate, which as a consequence of the whole afforestation process⁸² could potentially lead to loss/reduction of habitat areas, disturbance to key species, habitat or species fragmentation, reduction in species density and indirect effects as a result of the afforestation process.

A second effect of the Draft IFSIP is potentially inadequate training and support to all involved within the forestry lifecycle. There exists the risk of potential likely significant effects where non-specialists do not receive adequate or appropriate training, guidance or support on ecological sensitivities and specifically relating to the obligations and requirements set under the Habitats and Birds Directives. Failure to deliver appropriate training, guidance and/or support could potentially result in likely significant effects on European sites through effects on Annex I habitats, Annex II species and/or Annex I bird species through habitat loss, habitat degradation and/or fragmentation, disturbance to species, reduction in species density and indirect effects such as water quality impacts.

6.2 Stage 2 Appropriate Assessment: Purposes and Process

The outcome of the AA Screening for the Draft IFSIP determined that the actions, interventions, measures and requirements within the Draft IFSIP could potentially have impacts on European sites. The potential for likely significant effects was considered through the use of QIs and SCIs referred to as Key Receptors in this report. Likely significant effects could not be ruled out for a number of aspects of the Draft IFSIP and therefore these aspects would need full Appropriate Assessment.

- The output of the AA Screening stage is included within Section 5.
- The AA process then moved to Stage 2 AA as required under Section 177V, Part XAB, 2000 Planning and Development Act, as amended.
- The AA involved analysing the potential for adverse interactions between the proposed elements of the Draft IFSIP and the Key Receptors of European sites, whether that be Annex I habitats, Annex II species and/or Annex I bird species. Where the potential for an adverse impact to occur was identified, the assessment team has recommended changes to elements of the Draft IFSIP to avoid or to mitigate the potential impact. These recommendations have been integrated into the various elements of the Draft IFSIP so that the implementation would not result in an adverse effect on the integrity of any European site, either alone or in combination with other plans or projects.

⁸² The whole afforestation process refers to any aspect of afforestation, standalone or in combination, which can include site selection, planting, felling/harvesting, reforestation, maintenance, forest road construction and operation and afforestation related infrastructure such as drainage.

- The Draft IFSIP will be published for a period of public consultation. All submissions will be reviewed and implications for European sites and their qualifying interest species and the need for revision or addendum to this Appropriate Assessment report will be considered.

6.3 Summary of the Stage 1 Appropriate Assessment Screening

Following a review of the interventions, objectives, measures and requirements of the Draft IFSIP alongside the sensitivities of each Key Receptor, the potential for likely significant effects has been assessed. Some Annex I habitats, Annex II species and Annex I bird species were screened out based on one or more of the following criteria:

- Where the Annex habitat and/or species is located at such a distance that impacts are considered highly unlikely and there are no clear impact pathways such as hydrological links; and
- Where known threats or vulnerabilities of an Annex habitat and/or species, as listed in their conservation objectives, cannot be linked to any potential impacts that may occur through the implementation of the Draft IFSIP.

6.4 Stage 2 Appropriate Assessment Methodology

In line with the relevant guidance and case law, this stage of the AA consists of the three main steps, the first of which ‘Impact Prediction’ is contained in this section of the report:

- **Impact Prediction** – identify the aspects of the Draft IFSIP likely to affect the conservation objectives of European sites, the more general classification of impacts can include direct and indirect effects; short and long-term effects; construction, operational and decommissioning effects; and isolated, interactive and cumulative effects. A source-pathway-receptor model has been used to assess potential for impact;
- **Assessment of Effects** – where the effects of the Draft IFSIP are assessed as to whether they have any adverse effects on the integrity of European sites as defined by conservation objectives; and
- **Mitigation Measures** – where mitigation measures are identified to ameliorate any adverse effects on the integrity of any European site.

6.5 Stage 2 Appropriate Assessment Impact Prediction

A source-pathway-receptor model has been used to assess potential for impact.

- The source relates to any element of the Draft IFSIP, including Actions, Interventions, Measures and Requirements detailed in the Draft IFSIP which have the potential to adversely impact the integrity of a Key Receptor.
- The pathways by which the Draft IFSIP can impact a Key Receptor could include direct mortality of species, changes in land use, habitat loss/fragmentation, emissions to air and via hydrological connections.
- The receptor will be all QIs, or SCIs represented by each Annex habitat and species identified from Section 5.5 and their conservation objectives for which there is a pathway of connectivity as a result of the implementation of the Draft IFSIP.

Impacts that could potentially occur through the implementation of the Draft IFSIP can be categorised under the below categories which are derived from the EC 2021 methodological guidance document⁸³ and adapted to reference activities that have the potential to occur through the implementation of the Draft IFSIP:

- **Direct loss:** The reduction of habitat coverage as a result of its physical destruction e.g., through the planting and/or felling stages or during the construction and decommissioning of forestry related

⁸³ EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites Methodological guidance on the provisions of Article 6() and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels.

infrastructure such as roads, bridges, culverts, drainage systems etc. As a result, there is the potential for the loss of breeding, foraging, resting areas for species.

- **Degradation:** The deterioration of habitat quality, leading to a reduced abundance of characteristic species or an altered community structure (species composition). This can be caused by changes in abiotic conditions that has the potential to occur during planting, felling, forestry related construction and decommissioning (roads, bridges, culverts) and during fertilisation of commercial forestry. Potential impacts include changes to water levels or an increase in suspended sediments, pollutants or dust deposition resulting in a deterioration of breeding, foraging, resting areas for species.
- **Disturbance:** A change in existing environmental conditions e.g., from increased noise during planting and felling stages as a result of greater frequentation of people and vehicles, the movement of machinery during construction and decommissioning of forestry related infrastructure (roads, bridges, drainage etc.) and the noise of machinery during fertilisation of commercial forestry's can result in disturbances to habitats and species. Disturbance may cause, inter alia, the displacement of species individuals, changes in species behaviour, or the risk of morbidity or mortality.
- **Fragmentation:** Can lead to an alteration of distribution patches of relevant habitats and species, e.g., through the creation physical or ecological barriers in areas that are physically or functionally connected, or splitting them into smaller more isolated units. Fragmentation may occur as a result of planting, felling, during construction and decommissioning of forestry related infrastructure (roads, bridges, drainage etc) and during fertilisation of commercial forests.
- **Other indirect effects:** Indirect change to the quality of the environment (resulting for example from a change in availability of nutrients and light, or an increase in the vulnerability of the site to other new threats such as invasive alien species, human and animal penetration) has the potential to occur during felling, planting, construction and decommissioning stages of forestry related infrastructure, thinning and fertilisation activities. This can contribute to diffuse and point source pollution such as sedimentation, siltation and input of dissolved organic matter to receiving watercourses that have hydrological connections to a Natura 2000 site and their QIs.

6.6 Impact Identification

A summary of the main potential ecological impacts that could arise from the implementation of the Draft IFSIP are presented in Section 5.4.

6.7 Formal Guidance

The AA process has taken account of guidance contained in Section 3.2.

6.8 Embedded Protection Measures Included in the Draft IFSIP

This assessment has considered the potential to impact on the achievement of the Conservation Objectives of the European sites, as required by Article 6 of the Habitats Directive. The assessment has been developed in the context of the full policy base contained within the Draft IFSIP which includes environmental protection policies, introduced with a view of avoiding adverse effects in line with recognised mitigation hierarchy.

Of specific relevance to the potential for impact on European sites, the following environmental commitments and objectives as set out in Section 5 are contained within the Draft IFSIP and underpin the assessment which follows. Note that there may be recommendations for further strengthening of the wording of these embedded mitigations by way of the SEA and NIR recommendations.

There is a lack of clarity around whether mitigation measures already included within a plan could be construed as being mitigation as explored further for projects in the People Over Wind case⁸⁴. Therefore, the decision has been made in this NIR to include the suite of mitigation measures already within the Draft

⁸⁴ Accessed at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62017CJ0323> on 14 October 2022

IFSIP and listed in Section 7.1 as part of mitigation to avoid adverse impacts on the integrity of any European site.

7. Stage 2 Assessment of Effects of the Draft IFSIP

7.1 Introduction

DAFM oversee the development of the forest estate within Ireland. A licensing and consent system exists, in which DAFM regulates forestry activities, such as the schemes detailed within the actions, interventions and measures outlined within the Draft IFSIP. Forestry activities must adhere to legislation and are mandatorily required to adhere to a suite of standards, guidelines and requirements which are outlined below.

7.1.1 Legislative Requirements

- European Communities (Forest Consent and Assessment) (Amendment) Regulations 2012 (S.I. No. 442 of 2012) – approval required for afforestation of any area > 0.1ha, forest road construction and ancillary works;
- Forestry Regulations 2017 (S.I. No. 191 of 2017) – felling, afforestation, forest road works and control of aerial fertilisation of forests;
- Forestry (Amendment) (No.2) Regulations 2020 (S.I. 39 of 2020);
- Animal Health and Welfare and Forestry (Miscellaneous Provisions) Act 2022 – approval for Native Tree Area planting scheme under 1ha without a licence;
- Forestry Act 2014;
- European Communities (Aerial Fertilisation) (Forestry) Regulations 2012 (S.I. No. 125 of 2012) – licence required for aerial fertilisation of forests;
- European Communities (Birds & Natural Habitats) Regulations 2011 (As amended) (S.I. 477 of 2011); and
- European Communities (Water Policy) Regulations 2003 (As Amended) (S.I. No 722 of 2003).

7.1.2 Mandatory Standards, Guidelines and Requirements

The below standards, guidelines and requirements are mandatory for forestry activities and are listed within the Draft IFSIP.

7.1.2.1 General

- Forest Protection Guidelines. Forest Service (2000) Department of the Marine and Natural Resources; and
- Forests & Water – Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021 Department of Agriculture, Food and the Marine (2018).

7.1.2.2 Recreation

- Forest Recreation in Ireland A Guide for Forest Owners and Managers (2006) Forest Service, Department of Agriculture and Food.

7.1.2.3 Afforestation/Reforestation

- Land Types for Afforestation. October 2017. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford;

- Environmental Requirements for Afforestation, December 2016. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford;
- Forestry Standards Manual, November 2015. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford; and
- Forests & Water Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021, June 2018. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford.

