2026

Perth and Kinross Forest and Woodland Strategy Review –SEA Scoping Report

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Perth and Kinross Council

April 2026

PERTH & KINROSS COUNCIL

PKC LOCAL DEVELOPMENT PLAN

Cover Note

Part 1		
1.1		An SEA Scoping Report is attached for the Perth and Kinross Local Forestry and Woodland Strategy (FWS)
1.2		The Responsible Authority is Perth and Kinross Council
Part 2		
In respect of the requirements under the Environmental Assessment (Scotland) Act 2005, it is the view of Perth and Kinross Council that:		
2.1	☒	The PPS falls under the scope of Section 5[3] of the Act and **requires an SEA** under the Environmental Assessment (Scotland) Act 2005 **OR**
2.2	☐	The PPS falls under the scope of Section 5[4] of the Act and **requires an SEA** under the Environmental Assessment (Scotland) Act 2005 **OR**
2.3	☐	The PPS does **not require an SEA** under the Environmental Assessment (Scotland) Act. However, we wish to carry out an SEA on a voluntary basis. We accept that, as the SEA is voluntary, the Consultation Authorities cannot guarantee a response containing their views within the statutory five-week timescale.
Part 3		
3.1	**Contact Name**	Ciara Gray
3.2	**Job Title**	Principal Planning Officer – Development Plans Team
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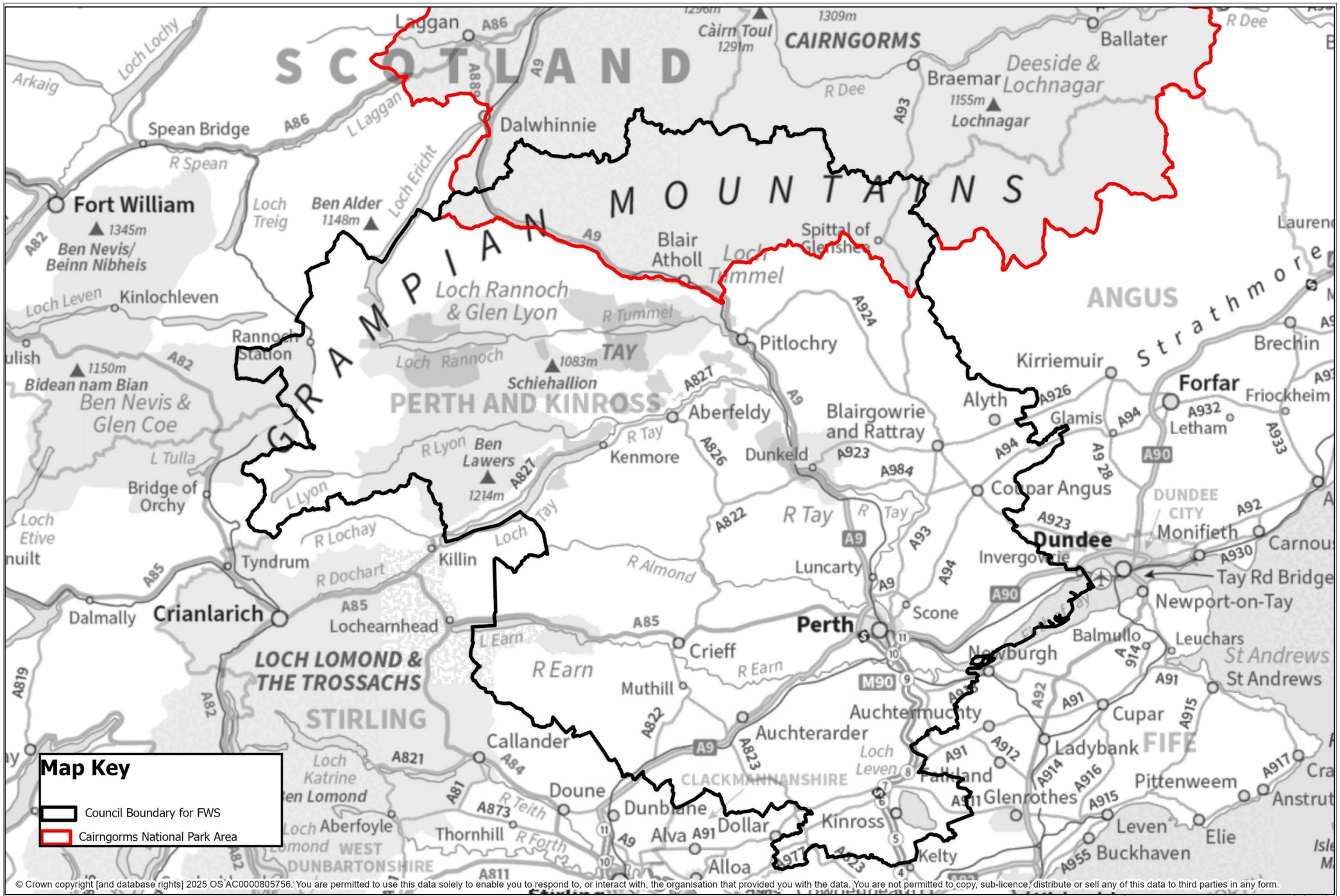
Date		27/04/26

Key Facts about the FWS Review:

Title of Plan, Programme or Strategy (PPS)	Perth and Kinross Forestry and Woodland Strategy
What prompted the PPS?	Legislative requirement – Part VII, Section A159 of the Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2019
Subject	Forestry
Period covered by the PPS	10 years from the approval of the FWS
Frequency of Updates	10 years or sooner if required
Area Covered by the PPS	Perth and Kinross Council Area, excluding the northern section which is within the Cairngorms National Park (See Figure 1 to follow)
Purpose of the PPS	In line with the 2019 Planning (Scotland) Act, the Perth and Kinross FWS review will set out Perth and Kinross Council's proposals as to the development of forestry and woodland; the protection and enhancement of woodlands, in particular those of high nature conservation value; the resilience of woodlands of high nature conservation value; the expansion of woodlands of a range of types to provide multiple benefits to the physical, cultural, economic, social, and environmental characteristics of the area, and any other matter which the planning authority consider appropriate. The Strategy will also identify woodlands of high nature conservation value within our area.