7.1.2.4 Forest Road Works

- Ryan, T., Phillips, H., Ramsay, J. & Dempsey, J. 2004. Forest Road Manual. Guidelines for the design, construction & management of forest roads. COFORD, Dublin;
- Forest Entrances – Requirements for Mandatory Consultation (Feb. 2020). Department of Agriculture, Food & the Marine. See Circular 03 / 2020. [gov.ie](http://www.gov.ie) - [Forestry Grants and Premium Schemes 2014 - 2022 Circulars \(www.gov.ie\)](http://www.gov.ie);
- Forestry & Archaeology Guidelines. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford;
- Forestry & Water Guidelines. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford;
- Forest Harvesting & the Environment Guidelines. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford;
- Forest Service. 2000. Forestry and the Landscape Guidelines. Forest Service, Department of the Marine and Natural Resources; and
- Forest Service. 2000. Guidelines for forestry and biodiversity. Forest Service, Department of the Marine and Natural Resources, Dublin.

7.1.2.5 Felling and Thinning

- Standards for Felling & Reforestation (v.Oct2019). Department of Agriculture, Food & the Marine. See Circular 14 / 2019. [gov.ie](http://www.gov.ie) - [Forestry Grants and Premium Schemes 2014 - 2022 Circulars \(www.gov.ie\)](http://www.gov.ie);
- Forest Harvesting & the Environment Guidelines. Forest Service (2000) Department of the Marine and Natural Resources; and
- Felling & Reforestation Policy. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford. [gov.ie](http://www.gov.ie) - [Tree Felling Licences \(www.gov.ie\)](http://www.gov.ie).

7.1.2.6 Aerial Fertilisation

- DAFM. 2015. Aerial Fertilisation Requirements, July 2015. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford.

7.1.2.7 Biodiversity

- AA Mitigation for Felling and Reforestation. July 2022. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford.
- Standard text for AA mitigation for Afforestation. May 2022. Department of Agriculture, Food & the Marine, Johnstown Castle Estate, Co. Wexford.
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;

- Forestry & Otter Guidelines. Forest Service (2000) Department of the Marine and Natural Resources ⁸⁵;
- Forestry & Kerry Slug Guidelines. Forest Service (2000) Department of the Marine and Natural Resources⁸⁶;
- Forestry & Hair Wood Ant Guidelines;
- Forestry & Freshwater Pearl Mussel Requirements: Site Assessment and Mitigation Measures Forest Service (2000) Department of the Marine and Natural Resources; and
- A Plan for Forests & Freshwater Pearl Mussel in Ireland (Draft).⁸⁷ It is recommended that any mitigation and/or guidance on forestry related activities in relation to the freshwater pearl mussel arising from the finalised version be implemented.

7.2 Impact Prediction

In line with the impact prediction as set out within Section 6.5, the main impacts that could arise from various aspects of the Draft IFSIP are summarised in Table 8. In-combination impacts are assessed separately in Section 5.8.

⁸⁵ Forestry & Otter Guidelines Forest Service (2000) Department of the Marine and Natural Resources

⁸⁶ Forestry & Kerry Slug Guidelines. Forest Service (2000) Department of the Marine and Natural Resources

⁸⁷ DRAFT Plan for Forests & Freshwater Pearl Mussel in Ireland (2021) Department of Agriculture, Food and the Marine

Table 8 Predicted Impacts on Key Receptors in Absence of Mitigation as a Result of the Draft IFSIP

Activities arising from the Draft IFSIP	Interventions, Measures, Requirements, Actions with potential for LSE	Key Receptor								
		Freshwater Habitats	Peatland	Molinia Meadow	Slender Naiad	Marsh Saxifrage	Freshwater Pearl Mussel	Atlantic Salmon	Hen Harrier	Merlin
Planting	Intervention 1 (All measures) Intervention 2 (All measures) Intervention 4 Measures 4,7,8 Intervention 6 Measures 1, Intervention 8 Action: 30, 67, 73, 78, 83	Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Indirect effects (e.g., water quality)	Habitat loss Habitat degradation	Habitat loss Habitat degradation Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Habitat fragmentation	Habitat loss Habitat degradation Habitat fragmentation
Felling/ Harvesting	Intervention 1 (All measures) Intervention 4 Measures 1,2,3,6,7,8 Action: 30, 73, 78, 83	Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Habitat fragmentation Disturbance	Habitat loss Habitat degradation Habitat fragmentation Disturbance
Thinning	Intervention 1 (All measures) Intervention 4 1,2,3,6,7	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality, habitat structure)	Indirect effects (e.g., water quality, habitat structure)	Indirect effects (e.g., water quality, habitat structure)	Indirect effects (e.g., water quality, habitat structure)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Habitat degradation	Habitat degradation

Activities arising from the Draft IFSIP	Interventions, Measures, Requirements, Actions with potential for LSE	Key Receptor								
		Freshwater Habitats	Peatland	Molinia Meadow	Slender Naiad	Marsh Saxifrage	Freshwater Pearl Mussel	Atlantic Salmon	Hen Harrier	Merlin
	Intervention 7 Action: 30, 73, 78, 83									
Reforestation (following felling)	Intervention 1 (All measures) Intervention 4 Measures 1,2,3,6,7 Intervention 6 Measure 2 Intervention 7 (All measures) Intervention 8 Action: 30, 67, 73, 78, 83	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., changes in habitat structure)	Habitat degradation Indirect effects (e.g., changes in habitat structure)
Forest Road Construction (including drainage works etc.)	Intervention 1 (All measures) Intervention 3 Measures 1,2,3,4,6 Action: 30, 83	Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Indirect effects (e.g., water quality, habitat structure)	Habitat loss Habitat degradation Indirect effects (e.g., water quality, habitat structure)	Habitat loss Habitat degradation Indirect effects (e.g., water quality, habitat structure)	Habitat loss Habitat degradation Indirect effects (e.g., water quality, habitat structure)	Disturbance Indirect effects (e.g., water quality)	Disturbance Indirect effects (e.g., water quality)	Habitat loss Habitat degradation Habitat Fragmentation Disturbance	Habitat loss Habitat degradation Habitat Fragmentation Disturbance
Forest Road Operation	Intervention 1 (All measures)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)	Disturbance	Disturbance	Habitat Fragmentation Disturbance	Habitat Fragmentation Disturbance

Activities arising from the Draft IFSIP	Interventions, Measures, Requirements, Actions with potential for LSE	Key Receptor									
		Freshwater Habitats	Peatland	Molinia Meadow	Slender Naiad	Marsh Saxifrage	Freshwater Pearl Mussel	Atlantic Salmon	Hen Harrier	Merlin	
	Intervention 3 Measures 1,2,3,4,6 Intervention 7 Action: 30, 83							Indirect effects (e.g., water quality)	Indirect effects (e.g., water quality)		
Forestry Fertilisation	Intervention 1 (All measures) Intervention 7 Action: 30	Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Habitat degradation Indirect effects (e.g., water quality)	Indirect effects (changes in habitat structure)	Indirect effects (changes in habitat structure)					
Training & Support Schemes	Intervention 4 Measure 6,7,8 Intervention 5 (All measures) Intervention 7 Intervention 8 Actions: 10, 20, 21, 30, 24, 37, 38, 44, 49, 50	Indirect effects (Inappropriate/inadequate training)	Indirect effects (Inappropriate/inadequate training)	Indirect effects (Inappropriate/inadequate training)	Indirect effects (Inappropriate/inadequate training)						
Recreation & Amenity Infrastructure including access routes for walking	Intervention 5 Measure 2,3,4 Action: 30, 78	Disturbance Indirect effects	Disturbance Indirect effects	Disturbance Indirect effects	Disturbance Indirect effects						

7.3 Mitigation

7.3.1 Existing Mandatory Forest Service Requirement as Mitigation

All of the mandatory requirements set out in the full suite of DAFM documents, as listed in Section 7.1.2, such as ‘Environmental Requirements for Afforestation’ (DAFM, 2016) Land Types for Afforestation. (DAFM, 2015) and the Forestry Standards Manual (DAFM, 2015) must be complied with. Relevant specific requirements or mitigation in those documents relating to Activities arising from the Draft IFSIP are presented in Table 9.

In response to Project Wood Recommendation 9 of the Project Woodland Regulatory Review Report, June 2022 (Philip Lee, 2022)⁸⁸, which states: “*It is recommended that DAFM adopt standardised conditions and generally binding rules in relation to standards which are to be met by licensees, with the objective of ensuring consistency, clarity, and a streamlined approach to drafting and determining licences*” DAFM is currently collating relevant mitigation measures. This document will summarise the significant number of mitigation conditions which are already referenced in existing published guidelines which are a requirement of all licence and grant aid applications. Therefore existing mitigation measures outlined below are considered adequate and further mitigation measures can be applied on licences as special specific conditions on a case by case basis.