Figure 1: Area Covered by the Perth and Kinross Forestry and Woodland Strategy



Area Covered by the Perth and Kinross FWS

October 2025

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GLOSSSARY OF TERMS AND ABBREVIATIONS

Biodiversity	Biodiversity is the variety of life on Earth at all levels (from genes to ecosystems), and the natural patterns that it forms. It is essential to the processes which support all life on earth ecosystem services. Protecting biodiversity is crucial in reducing greenhouse gas emissions.
Carbon Sequestration	A natural or artificial process through which carbon dioxide is removed from the earth's atmosphere and held in either a solid or liquid form.
Climate Resilience	Is the ability to prepare for, recover from, and adapt to the impacts of climate change whilst preventing those impacts from growing worse.
Consultation Authorities	Organisations with a particular status for involvement in the SEA process under the Act. In Scotland, these are the Scottish Ministers (Historic Environment Scotland (HES)), Nature Scot, and Scottish Environment Protection Agency (SEPA).
Cultural Heritage	The qualities and attribute of places that have aesthetic, historic, scientific or social value for past, present or future generations. These values may be seen in a place's physical features but can also be intangible qualities such as people's association with, or feelings for, a place.
Ecosystem Services	Ecosystem Services are the benefits that come from nature to people. They can be provisioning services (e.g. supply of food, clean air, water, and materials), regulating services (e.g. water and climate regulation, nutrient cycling, pollination, formation of fertile soils), or cultural services (e.g. recreation opportunities, inspiration drawn from nature). Natural ecosystems are typically multi-functional, which means they can provide a wide range of these services at the same time.
Environmental Assessment	A tool for integrating environmental considerations into decision making by assessing significant environmental effects. In the SEA Act, an environmental assessment means the preparation of an Environmental Report, the carrying out of consultations, the taking into account of the Environmental Report and consultation results in decision making, and the provision of information on the decision in accordance with the requirements of the Act.
Environmental Baseline	Data which describes issues and conditions at the beginning of the SEA process. It serves as a starting point for measuring impacts, performance etc., and the ecological and evolutionary processes that sustain it.
Environmental Enhancement	Measures envisaged to maximise the benefits of the positive actions of implementing the Strategy.
Environmental Report	Document required by the SEA Act as part of an environmental assessment, which identifies, describes and evaluates the likely significant impacts on the environment of implementing a plan, programme or strategy.
Local Development Plan (LDP)	A plan which sets out, for the land in the part of the district it relates to, a spatial strategy; any other such matters as may be prescribed by the Scottish Ministers, and any other matters which the planning authority consider appropriate to include.
National Planning Framework 4 (NPF4)	NPF4 is the national spatial strategy for Scotland. It sets out the Scottish Government's spatial principles, regional priorities, national developments, and includes a suite of national planning policy. NPF4 was adopted in February 2023.
Native Woodland	Native Woodlands are woods where the canopy cover is mainly made up of native species i.e., over 50%.
Nearly Native Woodland	Nearly Native Woodlands are where native tree species make up between 40% and 50% of the canopy. These woods have the potential to be converted into native woodlands through changing their species mix.
Plantations on Ancient Woodland Sites (PAWS)	PAWS are surveyed in the Native Woodland Survey of Scotland (NWSS), where they are recorded in the Scottish Ancient Woodland Inventory. These woodlands seem to have originated as a result of natural regeneration sometime prior to the mid-19th Century but were later converted to planted woods.
Tree Preservation Order (TPO)	A TPO is made by the Local Authority, under Section 160 of the Town and Country Planning (Scotland) Act 1997, and within the procedures set out in the Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 1975-1984. They are made to protect individual trees, groups of trees or woodlands which have particular amenity value, make a significant contribution to the landscape or townscape or because there may be a potential threat to the trees. Any management work to trees which are subject to a TPO requires consent from the relevant planning authority for the area.
Woodland of High Nature Conservation Value	A woodland of high nature conservation value can be described as: native woodland and scrub identified by the Native Woodland Survey of Scotland (NWSS); ancient woodland and ancient semi-natural woodland, including Plantations on Ancient Woodland Sites (PAWS) and Long-Established woodlands of Plantation Origin (LEPO); woodland that is integral to the value of designated or special sites (SACs, SPAs, SSSIs, Ramsar sites, and National Nature Reserves (NNRs)), and wood pasture.

1 INTRODUCTION

Requirement for SEA

1.1 The Environmental Assessment (Scotland) Act 2005 requires qualifying plans, programmes, and strategies (PPS), developed by public bodies, to be subject to Strategic Environmental Assessment (SEA). As the Perth and Kinross Forestry and Woodland Strategy (FWS) review deals with the subject matter of forestry and is likely to result in significant environmental effects (both positive and negative), it classified as a qualifying plan under Section 5(3)(a) of the 2005 Act, and therefore SEA requires to be undertaken. As such, Perth and Kinross Council has chosen not to carry out SEA Screening for our FWS review, but rather to proceed straight to Scoping stage. This Scoping Report is the record of that process.

Benefits of SEA

1.2 The purpose of carrying out SEA is to help gauge the potential impact of a public plan on the environment and to identify ways to minimise any likely negative effects if those effects are anticipated to be significant. The SEA process has the potential to make a real and valuable contribution to the plan preparation process through ensuring that any likely environmental impacts of the Strategy's policies and proposals are fully understood, and any significant environmental effects are addressed.

Role of this Scoping Report

1.3 The role of this SEA Scoping Report is to set out sufficient information on Perth and Kinross Council's FWS review, to allow the Consultation Authorities (Historic Environment Scotland, Nature Scot, and Scottish Environment Protection Agency) to form a view on the adequacy and appropriateness of the scope and level of detail proposed for the environmental assessment, and the consultation period for the SEA Environmental Report.

1.4 The contents and methodology may be amended following consultation with the Consultation Authorities. A record of consultation responses and subsequent changes made will be kept using the template in Section 8 of this report.

Linkages between Local Development Plan 3 and the FWS Review

1.5 National Planning Framework 4 (NPF4), Policy 6: Forestry, Woodland and Trees, expects Local Development Plans to:

- Identify and protect existing woodland and the potential for its enhancement or expansion to avoid habitat fragmentation and improve ecological connectivity, helping to support and expand nature networks, and
- LDP spatial strategies should identify and set out proposals for forestry, woodlands, and trees in the area, including their development, protection and enhancement, resilience to climate change, and the expansion of a range of types to provide multiple benefits. <u>This is to be supported and informed by an up to date forestry and woodland strategy.</u>

1.6 The 'Policy Intent' of NPF4 Policy 6 is noted as – 'To protect and expand forests, woodland and trees', and the 'Policy Outcomes' are identified as:

- Existing woodlands and trees are protected, and cover is expanded.
- Woodland and trees on development sites are sustainably managed.

1.7 In terms of the requirement for an up to date strategy, the Planning (Scotland) Act 2019 requires planning authorities to prepare a forestry and woodland strategy which:

- Identifies woodlands of high nature conservation value within the planning authority's area.
- Sets out the planning authority's proposals as to the development of forestry and woodlands; the protection and enhancement of woodlands, in particular those of high nature conservation value; the resilience of woodlands of high nature conservation value; the expansion of woodlands of a range of types to provide multiple benefits to the physical, cultural, economic, social, and environmental characteristics of the area, and any other matter which the planning authority consider appropriate.

1.8 During early to mid-2024, the Council produced and consulted on a series of topic papers, to help inform the development of our LDP3 Evidence Report and SEA Scoping Report. These papers set out the evidence collated and reviewed on each of the NPF4 national policies topics, and the Council's summary of implications of those sources of evidence for the development of the Proposed Plan. Topic Paper 007: Forestry, Woodland, and Trees, and Issue 004 of our LDP3 Evidence Report set out much of the data and information which forms the basis of the SEA environmental baseline included within this Scoping Report. However, where appropriate, data contained within several of the other topic papers and evidence report issues have also been drawn upon for this SEA, particularly in relation to Issues 001: Tackling the Climate and Nature Crises; 002: Biodiversity and Natural Places; 003: Soils; 013: Blue and Green Infrastructure, and 015: Flood Risk and Water Management.

SEA Scoping Questions

1.9 Views and comments from the Consultation Authorities and other stakeholders would be particularly welcome on the list of questions provided on the following page. However, additional feedback on any relevant matters not covered through the prescribed questions would also be appreciated. Please note, for ease of reference, these questions have also been repeated throughout this Report, under the corresponding sections.

SEA Scoping Questions:

1. Are there any plans, programmes, strategies, legislation, or policy guidance of relevance to FWS review that you consider should be added to the list in Appendix A?
2. Do you agree with the baseline data collected is appropriate to our FWS?
3. Are you aware of any additional baseline evidence that would help inform the assessment process?
4. Does your organisation agree with the proposed vision, priorities, contributing themes and objectives for the FWS review outlined under Section 4 of this Scoping Report?
5. Does your organisation agree that all the significant environmental issues relevant to the FWS review have been included? If not, can you suggest further issues you believe should be included?
6. Do you agree with the proposed scope for the SEA of our FWS?
7. Do you agree the proposed SEA Objectives (Table 6.1) cover the breadth of environmental issues appropriate for the area covered by the Strategy?
8. Do you agree that the proposed indicators (Table 6.1) provide a relevant measure for the associated objective? If not, can you suggest additional/ alternative indicators?
9. Do you think the proposed approach to undertaking the environmental assessment of the FWS review as set out under Section 7 of this Scoping Report?
10. Is the proposed consultation period and means of undertaking that consultation adequate?
11. Are there any other comments you wish to provide which are not covered through Questions 1 to 10 above?

2 STRATEGY CONTEXT

Purpose and Structure of the Report

2.1 This Scoping Report sets out the background information that will be used in undertaking the Strategic Environmental Assessment of the Perth and Kinross FWS. As previously identified in Section 2, data and evidence gathered for our series of LDP3 Topic Papers and Evidence Report preparation, where relevant, will also be used to inform both the SEA of LDP3 and the development of the Proposed Evidence Report for the Plan. This report has been prepared in accordance with Section 15 of the Environmental Assessment (Scotland) Act 2005. It sets out the background information that will be used in the preparation of the Environmental Report, which includes:

- Those topics which are being scoped in for the environmental assessment
- The level of detail (spatial, temporal, and technical) of that assessment
- Proposed SEA Objectives and Indicators
- Proposed alternatives
- An outline of the proposed assessment approach/ methodology
- A proposed timetable for completion of the Environmental Report and Proposed LDP3

2.2 The range of environmental topics covered in the SEA is referred to as the technical scope. Schedule 3 of the 2005 SEA Act requires that the likely significant effects of the FWS are assessed in relation to the following:

- Biodiversity, Flora and Fauna
- Population
- Human Health
- Soil
- Water
- Air
- Climatic Factors
- Material Assets
- Cultural Heritage
- Landscape

2.3 The Act also requires that:

- The inter-relationships between the above factors are assessed, and
- The secondary, cumulative, synergistic, short, medium, and long-term, permanent, and temporary, positive, and negative effects of the above topics are considered where appropriate.

The Forestry and Woodland Strategy Area

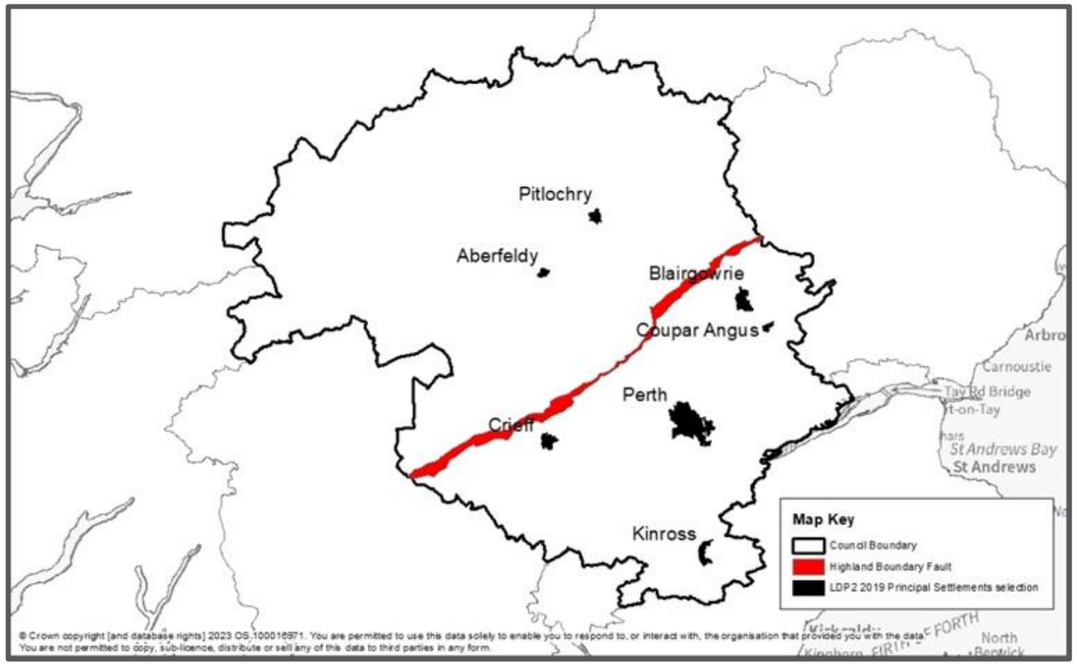
2.4 The Perth and Kinross Council Area is situated in the heart of Scotland, just north of the Central Belt bordering Aberdeenshire, Angus, City of Dundee, Fife, Clackmannanshire, Stirling, Argyll and Bute, and Highland Council areas. The Cairngorms National Park is located to the north, and the Loch Lomond and the Trossachs National Park to the west.