Table 9 Existing Mandatory Mitigation Requirement of Forest Service

Mitigation Measures	Aspect of IFSIP to which it relates
Afforestation / Reforestation / Forest Creation / Reconstitution / Any New Planting	
Applicants are encouraged to seek ecological input early in the design stage in situations where one or more of these scenarios apply, and to tailor any subsequent application accordingly before submission to DAFM	Intervention 1 (All measures) Intervention 4 Measures 1,2,3,6,7,8
In relation to setbacks from dwellings, setback planting is encouraged within the 30m to 60m zone, if agreed to by the neighbouring dweller.	Action: 30, 73, 78, 83
Minimum setback, as measured from the surfaced edge of the public road: 10 metre for broadleaves and 20m for conifers, (average, within any one application) (For conifer plots, note the additional requirement regarding edge planting)	
The Registered Forester must assess the potential risk of sedimentation and nutrient runoff entering into ‘receiving waters’ (aquatic zones (streams, rivers, lakes)), both during afforestation establishment phase. Forest management must continue to assess sedimentation and nutrient runoff throughout the remainder of the rotation and adapt the forest design and planned operations accordingly.	
Ensure that an adequate contingency plan is prepared. This plan must clearly inform operators how to react and who to contact, should an unexpected event arise that may create a risk to the environment, e.g. a period of intense rainfall, an accidental spillage of chemicals, the discovery of an unidentified archaeological site, monument or object. The plan should be readily available onsite and all operators should be made familiar with its content.	
The Registered Forester must ensure that all operators are aware of the importance of any environmental setbacks required onsite, their location and extent, and what is and is not permitted within them. An environmental setback must not be used for any forest operation or for any other purpose which could compromise its protective function, or which could damage the environmental feature or sensitivity being protected. Minimum environmental setbacks to be applied are set out in the Environmental Requirements for Afforestation.	
Where afforestation is approved near known or suspected archaeological sites and monuments or other important built heritage structures or features, to seek to ensure that:	

Mitigation Measures	Aspect of IFSIP to which it relates
<p>(i) appropriate exclusion zones, fencing, access paths and other relevant measures are determined and required by condition to be incorporated into the project design; (ii) provision is made so there is an appropriate response should any previously unrecorded archaeological site, monument, object, structure or feature be discovered during site work; and (iii) any approved design is sympathetic to and provides an appropriate visual setting for such sites, monuments, structures or features. The minimum environmental setbacks set out in the Environmental Requirements for Afforestation should be applied, unless conditions specify otherwise.</p>	
<p>Existing access routes to an archaeological site must be left unplanted and undisturbed, and must be left open for pedestrian access by archaeological officials throughout the rotation. If there is no existing access route, leave an unplanted 4 metre wide route suitable for pedestrian access from the direction of the nearest public road, forest road or track.</p>	
<p>An Archaeological Assessment / Archaeological Impact Statement is required for sites where it is determined that there is a significantly elevated potential for impacts on known or suspected archaeological sites and monuments or other important built heritage structures or features.</p>	
<p>The Registered Forester should consult with the relevant County Development Plan (both Draft and Final Plans), which will identify areas of particular landscape sensitivity, important views and considered suitability for afforestation. The Registered Forester should also view the site from various vantage points and approaches, to identify how best to design the forest</p>	
<p>Monitor to ensure the successful establishment of forest edge planting and environmental setback planting (where undertaken) and maintain trees as appropriate (e.g. vegetation management, replacement of mortalities, adjustment and eventual removal of tree shelters) until the trees are established and free of vegetation competition or browsing pressure.</p>	
<p>Retain hedgerows, existing veteran trees, earth banks and stone walls unless required for access.</p>	
<p>Under Irish legislation, EIA is mandatory for the following forestry projects: -initial afforestation which would involve an area of 50 hectares or more pursuant to Regulation 13(2)(a) of the Forestry Regulations 2017 (S.I. 191 of 2017). Where EIA is not mandatory, regard should be had to Section 11(d)(i) of the Forestry Act 2014, Regulation 13(2)(c) Forestry Regulations 2017, and Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended and an EIA Screening carried out, as required.</p>	
<p>An appropriate ecological assessment is required in sites where the habitat of Annex I bird species or Annex II species occur or are likely to occur to investigate the potential for where they occur.</p>	
<p>Each site being assessed for suitability must, amongst other things, undergo a preliminary soil investigation by a Registered Forester.</p>	
<p>Afforestation will be restricted to native tree species in the Top 8 Freshwater Pearl Mussel Catchments, namely: Bundorragha, Caragh, Corrib, Cumberagh, Dawros, Kerry Blackwater, Leannan and Ownagappul.</p>	
<p>The Native Tree Area scheme will not follow the pre-approval process of the existing afforestation scheme. Direct entry to the scheme will apply, using the same approach that is employed with agri-environmental schemes. The scheme has been designed to avoid and minimise potential impacts from the outset using the best available information and by applying pre-emptive measures. These generic measures are mandatory in nature for all areas to be included in the scheme. They will not be proposed on a farm-by-farm basis by applying site specific conditions. Pre-emptive measures have been introduced to ensure that tree planting works are undertaken in a legally compliant and sustainable manner. These measures are applied in the form of two distinct stages; Stage 1: Scheme Eligibility Map and Stage 2: Scheme Pre-Emptive Measures.</p>	

Mitigation Measures	Aspect of IFSIP to which it relates
Consideration should be given to timing of ecological surveys	
Forest Management/ Forestry Operations including Felling and Thinning	
Sediment must be prevented from entering aquatic zones. This is achieved by adherence to Environmental Requirements for Afforestation, Standards for Felling and Reforestation and any site-specific measures that may also be required	Intervention 1 (All measures) Intervention 4 Measures 1,2,3,6,7,8 Action: 30, 73, 78, 83
In relation to setbacks from dwellings, setback planting is encouraged within the 30m to 60m zone, if agreed to by the neighbouring dweller.	
Minimum setback, as measured from the surfaced edge of the public road: 10 metre broadleaves and 20m for conifers (average, within any one application) (For conifer plots, note the additional requirement regarding edge planting)	
If vegetation clearance with machine is required, particular care is needed to guard against soil damage, compaction, rutting or removal. Subsequent spraying may also be required, using approved herbicide appropriate to the target vegetation	
Where trees are required to be removed (e.g. to facilitate the erection of a fence), a felling licence may be necessary	
Good site hygiene and biosecurity controls will be employed to prevent the introduction and spread of invasive alien species (e.g. rhododendron, Japanese knotweed) by thoroughly checking/washing vehicles prior to entering and leaving the project site.	
Minimise the crossing of drains during felling and extraction, and limit machine activity to brushed extraction racks and haulage routes where required.	
Where felling operations adjoin public roads, appropriate safety signs should be in place to alert the public, including road users. Close off the forest (or parts of, if large) to users, if utilised for recreation.	
Where practical and feasible and with consideration to other environmental receptors e, access to forest land should select the least visually-sensitive route, particularly in areas of high landscape sensitivity. Existing access routes and crossing points should be used when present and suitable.	
The felling and replanting of forests damaged by storms, fire, pests or diseases should take appropriate cognisance of underlying environmental receptors such as water quality, habitats and species, archaeology and landscape.	
The potential of operations to cause disturbance should be considered and where possible, reflected in the timing operations	
All forest operations within areas of high-water sensitivity (such as Freshwater Pearl Mussel catchments and high-status waterbodies) must be planned and managed with a particular regard to the protection of water quality, aquatic ecosystems and species.	
Archaeological monitoring of specified areas at initial afforestation or reforestation stage by an independent archaeological consultant retained by the Applicant or the Registered Forester is required where it is determined that there is an elevated potential for impacts on known or suspected archaeological sites and monuments or other important built heritage structures or features in those areas.	
Trees within archaeological exclusion zones should only be felled following the preparation by an archaeologist or other suitably qualified environmental professional, in conjunction with a forester or arborist, of a plan outlining the most appropriate means to fell and remove trees from on or around the monument.	
Where required, bio-security measures shall be adopted on sites where there is known or high risk of pest, disease or invasive species; including cleaning vehicles regularly, contained wheel wash zones and foot wash areas and cleaning equipment of all organic	

Mitigation Measures	Aspect of IFSIP to which it relates
debris to avoid the spread and/or introduction of non-native invasive species, pests and diseases from site to site.	
Prior to operations commencing, all machine operators and other site personnel will be appropriately briefed by the appointed Works Manager, Registered Forester or Site Ecologist, on the specific sensitivities of the site and on all relevant conditions, including the location of all exclusion zones and environmental setbacks	
Forest Road Works	
Prior to the design or development of forest roads, regard should be had to the Forest Road Manual: Guidelines for the Design, Construction & Management of Forest Roads (COFORD, 2005)	Intervention 1 (All measures) Intervention 3 Measures 1,2,3,4,6
The development of new forest roads should be subject to options assessment, where appropriate. Access to forest land should select the least environmentally-sensitive route and utilise existing access where available and suitable	Action: 30, 83
Archaeological monitoring of specified sections of a forest route by an independent archaeological consultant is required where it is determined that there is an elevated potential for impacts on known or suspected archaeological sites and monuments or other important built heritage structures or features in those sections.	
The potential of operations to cause disturbance should be considered and where possible, reflected in the timing operations	
Alternative options such as lower density roading, temporary bridging, and the adoption of alternative silvicultural systems, will be considered on case-by-case basis, on sites with acute water sensitivity.	
Ensure that stream and river crossings constructed for forestry purposes are developed in compliance with the Coford Forest Road Manual and the Inland Fisheries Ireland Guidelines on the Protection of Fisheries During Construction In or Adjacent to Waters.	
Ensure that forest amenity and recreational facilities are managed in a way which ensures that there is no potential for significant adverse environmental effects.	Intervention 5 Measure 2,3,4 Action: 30, 78
General Mitigation	
To require all proposals relating to forestry or forestry projects to address the presence or absence of invasive alien species on the proposed site and to require an Invasive Species Management Plan where such species are present;	For all aspects of the Plan.
To prevent the spread of invasive species (e.g. rhododendron, Japanese knotweed), ensure that all vehicles involved in site works are clean and free of soil and plant debris before entering and leaving the site. See https://invasives.ie/resources/ for identification guides and further information.	
Where instream works are required, and to prevent the spread of freshwater invasive species and disease (e.g. Crayfish Plague, Zebra mussel, fishhook waterflea), any vehicles, tools and PPE directly involved in instream works, e.g. culvert for access purposes, are clean (disinfected and dried) and free of soil/sand/gravel and plant debris before entering and leaving the site.	
The health and vitality of forests must be protected and maintained, with management oriented towards pest and disease control and good practice in relation to the avoidance or minimisation of fire and windthrow damage.	
Require consideration of the distance to market for timber, fibre and biomass products to minimise GHG emissions related to transport.	

Mitigation Measures	Aspect of IFSIP to which it relates
All registered foresters, machine operators and forestry workers shall receive appropriate training, where deemed necessary, in identifying ecological features such protected species identification skills, botanical identification skills, invasive species identification skills etc	
Machinery used in forest operations should be managed so as to minimise the potential for any offsite air, noise or vibration impacts.	

7.3.2 Mitigation for the Forest Action Plan

Actions of the Forest Action Plan have been assessed in the Screening for AA process. Those that were determined to present the potential for likely significant risk have been brought forward for Stage 2 AA here. Where it cannot be demonstrated that there will be no potential for significant adverse effects from the implementation of these Actions or where doubt exists, mitigation measures have been proposed.

Several Actions refer to the implementation of Support Schemes through the Draft IFSIP. These include Actions 12, 13, 16, 17, 18, 35, 37, 41, 47, 48, 49, 52, 56, 57, 62, 63, 65, 76, 80, 83, 84, 85, and 86. Mitigation is proposed in the form of a requirement that any future support scheme should be subject to AA Screening. It is considered that this mitigation will eliminate or render insignificant any possible adverse effects on any potentially impacted qualifying features of a European site.

All other Actions brought forward from AA screening stage are provided in Table 10. Mitigation is provided in order to eliminate or render insignificant any possible adverse effects on any potentially impacted qualifying features of a European site.

Table 10 Forest Action Plan Mitigation

Goal & Action	Mitigation
Action 6 - Engage with forest owners through Forestry Knowledge Transfer Groups to develop skills and expertise across the forestry sector.	All Forest Owners receive education and training on the biodiversity and AA obligations. All licensed Foresters receive education and training on AA obligations and the potential risks to the key receptors. Such training should encompass guidance on the identification of receptors, the risk, pressures and threats they face and measures to avoid.
Action 9 – Review, implement and build on the recommendations of the independent Regulatory Review of the existing statutory framework for the licencing of forestry activities in relation to environmental and public participation obligations	Any recommendations or actions arising from the independent Regulatory Review be subject to a Screening for AA where relevant.
Action 10 – Support the work of the Land use Review Group to ensure that balanced land use options inform forest establishment decisions.	Any “optimal land use options” recommended by the Land use Review Group relating to forest establishment be subject to AA Screening.
Action 11 – Align tree planting measures in Agri-Environment Schemes with forest creation support measures	All tree planting measures in Agri-Environment Schemes facilitate education and training to all involved parties regarding biodiversity and AA obligations.
Action 14 - Provide advice, training, and research on farm forestry and related matters.	All involved in the provision of advice, training and research on farm forestry receive education and training on the biodiversity and AA obligations.
Action 15 - Promote forests and forestry on the public forest estate through the provision of recreation areas, the development of visitor destinations, and knowledge transfer initiatives on the multifunctional role of forests in our society.	The provision of recreation areas and development of visitor destinations be subject to Screening for AA where applicable.
Goal - Incentives for forest creation and management New incentives for the establishment and management of diverse, multifunctional forests that strengthen the economic viability of rural communities, protect our environment and are resilient in the face of climate change	Any future support scheme within the Draft IFSIP should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening

Goal & Action	Mitigation
Action 20 – Update the reference standard for forest practice in Ireland	The reference standard for forest practice reflects obligations that fall under the Habitats Directive, best available science and so as to avoid inappropriate or inadequate regard to Natura 2000 sites and that an AA Screening be prepared for any updated reference standard as necessary.
Action 28 – Review and assess the training needs of those who are directly involved in submitting forestry licence applications.	All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. receive education and training on the biodiversity and AA obligations.
Action 30 - Establish forest Knowledge Transfer Groups (KTGs) to increase the standard of forest management activity amongst participating forest owners	All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. receive education and training on the biodiversity and AA obligations
Action 31 - Provide support for ongoing continuous professional development among forest professionals, including foresters, ecologists, forest operatives and advisors.	All persons involved in the forestry licence application process, including foresters, advisors, contractors etc. receive education and training on the biodiversity and AA obligations.
<p>Goal – Forest Expansion</p> <p>A major expansion of climate resilient and healthy forests following the principles of sustainable forest management and the right trees in the right places for the right reasons with the right management.</p>	All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. receive education and training on the biodiversity and AA obligations
Action 38 – Provide advisory and knowledge transfer services to support landowners in the forest establishment decision	All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. receive education and training on the biodiversity and AA obligations.
Action 42 – Implement support schemes for the reconstitution of forests following significant damage by natural causes.	All cases considered in the reconstitution scheme undergo a Screening for AA, and where applicable, a Stage 2 NIS.
Action 43 – Implement redesign and habitat restoration measures for forests on peatlands based on the best available science	All cases relating to habitat redesign and restoration for forests on peatland be subject to a Screening for Appropriate Assessment, and where applicable, a Stage 2 NIS.
Action 44 - DAFM will encourage alignment of its actions to support the actions in the Climate Action Plan on the Built Environment including standards, research and technologies.	Ensure alignment with other national, regional and local level plans such as the Biodiversity Action Plan, the Prioritised Action Framework for Natura 2000, River Basin Management Plans etc., where applicable elsewhere in the Draft IFSIP.
<p>Goal – Supply</p> <p>An expansion at scale to continue to increase the supply of sustainable raw material from Ireland’s forest resource. A critical component will be efficient and effective licensing and regulatory procedures. Also, investment in research and development in the supply chain employing innovative technologies is to be prioritised</p>	Any future support scheme as part of this overall Goal should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
<p>Goal – Native Forest Expansion</p> <p>A major expansion of native forests and improved diversity of native tree species in new and existing forests.</p>	Any future support scheme as part of this overall Goal should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project or plan which might require AA Screening
<p>Goal – Protecting and Restoring Natural Heritage and Ecosystem Services</p> <p>Forestry practices will safeguard and enhance the quality of Ireland’s air, water, soils, landscapes, habitats and population of protected species. This includes support and funding for the provision of non-timber ecosystem services.</p>	All actions as part of this Goal incorporate a Screening for AA and Ecological Impact Assessment for any forestry activities to review the potential for likely significant effects on European sites
Action 64 - Support the establishment and natural regeneration of native forest on post-industrial cutaway peatlands, where appropriate.	All projects that fall under this category of ‘natural regeneration of native forest on post-cutaway peatlands, where appropriate’ be subject to a Screening for AA, and where applicable, a Stage 2 NIS to assess the potential for likely significant effects.

Goal & Action	Mitigation
Action 66 - Implement the restoration and conservation of forests in state-owned properties, particularly National Parks and Nature Reserves	All cases for the implementation and conservation of forests in state-owned properties, including National Parks and Nature Reserves be subject to a Screening for AA, and where applicable, a Stage 2 NIS.
Action 71 - Review and expand the Neighbourhood Scheme to support the creation of new public amenity forests and the enhancement of existing forests for public access, education, recreation and health and wellbeing for rural and urban communities.	All cases relating the expansion of the Neighbourhood forests be subject to a Screening for AA, and where applicable, a Stage 2 NIS.
Action 79 - Establishment of a number of pilot areas to develop a plan led approach to afforestation in collaboration with stakeholders. These pilot areas will help inform a national approach to plan led afforestation.	All cases relating the establishment of pilot areas to develop a plan led approach to afforestation be subject to a Screening for AA, and where applicable, a Stage 2 NIS.

7.3.3 Interventions, Measures and Requirements of the Draft IFSIP

Interventions, Measures and Requirements of the Draft IFSIP have been assessed in the Screening for AA process. Those that were determined to present the potential for likely significant effects have been brought forward for Stage 2 AA here. Where it cannot be demonstrated that there will be no adverse effects from the implementation of these Interventions, Measures and/or Requirements, mitigation measures have been proposed. Mitigation is proposed in order to eliminate or render insignificant any possible adverse effects on any potentially impacted qualifying features of a European site.