2.5 The Area covers 5,286 Km^2 (4,707 Km^2 excluding the part of Perth and Kinross within the Cairngorms National Park) and is the 5th largest unitary authority in terms of area in Scotland, and the 12th largest in respect of population size. It is an area of outstanding natural beauty, containing both highland and lowland landscapes.

2.6 The area is characterised by a diverse mix of urban and rural communities, from the main population centre of Perth, and towns such as Blairgowrie, Crieff, Kinross, Auchterarder and Pitlochry, to extremely remote communities such as Kinloch Rannoch in the Highland area.

2.7 The Highland Boundary Fault (Figure 2) runs across the area from the northeast to the southwest, roughly dividing the landscape of Perth and Kinross between the distinct geological areas of Highland Perthshire, and Lowland Perthshire and Kinross. The division is very much reflected in the topography, vegetation, and land use of those areas. Both are characterised by a diverse mix of rural and urban land use, which varies considerably from rich lowland arable farming to extensive upland forestry, and from the main population centre of Perth to small, remote communities, such as Kinloch Rannoch.

Figure 2: The Highland Boundary Fault Line with the Perth and Kinross Council Area



Relationship with other Relevant PPS

2.8 The review of plans, programmes and strategies (PPS) as part of the SEA process is a useful way of ensuring that the relationship between these documents and the FWS is fully explored, and that the relevant environmental protection and sustainability objectives are considered through the SEA.

2.9 Reviewing other PPS can also provide appropriate information on the baseline for the plan area and the key environmental issues. The PPS thought to have an influence on, or be influenced by, the FWS, are set out in Appendix A to this report. A comprehensive analysis of relevant PPS was also undertaken as part of the Scoping exercise for the higher level Local Development Plan 3, and the results of that exercise were used to identify the key issues across the Perth and Kinross area and develop the SEA Objectives that will be used in the assessment of that plan. Therefore, to avoid duplication and to apply a proportionate approach, the analysis in Appendix A of this report concentrates on those PPS which are thought to be particularly relevant to forestry, woodlands and trees.

2.10 There are a range of other plans, programmes, strategies and guidance (PPS) documents which are of relevance to, and will also influence, the development of our FWS. The main PPS connected to our FWS review have been summarised in the paragraphs to follow.

The Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2019

2.11 The 2019 Act was passed by the Scottish Parliament in June 2019. The content of the Act determines the structure of the land use planning system in Scotland. It includes details relating to the required form and content of the national planning framework and new local development plans to be prepared under the Act, along with participation and engagement requirements. With respect to forestry and woodland strategies, it requires planning authorities to prepare up to date strategies which:

- Identify woodlands of high nature conservation value within the planning authority's area.
- Sets out the planning authority's proposals as to the development of forestry and woodlands; the protection and enhancement of woodlands, in particular those of high nature conservation value; the resilience of woodlands of high nature conservation value; the expansion of woodlands of a range of types to provide multiple benefits to the physical, cultural, economic, social, and environmental characteristics of the area, and any other matter which the planning authority consider appropriate.

National Planning Framework 4

2.12 The most recent National Planning Framework, more commonly known as NPF4, was adopted in February 2023. NPF4 is required under the Planning (Scotland) Act 2019 and sets out the Scottish Ministers' policies and proposals for the development and use of land. The Framework plays a key role in supporting the delivery of Scotland's 11 National Outcomes, and the United Nations 17 Sustainable Development Goals.

2.13 NPF4 is divided into 3 parts. Part 1 provides a long-term Spatial Strategy for Scotland to 2045. It includes 6 overarching spatial principles, which all future places are to be planned in line with; an introduction to each of the Framework's 3 key themes: Sustainable Places, Liveable Places, and Productive Places, and an overview as to how the delivery of these themes will be supported by the National Spatial Strategy and individual National Developments. Part 1 also includes a section on Regional Spatial Priorities for the 5 identified regions. The Perth and Kinross area falls within the North and Central regions. Part 2 is the National Planning Policy section, containing 33 individual topic or issue-based policies, divided up by relevance, under the Framework's 3 key themes. Finally, Part 3 contains Annexes A to G. These provide, amongst other things: a guide on how to use the Framework; Statements of Need for each of the 18 National Developments identified in NPF4; detailed information on Spatial Planning Priorities for the 5 regions, which is to help guide the preparation of Regional Spatial Strategies and Local Development Plans; and the Minimum All-Tenure Housing Land Requirements (MATHLR) for each Local and National Park Authority area in Scotland.

2.14 Unlike previous iterations of the National Planning Framework, NPF4 forms part of the Statutory Development Plan, alongside Local Development Plans (LDPs). It supersedes both NPF3 and Scottish Planning Policy (SPP) (2014), and all strategic development plans (SDPs), including TAYplan, and any supplementary guidance issued in connection with SDPs.

2.15 The content and format of the Framework reinforces the importance of the interconnected nature of the policies, and the Scottish Government's expectations for the planning system to take a place-based approach to facilitate the delivery of place-based outcomes. It also makes it clear that the dual crises of climate and ecology must both be given significant weight in land use planning decision making for all development proposals.