Table 11 Interventions, Measures and Requirements Recommendations & Mitigation

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
Intervention 1 Forest Creation		
Overall Objective	<p>Within the Draft IFSIP, DAFM has included ‘Identification of relevant baseline elements’ with pertains to Statutory management requirements under Section 4.1 Forestry Act and Forestry Regulations. “The Forestry Act 2014 and Forestry Regulations is the primary legislative framework for supporting the development and promotion of forestry in Ireland and set out the provisions for licensing (consent) for afforestation and forest road applications, aerial fertilisation licensing and felling licences. Landowners submitting applications for forestry licences must follow the requirements prescribed in the legislation which includes requirements for public consultation”.</p> <p>Defined within are the required elements of an afforestation licence, including the requirement for AA Screening of all forestry licence applications.</p> <p>The mandatory requirements relevant to the AA process found within the Draft IFSIP are:</p> <p>All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives.</p> <p>Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned.</p> <p>The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>.</p> <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <ul style="list-style-type: none"> (a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive; (b) outside those areas, strive to avoid pollution or deterioration of habitats; (c) take appropriate enforcement action; <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used; and</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where forests are created as part of Intervention 1 Forest Creation be carried out post forest creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs. With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
Native Tree Area Scheme	<p>Mitigation currently in place for the Native tree Area Scheme are outlined below:</p> <p>The Native Tree Area Scheme has been developed to incentivise small scale planting without the requirement of an afforestation licence. Amendments to the Animal Health and Welfare and Forestry (Miscellaneous Provisions) Act 2022 has introduced Regulations to facilitate this scheme. Pursuant to 22A:</p> <p>(1) The Minister may, for the purpose of enabling the State to pursue, and achieve, the transition to a low carbon, climate resilient, biodiversity rich and environmentally sustainable economy, provide by regulation for a scheme to facilitate the planting of native tree areas.</p> <p>(2) Regulations under subsection (1) may—</p> <p>(a) subject to paragraph (b) and subsection (3), provide for the exemption of the planting of native tree areas, that would, but for such exemption, be subject to the requirements of section 22, from the requirements of that section,</p> <p>(b) prescribe conditions for an exemption under paragraph (a), having regard to—</p> <p>(i) the requirements of the environment and environmental law,</p> <p>(ii) the need for increased planting of native tree species,</p> <p>(iii) public safety,</p> <p>(iv) fire, pest or disease control, and</p> <p>(v) research and such other silvicultural requirements as the Minister considers appropriate,</p> <p>and</p> <p>(c) in relation to the scheme referred to in subsection (1)—</p> <p>(i) prescribe the terms and conditions of that scheme, having regard to such matters referred to in subparagraphs (i) to (v) of paragraph (b) and any other matters as the Minister considers relevant, and</p> <p>(ii) provide for the provision of native tree area grants for the planting of native tree areas.</p> <p>(3) Regulations under subsection (1) shall provide that an exemption from the requirements of section 22 shall be granted only where, on the basis of objective</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where forests are created as part of Intervention 1 Forest Creation be carried out post forest creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>information, the proposed native tree area is not likely to have a significant effect on a European site in view of the site conservation objectives, either individually or in combination with other plans or projects.</p> <p>(4) In this section, ‘European site’ has the same meaning as it has in the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).”,</p> <p>As a result of the aforementioned requirements set out for the Native Tree Area within Intervention 1, it is not anticipated that this Scheme shall pose a potential for likely significant effect on the Natura 2000 site network and/or QIs</p>	
Measure 1	<p>All measures within Intervention 1 are subject to requirements that are outlined above in the overall objective. All afforestation licences are required to adhere to and provide the following:</p> <p>All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives.</p> <p>Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned.</p> <p>The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>.</p> <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <p>(a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive,</p> <p>(b) outside those areas, strive to avoid pollution or deterioration of habitats, and</p> <p>(c) take appropriate enforcement action</p> <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs.</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where forests are created as part of Intervention 1 Forest Creation be carried out post forest creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
<p>Measure 3</p>	<p>All measures within Intervention 1 are subject to requirements that are outlined above in the overall objective. All afforestation licences are required to adhere to and provide the following:</p> <p>The mandatory requirements relevant to the AA process found within the Draft IFSIP are:</p> <ul style="list-style-type: none"> ○ All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives. ○ Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned. ○ The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>. <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <ul style="list-style-type: none"> – (a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive, – (b) outside those areas, strive to avoid pollution or deterioration of habitats, and – (c) take appropriate enforcement action <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where forests are created as part of Intervention 1 Forest Creation be carried out post forest creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
Intervention 2 –Agroforestry		
Overall Objective	<p>Within the overall objective for Intervention 2, the following mitigation is stated:</p> <p>“Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention”</p> <p>Pursuant to Part 8 of the Forestry Regulations (SI No. 191/2017), the Protection of European sites, all applications for a forestry licence under sections 17 or 22 of the Principal Act shall be assessed as to whether they shall, individually or in combination with other projects or plans, have a likely significant effect on a European site i.e., Screening for Appropriate Assessment. As a result of the requirement for Screening for Appropriate Assessment and subsequent Stage 2 Appropriate Assessment, where necessary, it is not anticipated that any of the measures within Intervention 2 shall pose the potential for likely significant effects to European sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where agroforestry systems are created as part of Intervention 2</p> <p>Creation of Agroforestry Systems be carried out post forest creation.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review and develop mandatory ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>
Measure 1 Silvopastoral Systems	<p>Within the overall objective for Intervention 2 (and all the measures within), the following mitigation is stated:</p> <p>“Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention”</p> <p>Pursuant to Part 8 of the Forestry Regulations (SI No. 191/2017), the Protection of European sites, all applications for a forestry licence under sections 17 or 22 of the Principal Act shall be assessed as to whether they shall, individually or in combination with other projects or plans, have a likely significant effect on a European site i.e., Screening for Appropriate Assessment. As a result of the requirement for Screening for Appropriate Assessment and subsequent Stage 2 Appropriate Assessment, where necessary, it is not anticipated that any of the measures within Intervention 2 shall pose the potential for likely significant effects to European sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where agroforestry systems are created as part of Intervention 2</p> <p>Creation of Agroforestry Systems be carried out post forest creation.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review and develop mandatory ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>
Requirement for Measure 1	<p>Within the overall objective for Intervention 2 (and all the measures within), the following mitigation is stated:</p> <p>“Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention”</p>	<p>Where setback areas for grazing are to be examined on a case-by-case basis DAFM to integrate the recommendation of the Independent Regulatory Review to develop mandatory ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation so as to avoid the potential for likely significant effects.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>Pursuant to Part 8 of the Forestry Regulations (SI No. 191/2017), the Protection of European sites, all applications for a forestry licence under sections 17 or 22 of the Principal Act shall be assessed as to whether they shall, individually or in combination with other projects or plans, have a likely significant effect on a European site i.e., Screening for Appropriate Assessment. As a result of the requirement for Screening for Appropriate Assessment and subsequent Stage 2 Appropriate Assessment, where necessary, it is not anticipated that any of the measures within Intervention 2 shall pose the potential for likely significant effects to European sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	
<p>Measure 2: Silvopastoral Systems Requirements</p>	<p>Within the overall objective for Intervention 2 (and all the measures within), the following mitigation is stated:</p> <p><i>“Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention”</i></p> <p>Pursuant to Part 8 of the Forestry Regulations (SI No. 191/2017), the Protection of European sites, all applications for a forestry licence under sections 17 or 22 of the Principal Act shall be assessed as to whether they shall, individually or in combination with other projects or plans, have a likely significant effect on a European site i.e., Screening for Appropriate Assessment. As a result of the requirement for Screening for Appropriate Assessment and subsequent Stage 2 Appropriate Assessment, where necessary, it is not anticipated that any of the measures within Intervention 2 shall pose the potential for likely significant effects to European sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where agroforestry systems are created as part of Intervention 2</p> <p>Creation of Agroforestry Systems be carried out post forest creation.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review to develop mandatory of ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>
<p>Measure 3: Forest Gardening</p>	<p>Within the overall objective for Intervention 2 (and all the measures within), the following mitigation is stated:</p> <p><i>“Specific requirements for this measure will vary for each of the three types of agroforestry system listed above. All mandatory and legal standards as set out in the Forestry Act 2014, the Forestry Regulations (SI No. 191/2017 as amended), and specified by the Department for the establishment and management of forests in the Forestry Standards Manual will apply to this intervention”</i></p> <p>Pursuant to Part 8 of the Forestry Regulations (SI No. 191/2017), the Protection of European sites, all applications for a forestry licence under sections 17 or 22 of the Principal Act shall be assessed as to whether they shall, individually or in combination with other projects or plans, have a likely significant effect on a European site i.e., Screening for Appropriate Assessment. As a result of the requirement for Screening for Appropriate Assessment and subsequent Stage 2</p>	<p>Follow-up monitoring of effectiveness of measures implemented to avoid significant adverse effects where agroforestry systems are created as part of Intervention 2</p> <p>Creation of Agroforestry Systems be carried out post forest creation.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review to develop mandatory of ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>Appropriate Assessment, where necessary, it is not anticipated that any of the measures within Intervention 2 shall pose the potential for likely significant effects to European sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	
Intervention 3 – Infrastructure and Technology Investments		
Overall Objective	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	<p>DAFM apply pollution prevention guidelines as a mandatory requirement for construction of any forest road type and for the decommissioning of any temporary structures.</p> <p>DAFM to consider the recommendation within the Independent Regulatory Review of whether there is any category of forest road which might be considered lower risk, from an environmental and social perspective. Assuming there is, it would need to be verified through environmental assessment (using criteria set out in the SEA/EIA/Habitats and Water Framework Directives) that a forest road of that type or scale is objectively a low environmental risk, subject to any site-specific considerations, such that it merits a permit procedure involving less control than a full licence. In each case it will be necessary for a prior AA and EIA screening to be carried out before the works proceed, with the right of DAFM to intervene to require AA or EIA to be carried out.</p> <p>DAFM to incorporate post-construction environmental monitoring of all forest road creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
Specific Requirements for this Intervention	<p>Within the specific requirements for this Intervention, and all measures, within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources). Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources).</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	
Measure 1: Forest Road Scheme	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following</p>	<p>DAFM to apply pollution prevention guidelines as a mandatory requirement for construction of any forest road type and for the decommissioning of any temporary structures.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review of whether there is any category of forest road which might be considered lower risk, from an environmental and social perspective. Assuming there is, it would need to be verified through environmental assessment (using criteria set out in the SEA/EIA/Habitats and Water</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources). Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources).</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	<p>Framework Directives) that a forest road of that type or scale is objectively a low environmental risk, subject to any site-specific considerations, such that it merits a permit procedure involving less control than a full licence. In each case it will be necessary for a prior AA and EIA screening to be carried out before the works proceed, with the right of DAFM to intervene to require AA or EIA to be carried out.</p> <p>DAFM to incorporate post-construction environmental monitoring to all forest road creation.</p>
<p>Measure 2: Additional Element to Forest Road Scheme</p>	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p>	<p>DAFM to apply pollution prevention guidelines as a mandatory requirement for construction of any forest road type.</p> <p>DAFM to incorporate post-construction environmental monitoring of all forest road creation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	
<p>Measure 3: Additional Element to Forest Road Scheme</p>	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the</p>	<p>DAFM to apply pollution prevention guidelines as a mandatory requirement for construction of any forest road type.</p> <p>DAFM to incorporate post-construction environmental monitoring to all forest road creation.</p> <p>DAFM to incorporate environmental monitoring of all water features created as part of this measure.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.	
Measure 6: Innovative forest technology scheme – Element 2: temporary forest access measure	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	<p>DAFM to apply pollution prevention guidelines as a mandatory requirement for construction of any forest road type.</p> <p>DAFM to incorporate post-construction environmental monitoring to all forest road creation.</p> <p>DAFM to incorporate environmental monitoring of all water features created as part of this measure.</p>
Measure 8: Investment aid for the development of the forest tree nursery sector	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where</p>	Any actions arising from this Measure to be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project for plan which might require an AA Screening.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p> <p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service (2000 Department of the Marine and Natural Resources.</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	
Main Requirements	<p>Within the specific requirements for this Intervention and all measures within:</p> <p>All applications in relation to licensed activities that are part of this and all interventions will undergo a detailed project evaluation by the Department (via desk, field inspection (if required) and use of the GIS-based iFORIS system), referral to statutory consultees as required, AA Screening and Appropriate Assessment (where required) under the Habitats Directive, to ensure compatibility with the environment and to consider areas of habitat and species sensitivity within the project plan.</p> <p>In assessing an application for a forestry licence, the Department is required to consider potential impacts across a range of issues and sensitivities. The following lists the primary components of the legal, regulatory and funding framework that apply:</p> <p>The Forestry Act 2014 (the Act) and the supplemental Forestry Regulation 2017 (SI No. 191 of 2017)</p>	Any future nurseries are subject to a Screening for AA.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>European Communities (Forest Consent & Assessment) Regulations 2010 (S.I.558 of 2010), as amended</p> <p>European Union rules governing the Implementation Plan.</p> <p>Legally protected species and habitats and associated designations (e.g., SAC, SPA, Natural Heritage Areas) and procedures (e.g., Appropriate Assessment)</p> <p>Water Framework Directive</p> <p>Legislation regarding archaeology and built heritage, including the National Monuments Acts.</p> <p>DAFM requirements, procedures and protocols the Forestry Standards Manual; the relevant Forest Service Requirements and Guidelines including but not limited to Forestry & Archaeology Guidelines. Forest Service (2000 Department of the Marine and Natural Resources. Forest Harvesting & the Environment Guidelines. Forest Service 2000 Department of the Marine and Natural Resources).</p> <p>Given the requirement for the AA Screening and Appropriate Assessment (where required) as part of any and all licensed activities, it is not anticipated that any of the measures within Intervention 3 shall pose the potential for likely significant effects to European sites and/or their QIs.</p>	
Intervention 4 – Sustainable Forest Management		
Overall Objective	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text <i>“referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process”</i></p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>Any future measures and/or actions arising from this overall objective should be reviewed for potential likely significant effects on European sites and whether they may fall under the definition of a project for plan which might require an AA Screening.</p>
Measure 1: Forest Management Scheme: Element 1: Thinning, tending and agroforestry	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text <i>“referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a</i></p>	<p>All thinning related activities fall under the licensing requirement for forestry related activities.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review of whether there is any category of ‘thinning’ which might be considered lower risk, from an environmental and social perspective. Assuming there is, it would need to be verified through environmental assessment (using criteria set out in the SEA/ EIA/Habitats and Water</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p><i>mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process”</i></p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>Framework Directives) that the ‘thinning’ activity is objectively a low environmental risk, subject to any site-specific considerations, such that it merits a permit or registration procedure involving less control than a full licence. In each case it will be necessary for a prior AA screening to be carried out before the works proceed, with the right of DAFM to intervene to require AA to be carried out, and a licence application to be made for the proposed ‘thinning’ activity. For public and larger forests, it would be most efficient to define and assess the proposed thinning activities in a forest management plan or equivalent, subject to prior AA. This recommendation would require legislative amendments and significant preparatory work and assessment to set the criteria for the appropriate level of regulatory control for the ‘thinning’ activities concerned.</p>
Requirement	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process”</i></p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>All thinning related activities fall under the licensing requirement for forestry related activities.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review of whether there is any category of ‘thinning’ which might be considered lower risk, from an environmental and social perspective. Assuming there is, it would need to be verified through environmental assessment (using criteria set out in the SEA/ EIA/Habitats and Water Framework Directives) that the ‘thinning’ activity is objectively a low environmental risk, subject to any site-specific considerations, such that it merits a permit or registration procedure involving less control than a full licence. In each case it will be necessary for a prior AA screening to be carried out before the works proceed, with the right of DAFM to intervene to require AA to be carried out, and a licence application to be made for the proposed ‘thinning’ activity. For public and larger forests, it would be most efficient to define and assess the proposed thinning activities in a forest management plan or equivalent, subject to prior AA. This recommendation would require legislative amendments and significant preparatory work and assessment to set the criteria for the appropriate level of regulatory control for the ‘thinning’ activities concerned</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
<p>Measure 2: Forest Management Scheme: Element 2 continuous cover forestry</p>	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>All thinning related activities to fall under the licensing requirement for forestry related activities.</p> <p>All Forest Owners receive support and training on biodiversity and AA obligations.</p>
<p>Requirements</p>	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
<p>Measure 3: Forest Management Scheme: (Element 3 coppice and coppice with standards)</p>	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p>	<p>All thinning related activities fall under the licensing requirement for forestry related activities.</p> <p>All Forest Owners to receive support and training on biodiversity and AA obligations.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
Requirements	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>All thinning related activities fall under the licensing requirement for forestry related activities.</p> <p>All Forest Owners to receive support and training on biodiversity and AA obligations.</p>
Measure 6: Forest management plans (iPLAN scheme)	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>Support and training on biodiversity and Appropriate Assessment obligations under the Habitats Directive to be delivered to all users of the iPLAN scheme.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review builds on the methodology employed in the Indicative Forestry Statement (2008) by consulting with the public and key stakeholders on the relevant data sets which may be available*, reliable, and relevant to be incorporated into the spatial mapping process, and the criteria which should be used to determine the categories (and sub-categories, if required) of areas which may be identified as suitable or unsuitable, perhaps with more granular breakdown of the type of forests which may be suitable in certain areas. As the goal is to move towards a more plan-led approach to forestry licensing, the objective should be to produce an up-to-date spatial map which will guide and support current and future forest policies and programmes, attract afforestation to the right areas, while respecting obligations under EU environmental directives. For this reason, prior to the adoption of any up-to-date version of the Indicative Forestry Statement and spatial map, it would be necessary to ensure that it is subject to assessment under the SEA and Habitats Directives. This would then potentially allow DAFM to filter licence applications by reference to that document and the spatial categorisation, by reference to (i)</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
		those which are more likely to be favourably considered from an environmental perspective, (ii) those which will require much greater levels of technical scrutiny, and (iii) those which are likely to be given less favourable consideration unless significant mitigations are proposed and carefully assessed. This would allow DAFM to deploy specialist resources where they are most needed, and to support the EU Forest Strategy 2030 for the right tree in the right place and for the right purpose.
Measure 7: Native woodland conservation	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	DAFM to incorporate environmental monitoring on all sites where native woodland conservation occurs.
Main requirements	<p>Mitigation stated within the overall objective for Intervention 4:</p> <p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	DAFM to incorporate environmental monitoring on all sites where native woodland conservation occurs.
Measure 8: Environmental enhancement scheme	Mitigation stated within the overall objective for Intervention 4:	Support and training on biodiversity and AA obligations under the Habitats Directive to be delivered to all users.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
Main requirements	<p>“All applications in relation to schemes that are part of this intervention will undergo a detailed project evaluation by the Department (via desk and field inspections, where required, and use of the GIS-based iFORIS system). “</p> <p>It is recommended that the following italicised text “<i>referral to statutory consultees, AA Screening and Appropriate Assessment (where required) under the Habitats Directive and screening for EIA to ensure compatibility with the environment. It is a mandatory requirement that all applications adhere to the environmental guidance set out within the guideline documents in Section 7.1 within the licensing application process</i>”</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	DAFM to incorporate environmental monitoring as an aspect of this measure.
Intervention 5: Developing skills and empowering people for SFM		
Measure 1: Forestry knowledge transfer groups (KTGs)	Mitigation recommendations for this Measure are found in the adjoining column.	<p>All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. receive education and training on the biodiversity and AA obligations.</p> <p>DAFM to incorporate the recommendation of the Independent Regulatory Review that DAFM Inspectors and other personnel directly involved in decision making are provided with regular access to relevant training opportunities, both internal and external, to keep abreast of relevant developments in EU and domestic environmental law, and the appropriate methodological approach to carrying out screening for AA and screening for EIA (where applicable) and assessing the implications for water quality and species. All personnel involved in the preparation of licence decisions would benefit from periodic refresher training on the duty to give reasons under section 7(3) of the Forestry Act and Regulation 21(1)(b) of the Forestry Regulations, which will include the reasons for the AA screening / AA determination.</p>
Measure 2: Training call for proposals	Mitigation recommendations for this Measure are found in the adjoining column	<p>All persons involved in the forestry licence application process, including applicants, landowners, licensed foresters etc. to receive education and training on the biodiversity and AA obligations.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review that DAFM Inspectors and other personnel directly involved in decision making are provided with regular</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
		<p>access to relevant training opportunities, both internal and external, to keep abreast of relevant developments in EU and domestic environmental law, and the appropriate methodological approach to carrying out screening for AA and screening for EIA (where applicable) and assessing the implications for water quality and species. All personnel involved in the preparation of licence decisions would benefit from periodic refresher training on the duty to give reasons under section 7(3) of the Forestry Act and Regulation 21(1)(b) of the Forestry Regulations, which will include the reasons for the AA screening / AA determination.</p>
Intervention 6 – Open Forests		
<p>Specific Requirements</p>	<p>Text outlined within the Draft IFSIP pertaining to Intervention 6 states: <i>“Applications for new forests will be submitted through the Afforestation Scheme as mentioned in intervention 1”</i></p> <p>All afforestation applications as part of Intervention 1 are required to adhere to and provide the following:</p> <p>The mandatory requirements relevant to the AA process found within the Draft IFSIP are:</p> <ul style="list-style-type: none"> – All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives. – Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned. – The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>. <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <ul style="list-style-type: none"> – (a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the 	<p>Follow-up environmental monitoring of the new forests created as part of Intervention 2.</p> <p>DAFM to integrate the recommendation of the Independent Regulatory Review to develop mandatory of ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive,</p> <ul style="list-style-type: none"> – (b) outside those areas, strive to avoid pollution or deterioration of habitats, and – (c) take appropriate enforcement action <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
Measure 2: The active forest	<p>Text outlined within the Draft IFSIP pertaining to Intervention 6 states:</p> <p><i>“Applications for new forests will be submitted through the Afforestation Scheme as mentioned in intervention 1”</i></p> <p>All afforestation applications as part of Intervention 1 are required to adhere to and provide the following:</p> <p>The mandatory requirements relevant to the AA process found within the Draft IFSIP are:</p> <ul style="list-style-type: none"> – All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives. – Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned. 	<p>Follow-up environmental monitoring to be carried out on forests created as part of the Neighbourwood Scheme.</p> <p>DAFM to incorporate the recommendation of the Independent Regulatory Review to develop mandatory of ‘no-go’ zones and ‘go-to’ or preferred areas for afforestation.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<ul style="list-style-type: none"> - The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>. <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <ul style="list-style-type: none"> - (a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive, - (b) outside those areas, strive to avoid pollution or deterioration of habitats, and - (c) take appropriate enforcement action <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
Requirements	The potential for likely significant effects is mitigated through the implementation of mitigation identified within Measure 2 (above).	All persons involved in the forestry licence application process, including foresters, advisors, contractors etc. to receive education and training on the biodiversity and AA obligations under the Habitats Directive
Measure 3: Heartwoods Environmental Target and Requirements	Text outlined within the Draft IFSIP pertaining to Intervention 6 states: “Applications for new forests will be submitted through the Afforestation Scheme as mentioned in intervention 1” All afforestation applications as part of Intervention 1 are required to adhere to and provide the following:	DAFM to incorporate the recommendation of the Independent Regulatory Review to develop mandatory ‘no-go’ zones and ‘go-to’ areas for afforestation.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>The mandatory requirements relevant to the AA process found within the Draft IFSIP are:</p> <ul style="list-style-type: none"> – All initial afforestation applications are screened for appropriate assessment (AA) to determine whether the proposed project, individually or in combination with other plans and projects, is likely to have a significant effect on any European site (i.e., Natura 2000 sites), in view of the site’s conservation objectives. – Afforestation applications within European sites (SAC or SPA) will only be approved if they are compatible with the conservation objectives of the European site and will not adversely affect the integrity of the site concerned. – The Minister has an obligation, pursuant to Regulation 20(3) of SI 191 of 2017 to refuse an application if, in his or her opinion, the proposed development is <u>likely to have significant adverse impact on nature conservation</u>. <p>Public authorities, in the exercise of their functions, insofar as the requirements of the Birds Directive and the Habitats Directive are relevant to those functions, shall—</p> <ul style="list-style-type: none"> – (a) take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive, – (b) outside those areas, strive to avoid pollution or deterioration of habitats, and – (c) take appropriate enforcement action <p>The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</p> <p>In lieu of the above requirements for all afforestation licence applications and considering that an afforestation licence is required for the Measures found within Intervention, it is not anticipated that Intervention 1 shall pose a likely significant effect on Natura 2000 sites and/or their QIs.</p> <p>With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
Intervention 7- Climate Resilient Reforestation		
Overall Objective	<p>Text within the overall objective of Intervention 7 states:</p> <p><i>“Mandatory replant conditions are determined as per Felling and Reforestation Policy (DAFM, 2017) and are consistent with Sustainable Forest Management Principles.... And “In addition to mandatory requirements set under replanting conditions, all interventions will be subject to the DAFM-Forest Service Forestry Standards, including the accepted species, origin and provenance list”</i></p> <p>In addition, the following text pertaining to Intervention 7 states:</p> <p><i>“Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums requires landowners to include specific measures, which are assessed by Department Inspectors. These includes a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation..... The replanting condition and other statutory obligations are determined as part of granting of the felling license Under the Forestry Act, 2014, S.I 191 of 2017”</i></p> <p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 7.
Measure 1: Resilient reforestation (Element 1: Reforestation for continuous cover forestry)	<p>The following text pertaining to Intervention 7 states:</p> <p><i>“Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums requires landowners to include specific measures, which are assessed by Department Inspectors. These includes a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation..... The replanting condition and other statutory obligations are determined as part of granting of the felling license Under the Forestry Act, 2014, S.I 191 of 2017”</i></p> <p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents</p>	DAFM incorporate follow to up environmental monitoring for sites that fall under Intervention 7.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
<p>Measure 2: Resilient reforestation (Element 2: Reforestation for native woodlands)</p>	<p>Text within the main requirements of Measure 2 states <i>‘The Native Woodland Scheme Framework applies’</i>.</p> <p>Requirements for the Native Woodland Scheme Framework includes the application of the Forest Service AA procedure and further safeguards for the environment⁸⁹.</p> <p>In addition, further text states: <i>“Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums requires landowners to include specific measures, which are assessed by Department Inspectors. These includes a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation..... The replanting condition and other statutory obligations are determined as part of granting of the felling license Under the Forestry Act, 2014, S.I 191 of 2017”</i></p> <p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	<p>DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 7.</p>
<p>Measure 3: Resilient reforestation: Element 3 (Reforestation for Biodiversity and water protection)</p>	<p>The following text pertaining to Intervention 7 states:</p> <p><i>“Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums requires landowners to include specific measures, which are assessed by Department Inspectors. These includes a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation..... The replanting condition and other statutory obligations are determined as part of granting of the felling license Under the Forestry Act, 2014, S.I 191 of 2017”</i></p>	<p>DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 7.</p>