2.16 Under the 2019 Planning Act the duty on planning authorities for the four largest city regions to prepare Strategic Development Plans was repealed and replaced by a requirement for all planning authorities (working together as they see fit) to prepare and adopt a Regional Spatial Strategy. Unlike Strategic Development Plans, Regional Spatial Strategies do not form part of the Statutory Development Plan. Secondary legislation regarding the content of and requirements for Regional Spatial Strategies has not been published yet.

2.17 Policy 6 of NPF4 deals specifically with the subject matter of forestry, woodland, and trees. It expects Local Development Plans to:

- Identify and protect existing woodland and the potential for its enhancement or expansion to avoid habitat fragmentation and improve ecological connectivity, helping to support and expand nature networks, and
- LDP spatial strategies should identify and set out proposals for forestry, woodlands, and trees in the area, including their development, protection and enhancement, resilience to climate change, and the expansion of a range of types to provide multiple benefits. This is to be supported and informed by an up to date Forestry and Woodland Strategy.

2.18 The Policy Intent of NPF4 Policy 6 is noted as 'To protect and expand forests, woodland and trees, and the Policy Outcomes are:

- Existing woodlands and trees are protected, and cover is expanded.
- Woodland and trees on development sites are sustainably managed

Perth and Kinross Council Corporate Plan 2022-2027

2.19 Our FWS review will be prepared within the context of the Council's Corporate Plan, which sets out the Council's vision for a Perth and Kinross 'where everyone can live life well, free from poverty and inequality.' It proposes a number of key priorities for the 5-year period 2022 to 2027. It also reflects the principles of the Perth and Kinross Offer.

2.20 The Corporate Plan identifies 7 priority areas which the Council feels it can directly influence and have the most impact upon, and those which are most important to delivering the Vision for Perth and Kinross. These priorities are:

1) Working in partnership with communities
2) Tackling poverty
3) Tackling climate change and supporting sustainable places
4) Developing a resilient, stronger, and greener local economy
5) Enabling our children and young people to achieve their full potential
6) Protecting and caring for our most vulnerable people
7) Supporting and promoting physical and mental wellbeing

2.21 Delivery of the Corporate Plan's Priorities will be underpinned by a set of Key Principles and delivered through a range of Key Actions.

Perth and Kinross Community Plan (LOIP) 2022-2032

2.22 The Community Plan sets out the Community Planning Partnership's (CPP) ambition for the area, which is for Perth and Kinross '…to be the best place in Scotland for everyone to live life well, free from poverty and inequality', and what the CPP will do over the following 12 months and beyond to help realise that ambition.

2.23 The Plan's priorities focus on inequalities which are stubborn and need new collaborative approaches. The priorities are:

1. Reducing Poverty
2. Physical and Mental Wellbeing
3. Digital Participation
4. Learning and Development
5. Employability

2.24 In addition to the above 5 Strategic Priorities, the Community Plan identifies 2 cross-cutting issues:

1. Climate Change and a Just Transition to a Net Zero Scotland by 2045 – CPP Climate Change Working Group has been established to address specific inequalities brought by climate change and provide a forum for partners to collaborate on climate change related actions
2. Cost of Living Crisis – take joint action to mitigate the impact on people and communities in Perth and Kinross.

2.25 The Community Plan, in outlining the national strategic context, highlights that in addition to the Community Empowerment Act, other key policy drivers which influence the delivery of community planning. Those which are specifically linked to land use planning include: NPF4, and the need to ensure the priorities of local community partnerships are aligned with any local place plans to help support delivery of the Place Principle; and the concept of 20 minute neighbourhoods.

Perth and Kinross Council Climate Change Strategy and Action Plan (2021)

2.26 In December 2021 the Council adopted its first PKC Climate Change Strategy and Action Plan (CCSAP). It was produced in response to the UK Parliament and Scottish Government's environment and climate emergency declaration statements in Spring 2019. The purpose of the CCSAP is to turn the intent of the Council's support for these emergency declarations into practice. It sets out the next steps and an initial route map to take us to a net zero carbon and climate resilient Perth and Kinross. Public engagement work was carried out on the Draft Strategy and Action Plan during 2020 and 2021 to help shape the final documents.

2.27 The Strategy sets out the legislative framework, including national targets; outlines key emissions trends; establishes six overarching principles to shape the long-term approach to climate change for the area, and contains 27 Council Commitments which are needed to achieve the outcomes. The overarching principles are:

1. Achieving Net Zero aligned with the Paris Agreement and the Scottish Government Targets, with the ambition of achieving them sooner.
2. Building a more resilient Perth and Kinross.
3. Ensuring climate action is fair and benefits all and we deliver a green recovery from Covid-19.
4. Enhancing biodiversity to help avoid an ecological emergency.
5. Engaging and empowering young people to take action on climate change.
6. Empowering our communities and businesses to take climate action in line with the Perth and Kinross Offer.

2.28 The Action Plan is then divided into 8 thematic areas: Transport; Buildings and Energy; Business and Industry; Waste and Circular Economy; Land Use (incorporating LULUCF); Climate Resilience; Education and Engagement, and Governance. For each of these thematic areas or sectors, it provides details on - existing action to date within the area; a list of key themes for each sector and related actions; a Road Map to deliver these actions; key challenges and opportunities, and corresponding Key Performance Indicators (KPIs) to help measure progress.

2.29 Originally, 146 Actions were identified in the Council's Climate Action Plan, spread across the 8 themes. That number has since risen to approximately 204, because of new actions being identified through the Council's 8 internal Climate Change Working Groups, which are made up of officers from different teams across various Council services, who are tasked with the delivery of the actions, often in partnership with other stakeholders. The groups regularly review their list of actions to ensure they remain appropriate. To date, a number of the actions have already been or are close to being delivered, and progress against these actions is regularly monitored.

2.30 The Action Plan identified a review of the Council's Forest and Woodland Strategy as a priority action.

ARUP, Perth and Kinross Climate Risk and Opportunity Assessment Technical Report (2023)

2.31 The Climate Change (Scotland) Act 2009 places a legal duty on public bodies, such as Perth and Kinross Council, to adapt to the impacts of climate change. Statutory climate change reporting requirements also include a provision for public bodies to report on how they are contributing to national objectives for climate change adaptation and resilience, as set out in the Scottish Climate Change Adaptation Programme (SCCAP).