⁸⁹ DAFM (2015) Native Woodland Conservation Scheme. September 2015. Forest Service, Department of Agriculture, Food & The Marine.. Accessed at <https://www.gov.ie/en/service/803ef3-native-woodland-conservation-scheme/> on 10/10/2022.

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	
Intervention 8 – Reconstitution		
Overall Objective	<p>Text within the Draft IFSIP pertaining to Intervention 8 states:</p> <p>Explanation as to how the commitment goes beyond mandatory requirements</p> <p><i>Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums require landowners to include specific measures, which are assessed by Department Inspectors. These include a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard to establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</i></p> <p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	<p>DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 8.</p>
Measure 1: Reconstitution Scheme	<p>Text within the Draft IFSIP pertaining to Intervention 8 states:</p> <p>Explanation as to how the commitment goes beyond mandatory requirements</p> <p><i>Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums require landowners to include specific measures, which are assessed by Department Inspectors. These include a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard to establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</i></p>	<p>DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 8.</p>

Intervention, Measure, Requirement	Pre-existing Mitigation within the draft IFSIP	Further Mitigation
	<p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites. With the implementation of the above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites.</p>	
Requirements	<p>Text within the Draft IFSIP pertaining to Intervention 8 states:</p> <p>Explanation as to how the commitment goes beyond mandatory requirements</p> <p><i>Whilst the schemes align with specific objectives of Article 6, the requirements for payments for grants and premiums require landowners to include specific measures, which are assessed by Department Inspectors. These include a suite of mandatory measures relating to biodiversity, environmental protection and the provision of ecosystem services. The schemes as applied, must be in compliance with the Forestry Act, 2014, S.I 191 of 2017 (as amended) and existing forestry requirements, such as adherence to the standards set out in the Forestry Standards Manual, Environmental Requirements for Afforestation and the Land Types for Afforestation. These include specific requirements with regard to establishment, land types, environmental protection, forest design, a prescribed list of species/provenance and origin for the planting material used.</i></p> <p>With the requirement that schemes be in compliance with the Forestry Act 2014 S.I. 191 of 2017 in addition to the mandatory adherence to the suite of documents aforementioned above, it is not anticipated that this objective shall pose any potential for likely significant effects to European sites</p>	<p>DAFM to incorporate follow up environmental monitoring for sites that fall under Intervention 8.</p>

7.4 In-Combination Effects Recommendations

Mitigation to prevent significant in-combination adverse effects and to avoid adverse impacts on the integrity of any European site and the Key Receptors are presented in Table 12.

Table 12 Recommended Mitigation for the In-Combination Effects

Policy Level	Plan/ Program/ Policy	Recommended Mitigation
European Union	Common Agricultural Policy (CAP)	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the CAP and the Draft IFSIP.
European Union	Energy 2020 – A strategy for competitive, sustainable, and secure energy	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the Energy 2020 and the Draft IFSIP.
European Union	The Renewable Energy Directive (2009/28/EC)	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the Renewable Energy Directive and the Draft IFSIP.
European Union	The EU Policy Framework for Climate and Energy in the period from 2020 to 2030	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the EU Policy Framework for Climate and Energy and the Draft IFSIP.
Irish national policy	Food Wise 2025	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of Food Wise 2025 and the Draft IFSIP.
Irish national policy	Food Vision 2030 - A World Leader in Sustainable Food Systems	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the Food Vision 2030 and the Draft IFSIP.
Irish national policy	Action Plan for Rural Development (2019)	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the Action Plan for Rural Development and the Draft IFSIP.
Irish national policy	National Implementation Plan for the Sustainable Development Goals (2018-2020)	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the National Implementation Plan for the Sustainable Development Goals and the Draft IFSIP.
Irish national policy	National Renewable Energy Action Plan	The mitigation and recommendations prescribed in Table 7 and Table 8 in combination with the mandatory guidance documents and relevant legislation found in Section 7.1 provides sufficient mitigation to avoid the potential for likely significant in-combination effects from the interaction of the National Renewable Energy Action Plan and the Draft IFSIP.

8. Summary and Conclusion

8.1 Appropriate Assessment Findings

This NIR has considered the potential of the Draft IFSIP to give rise to likely significant effects which could adversely affect any European site with regard to their qualifying interests, associated conservation status and the overall site integrity. In considering the implementation of the Draft IFSIP and its nationwide scale, this NIR assessed the potential for the Draft IPFS to have likely significant effects on Annex I habitats, Annex II species and Annex I bird species that were identified to be vulnerable or at risk from forestry related activities which might be arise from the Draft IFSIP.

Habitats and species in this report were termed Key Receptors with impact prediction on European sites identified through assessment of the actions, interventions, measures and requirements set out in the Draft IFSIP. The precautionary approach has been applied in this determination of likely significant effects and where mitigation has been provided, these are underpinned by the principles of the protection of European sites and their qualifying interests.

Actions, interventions, measures and requirements found within the Draft IFSIP have been subject to Screening for AA and where potential for likely significant effects have been determined, brought forward to Stage 2 AA. Mitigation is outlined within the Draft IFSIP, which includes adherence to legal and statutory frameworks such as the Forestry Act 2014 and Forestry Regulations 2017 in addition to adherence to mandatory documents that are outlined in Section 7.1 of this NIR.

With the implementation of mitigation already contained within the Draft IFSIP, along with further mitigation as identified within this NIR for Actions, Interventions, Measures and Requirements. The implementation of the mitigation within the Draft IFSIP and the recommendations of this NIR provides sufficient evidence that the potential for likely significant effects has been mitigated.

8.2 Conclusion

In order for the AA to comply with the requirements of Article 6(3) the Habitats Directive and Part XAB of the Planning and Development Act 2000, a Stage 2 AA undertaken by the competent authority must include an examination, analysis, evaluation, findings, conclusions and a final determination. The information in this report will, along with all other submissions and observations received, enable the Department of Agriculture, Food and Marine to perform its statutory function in this regard.

This NIR has examined and analysed, in light of the best scientific knowledge, with respect to the relevant European sites, the potential impact sources and pathways, how these could impact on the QI habitats and QI/SCI species and whether the predicted impacts would adversely affect the integrity of the European sites. Mitigation measures are set out within this report to ensure that any impacts on the conservation objectives of European sites will be avoided and/or minimised during the implementation of the Draft IFSIP such that there will be no risk of adverse effects on European sites, from the Draft IFSIP either alone or in combination with other plans or projects.

Accordingly, in the professional opinion of the authors of this report, whilst it has been acknowledged that there is the potential in the absence of mitigation for the Draft IFSIP to have significant impacts on European sites, with the implementation of the mitigation measures identified in this NIR, the integrity of any European sites will not be adversely affected.