2.32 Considering this requirement, Perth and Kinross Council commissioned ARUP to develop our first Climate Change Risk and Opportunity Assessment (CCROA) and risk and opportunities register, in response to the increasing risks and impacts of current and future climate change on the Council Area and its assets and operations. This information is fundamental for informing the prioritisation of climate action, investment in adaptation, and supporting community resilience groups. It builds on the work already being undertaken through the Council's Climate Action Plan and through those community groups.

2.33 The assessment used the Met Office's UKCP18 climate projections and SEPA's flood maps to understand how the climate is changing in Perth and Kinross; these data sources, along with a literature review and stakeholder engagement exercises, were then used to identify risks and opportunities. The risks were then scored to help understand the likelihood and impact, and to inform future prioritisation of action. The risks were categorised into 5 different themes:

1. Health, Communities, and the Built Environment
2. Business and Industry
3. Infrastructure
4. Nature
5. Risks and Opportunities of relevance to Perth and Kinross Council

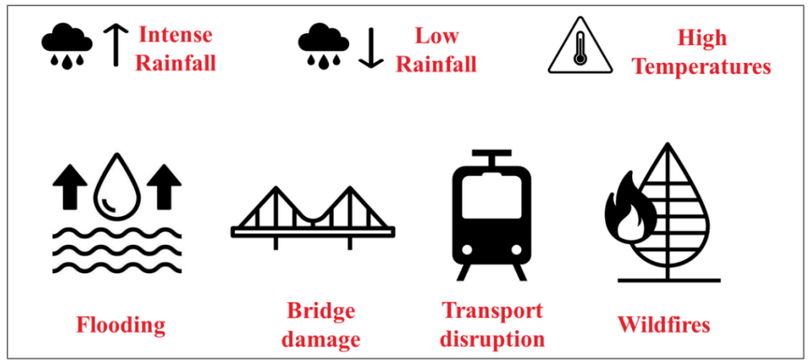
Current Impacts of Climate Change on Perth and Kinross

2.34 In terms of the current impacts of climate change in Perth and Kinross, the assessment highlighted increasing incidences of both flash surface water flooding in urban areas and river flooding, linked to an increase in rainfall over Scotland in the past few decades (with an increasing proportion of rainfall coming from heavy rainfall events). These floods have caused significant damage to properties, impacted multiple communities and businesses, as well as assets. With serious secondary impacts also occurring, such as landslips and increased scour to bridges. The annual average damage of these risks is estimated at around £11.4 million within the Tay District (Tay District Flood Risk Management, covering most of Perth and Kinross and a small area of adjoining local authorities).

2.35 Additionally, there has been a recent increase in temperature, with Scotland's 10 warmest years on record all having occurred since 1997. The average temperature in Scotland in the last decade (2010-2019) was 0.69oC warmer than the 1961-1990 average. Heatwaves are becoming more frequent and intense and can cause heat related illness and mortality. Temperature impacts have already been experienced within Perth and Kinross.

2.36 Figure 3 to follow is an extract from the Perth and Kinross CCROA Executive Summary and shows those changes to the Perth and Kinross climate which are already impacting the region.

Figure 3: Current Changes to Perth and Kinross Climate



Future Impacts of Climate Change on Perth and Kinross - Precipitation

2.37 The precipitation rate anomaly, which represents the total precipitation, is projected to vary significantly seasonally for the area. In general, it is projected that more precipitation will occur during the winter months with less occurring during the summer months. There are also spatial differences in precipitation rate anomaly projections, with the greatest changes in winter rainfall expected in the southern and eastern parts of Perth and Kinross.

2.38 Under both warming scenarios (low and high emissions), short-term prolonged intense precipitation is expected to increase, but the increase is much lower under the low emissions scenario compared to the high emissions scenario. It is anticipated that interventions to reduce the risk of flooding will be required under the low emissions scenario, as flooding is already an issue in Perth and Kinross. Increased temperatures lead to drier ground, which, combined with more intense rainfall, is expected to result in more frequent and severe surface water flooding, particularly in urban areas.

Future Impacts of Climate Change on Perth and Kinross - Temperature

2.39 Within Perth and Kinross winter minimum, mean and maximum temperature are projected to increase under all scenarios. However, the increase in these climate variables is unevenly distributed across the local authority, with the greatest change projected in the east and north.

2.40 Summer minimum, mean and maximum temperatures are projected to increase in both warming scenarios in the Council Area. All three of the metrics show similar patterns across both the century and when comparing emissions scenarios. Spatially within Perth and Kinross the degree of increase varies, showing a similar distribution to winter temperatures. The maximum projected temperature for the area is 37.5°C, and Perth and Kinross will also experience heatwaves more frequently. Figure 4 to follow shows the projection results for Perth and Kinross at 25 KM grid cells. The map shows the absolute summer maximum projection for 2080 under RCP 8.5[1]. Figure 5 represents a summary of climate change effects for temperature and precipitation in summer and winter for the area.

Figure 4: Maximum Summer Projection Results for Perth and Kinross for 2080

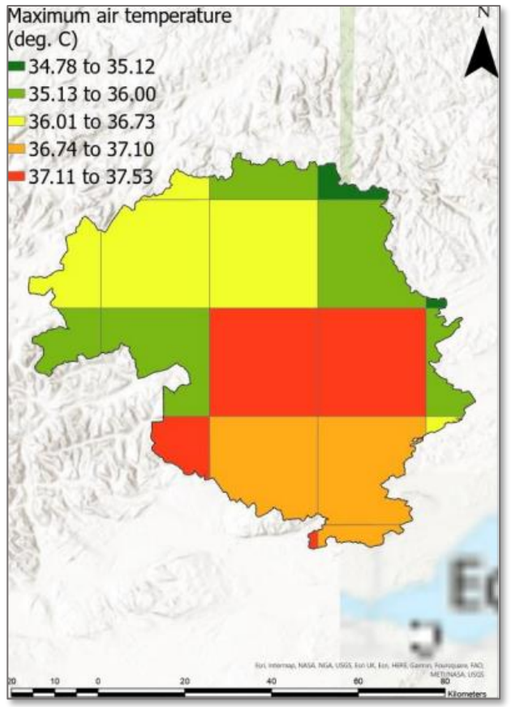
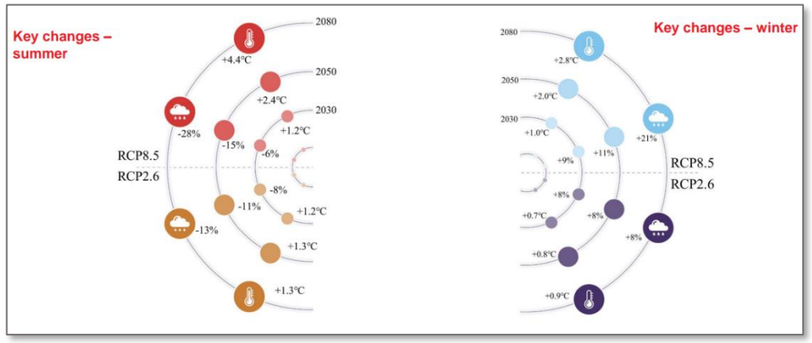


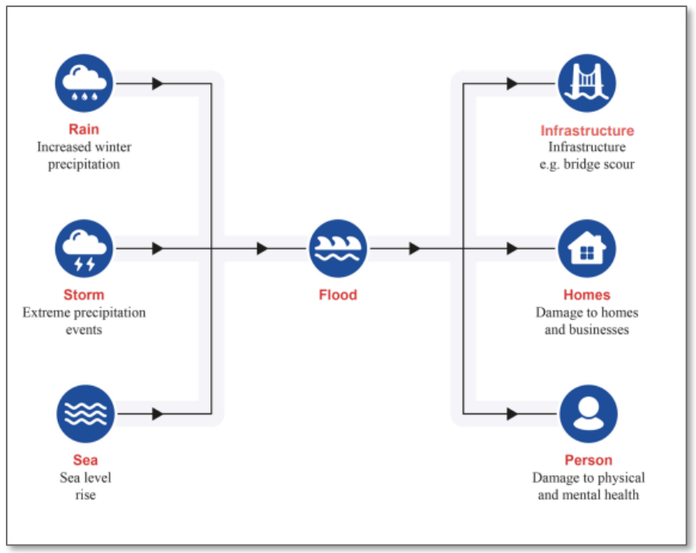
Figure 5: Summary of Climate Change Effects in Perth and Kinross – Temperature and Precipitation (Summer and Winter)



Future Impacts of Climate Change on Perth and Kinross - Flooding

2.41 As previously mentioned, flooding already affects the Perth and Kinross Area, and current projections suggest that the extent and severity of flooding is likely to get worse. Changes to precipitation and sea level rise will affect flooding, and increased winter precipitation is likely to increase flooding. In addition, despite summer precipitation being expected to decrease, high-intensity short-term precipitation events make flash flooding more likely, particularly during periods of higher temperatures where run-off capacity is reduced. The National Flood Risk Assessment identifies approximately 9000 homes and businesses within Perth and Kinross as being currently at risk, and this is projected to increase to 13,000 by 2080 as a result of climate change. Figure 6, which has been extracted from our CCROA Executive Summary, shows a diagram of flooding cause and effects.

Figure 6: Diagram of Cause and Effects of Flooding



[1] RCP 8.5 is a high emissions scenario that is typically referred to as "business as usual". It is considered a "worst case scenario" by the international science community.

Future Impacts of Climate Change on Perth and Kinross – Wind, Snowfall, Sea Level Rise/Storm Surge

2.42 Projected changes to windspeed for the Perth and Kinross Area vary seasonally. Overall, windspeed is expected to increase slightly in winter by 0.1 ms-1 and decrease slightly in summer by a maximum of 0.3 ms-1. The southern, western, and eastern extends of the Council Area are projected to experience the greatest change in windspeed.

2.43 Establishing a baseline for snowfall is particularly difficult because of a lack of reliable, consistent observed data. However, snowfall is predicted to decrease progressively through the century across the entire area. The areas where the greatest decrease is projected are in the northeast and northwest (upland) parts of Perth and Kinross. Figure 7 shows a summary of climate change effects for snowfall flux and surface snow in Perth and Kinross - both show the projected changes at RCP 8.5. Figure 8 shows the projected spatial variation of snowfall flux percentage change at RCP 8.5 in winter.

Figure 7: Summary of Climate Change Effects for Snowfall

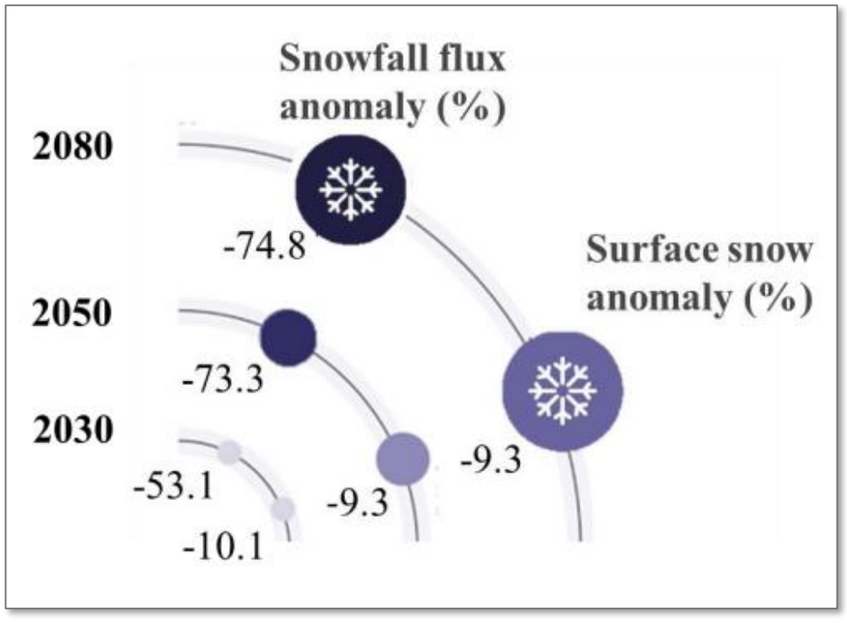
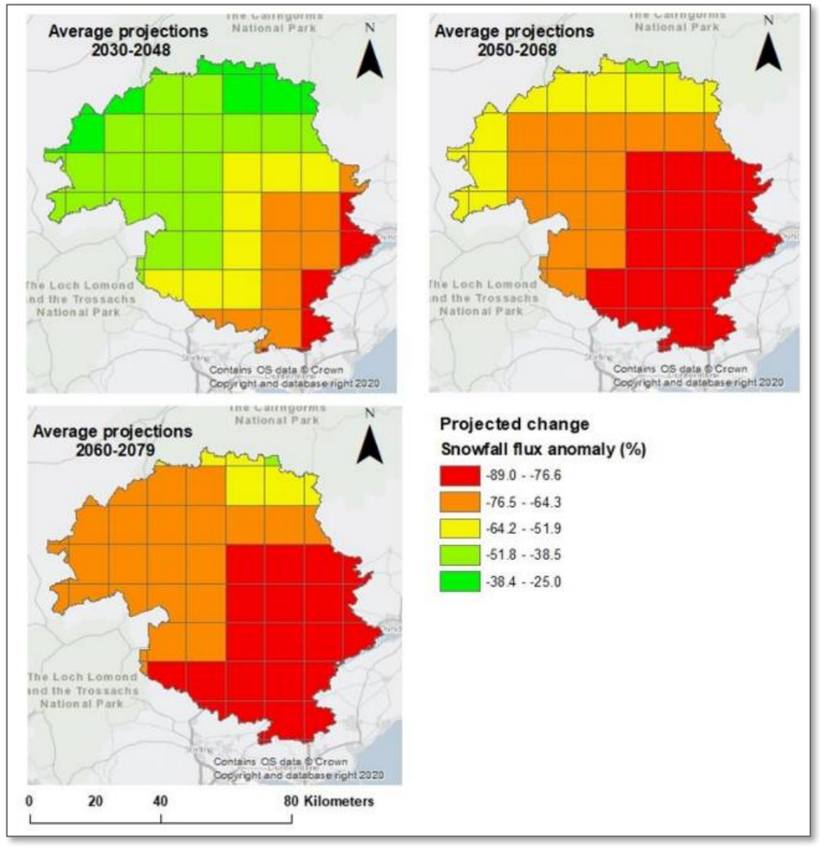