Appendix A

Tables

A.1 Article 17 Pressures, Threats and Conservation Measures

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B01	B	Conversion to forest from other land uses, or afforestation (excluding drainage)	<p>Increase in forest area, including planting of forests on grassland or heathland, or converting shrubs into forest.</p> <p>This pressure does not relate only to land use changes that occurred during the reporting period but it refers to instances where continuing the current forestry use of a natural/semi-natural habitat prevents the latter from being restored (e.g. in cases of land use conflicts between forestry and nature conservation for the restoration of some heathlands and peats, which were in the past afforested and are currently being managed and replanted as forests).</p>	CB01	Prevent conversion of (semi-) natural habitats into forests and of (semi-)natural forests into intensive forest plantation	Preventing the conversion of natural and semi-natural habitats, as well as habitats of species targeted by the nature directives, into forest (e.g., afforestation), preventing the conversion of natural and semi-natural forests into intensive forest plantations or monocultures.
B02	B	Conversion to other types of forests including monocultures	<p>Conversion of forest habitats into another type of forest habitat, often conversion from extensive forests into production forests (e.g., conversion to monocultures) but also other types of conversion (e.g., conversion from coppice to high forest or changes of tree species composition). Includes deliberate changes. Passive abandonment of traditional forest management should be reported as B04.</p> <p>This pressure does not relate only to land use changes that occurred during the reporting period, but it refers to instances where continuing the current forestry use of a natural/semi-natural habitat prevent the latter from being restored (e.g., in case of land use conflicts between forestry and nature conservation).</p>	CB02	Maintain existing traditional forest management and exploitation practices	<p>Maintaining existing (traditional or extensive) forest management and exploitation practices to preserve habitats or habitats for species or to avoid species disturbance.</p> <p>This includes maintaining traditional or extensive management, for example, to secure or develop old tree stocks, the old-growth and natural decay stages of forests (that are clearly beyond regular harvesting age), coppices, pollarding or secondary forest habitats (such as oak-hornbeam forest on potential beech habitats); this also includes maintaining the measures to favour the opening of closed woodlands, to preserve or restore habitat continuity, to manage species composition, or to retain habitat tree groups. Includes also keeping aside wilderness areas.</p>

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B03	B	Replanting with or introducing non-native or non-typical species (including new species and GMOs)	Replanting with non-native (including new tree species and genetically modified organisms) or non-typical species (i.e., native species which do not naturally occur as a part of a specific forest type or within a specific region) after forest exploitation or planting non-native or non-typical species in existing forests.	CB03	Reinstate forest management and exploitation practices	Reinstating (traditional or extensive) forest management and exploitation practices to preserve or to restore habitats or habitats for species targeted by the nature directives impacted by abandonment of traditional forestry use.
B04	B	Abandonment of traditional forest management	Abandonment of traditional management and maintenance of secondary forest habitats such as some oak and oak-hornbeam forests, chestnut forests or lichen-pine forests.	CB04	Adapt/manage reforestation and forest regeneration	Adapting or managing reforestation to restore habitats and habitats of species including for example the conversion of clear-fell plantations to long-term native woodland or the adaptation of reforestation techniques such as using natural regeneration or fire.
B05	B	Logging without replanting or natural regrowth	Decline in forest area due to non-replanting or absence of natural regrowth after forest exploitation.	CB05	Adapt/change forest management and exploitation practices	Adapting or changing forest management and exploitation practices to preserve or to restore habitats/habitats of species targeted by the nature directives or to avoid species disturbance. This can involve adapting and changing management practices in order to secure or develop old stocks of trees, to maintain coppices, to retain dead and dying trees and stumps, to favour opening of closed woodlands, to preserve or restore habitat continuity, to manage species composition, to prevent forest wildfires; but also adapting the time and duration of forestry activities to avoid disturbance of species. However, this excludes the management of drainage and irrigation, which are included under CB14.

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B06	B	Logging (excluding clear cutting) of individual trees	Logging (of individual trees) causing damage to e.g., standing trees, forest undergrowth or soil and springs.	CB06	Stop forest management and exploitation practices	Stopping (or avoiding) forest management and exploitation practices to preserve or to restore habitats or habitats for species targeted by the nature directives, or to avoid species disturbance. Includes the application of non-intervention management.
B07	B	Removal of dead and dying trees, including debris	Removal of dead and dying trees (e.g., to prevent forestry pests) and removal of fallen wood (e.g., for firewood collection, fire prevention or enabling access by machinery).	CB07	Combat illegal logging	Taking measures to stop and prevent illegal logging and pressures from this illegal activity.
B08	B	Removal of old trees (excluding dead or dying trees)	Targeted removal of old trees (e.g., to preserve the forest structure or to improve regeneration). Includes logging of mature trees (trees with a high potential to become old) in forests with a diverse age structure.	CB08	Restoration of Annex I forest habitats	Land previously used for agriculture (e.g., arable land), for industrial forestry plantations (e.g., poplar or eucalyptus plantations), or other land cover being restored or (re)created as an Annex I forest habitat type. This could be, for example, recreating an Annex I alluvial forest from farmland. It could take decades to fully restore the habitats structure and functions and it can include active restoration (seed sowing or planting new vegetation) or passive allowing natural succession.
B09	B	Clear-cutting, removal of all trees	Forest clearance (small to large scale removal of all trees) causing damage to forest habitat or habitats of species targeted by the nature directives, to soil or springs or other physical features.	CB09	Manage the use of chemicals for fertilisation, liming and pest control in forestry	Managing (reducing or eliminating) of the use of: - pesticides, herbicides and pest control products - fertilisers (mineral, manure, sludge) - liming.
B10	B	Illegal logging	Illegal logging e.g., organised illegal timber extraction.	CB10	Reduce diffuse pollution to surface or ground waters from forestry activities	Reducing diffuse pollution to surface and ground waters due to forestry activities.
B11	B	Cork extraction and forest exploitation excluding logging	Forest exploitation activities (e.g., cork extraction), excluding timber logging.	CB11	Reduce air pollution from forestry activities	Reducing air pollution due to forestry activities.

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B12	B	Thinning of tree layer	Removal of trees (including logging) of a certain tree layer(s) (upper or lower) in order to favour selected trees or to promote natural regeneration. Includes damage to soil, springs, forest habitats and undergrowth due to thinning.	CB12	Reduce marine pollution from forestry activities	Reducing marine pollution due to forestry activities.
B13	B	Burning for forestry	Burning as a forestry practice (e.g., burning waste after exploitation).	CB13	Reduce soil pollution from forestry activities	Reducing soil pollution due to forestry activities.
B14	B	Suppression of fire for forestry	Suppression of forest management practices using controlled burning and fire.	CB14	Manage drainage and irrigation operations and infrastructures	<p>Managing drainage and irrigation operations and infrastructure (including surface and groundwater abstraction, construction and operation of dams and altering of hydrological flow of rivers) as well as managing or restoring the hydrological regime of drained forest areas. The management of drainage and irrigation can include the possible cessation of these activities.</p> <p>This measure also includes restoring freshwater habitats impacted by changes of hydrological functioning due to drainage for forestry.</p>
B15	B	Forest management reducing old growth forests	Shortening of logging rotations or other activities like thinning aimed at earlier logging.	CB15	Other measures related to forestry practices	Other measures related to forestry practices or forest habitats not covered by the other CB measures.
B16	B	Wood transport	Construction and maintenance of logging roads and tracks (closed to public circulation), wood transport within forest (damaging forest undergrowth, soil and springs) and poor management of wood transport (e.g., leaving the felled wood in piles in forests during summer or damage to soil).			
B17	B	Tillage practices in forestry and other soil management practices in forestry	Using tillage or other soil management practices in forestry (e.g., preparation of soil for forest replanting).			
B18	B	Application of natural fertilisers	Use, application, treatment and stocking of natural fertilisers (e.g., manure, slurry) in forestry.			

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B19	B	Application of synthetic fertilisers in forestry, including liming of forest soils	Use, application, treatment and stocking of synthetic fertilisers in forestry.			
B20	B	Use of plant protection chemicals in forestry	Use of plant protection chemicals in forestry (e.g., pesticides, fungicides, pheromones or repulsives).			
B21	B	Use of physical plant protection in forestry, excluding tree layer thinning	Use of physical or mechanical plant protection in forestry (e.g., enclosure fencing, protective cages/sleeves around trees/saplings, cutting weeds, mulching).			
B22	B	Use of other pest control methods in forestry	Use of other pest control methods in forestry (e.g., biocontrol).			
B23	B	Forestry activities generating pollution to surface or ground waters	This pressure addresses diffuse water pollution resulting from activities which cannot be directly attributed to specific activities covered by other level 2 pressures (e.g., diffuse pollution due to application of fertilisers or plant protection chemicals should be reported under respective activities B19, Application of synthetic fertilisers in forestry, including liming of forest soils or B21 Use of physical plant protection in forestry, excluding tree layer thinning).			
B24	B	Forestry activities generating air pollution	This pressure addresses air pollution resulting from forestry activities.			
B25	B	Forestry activities generating marine pollution	This pressure addresses marine pollution resulting from activities which cannot be directly attributed to specific activities covered by other level 2 pressures (e.g., marine pollution due to the application of fertilisers or plant protection chemicals should be reported under respective activities B19 Application of synthetic fertilisers in forestry, including liming of forest soils or B21 Use of physical plant protection in forestry, excluding tree layer thinning).			
B26	B	Forestry activities generating soil pollution	This pressure addresses soil pollution resulting from activities which cannot be directly attributed to specific activities covered by other level 2 pressures (e.g., soil pollution due to application of fertilisers or plant protection chemicals should be reported under respective activities B19 Application of synthetic fertilisers in forestry, including liming of forest soils or B21 Use of physical plant protection in forestry, excluding tree layer thinning).			

Code	B	Forestry	Description	CB	Measures related to forestry and forest-related habitats	Description
B27	B	Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams)	Activities modifying the physical structure or hydrological functioning of water bodies triggered by forestry production and exploitation, and activities aimed at drying out the land to facilitate forestry production or exploitation (e.g., altering of flooding regimes, canalisation of rivers, cutting of the oxbow lakes, building draining canals).			
B28	B	Forests for renewable energy production	Conversion of forest or non-forest habitats into short rotation coppices (e.g., coppices of willow, poplar or eucalyptus) or converting or maintaining existing forest as short rotation coppices/forests (e.g., chestnut forests) for biomass production and other pressures from forestry biomass production.			
B29	B	Other forestry activities, excluding those relating to agro-forestry	Other forestry activities not mentioned above (e.g., example pruning).			