Figure 8: Spatial Variation of Snowfall Flux % Change



2.44 There is currently no consensus with regards to the effects of climate change on storm surge levels. At present, current storm surge levels are combined with sea level changes. The Perth and Kinross Area does not have open areas of coastline, but sea level rise will affect the Tay Estuary, which will affect tidal areas such as Perth and Invergowrie.

Climate Change in Perth and Kinross – Major Increased or Additional Risks

2.45 Some of the impacts as a result of changes to the current climate of Perth and Kinross, and future changes to it will be positive and present opportunities. However, many will in fact be negative and bring significant risks to the area.

2.46 The Assessment identified 52 risks in total. Overall, flooding and its impacts are the most pressing climate change threat for Perth and Kinross and affects all sectors. Flooding is already happening and will continue to be a threat throughout the century as rainfall intensity increases.

2.47 Heat is also likely to cause impacts for the Perth and Kinross Area during the mid to late century as summer temperatures increase and heatwaves become more regular and extreme. Heat poses a risk of significant health impacts, particularly to the most vulnerable members of our community.

2.48 Many of the risks posed to nature are classified as high impact. Nature across Perth and Kinross is diverse and important to both tourism and some of the key industries.

2.49 The risks identified to the various sectors are set out below.

- **Risks to Health, Communities, and the Built Environment** – higher temperatures can have direct health risks (heat stroke/heat stress), lead to an increase in disease prevalence, cause buildings to overheat, and result in a reduction in air quality. Increased precipitation can lead to flooding, which will impact people and communities, and an increased occurrence of water damage, condensation, and damp in homes.
- **Risks to Business and Industry** – possible increase in energy costs due to additional cooling needed, and reduced productivity for employees during times of high temperature. Flooding, drought (especially for agriculture) and possible water scarcity because of precipitation changes. Risks to supply chains as a result of global climate impacts causing supply problems. Climate will impact on the transition to Net Zero.
- **Risks to Nature** – species which are currently at upper temperature limits, particularly in higher areas, may not be able to survive in the area in the future. Reduced snowfall is likely to have a big impact on upland wildlife as well as hydrology within the area. Generally, threats are expected to both specific species and habitats from pests, pathogens, and invasive non-native species which thrive more due to changes in climate.
- **Risks to Infrastructure** – higher temperatures are likely to lead to increased energy requirements because of an increased cooling demand, and roads melting during times of extreme heat. Increased precipitation will lead to flooding, scour to bridges, and landslips – all potentially damaging infrastructure directly. A decrease in precipitation could result in private water supplies drying up.

2.50 The risks identified to Council assets, operations, and net zero transition include:

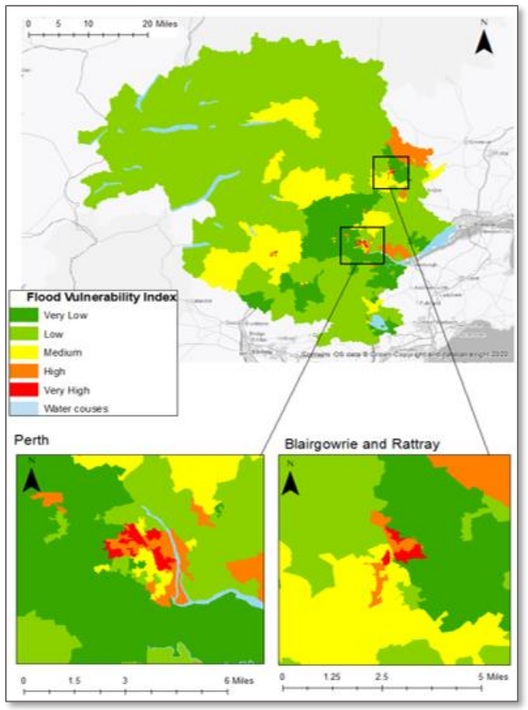
- **Risks to Council-Maintained Community Spaces from Flooding** – Some of the community spaces which PKC maintain lie within flood risk zones, which brings the risk of potential large financial costs and impacts on residents.
- **Risks to PKC Estates from Flooding** – Potential large financial costs and impacts on residents of social housing, Council offices, or possibly equipment damage which could affect service operation. There are also five schools and HMP Perth at risk from flooding.
- **Risks to Road Infrastructure from Flooding** – some Council-maintained roads lie within flood risk zones and are at risk from scour which will result in significant repair costs.
- **Risk to Housing and Housing Provision from Flooding** – there will be financial costs associated with protecting and repairing housing affected by flooding, with associated effects of both a physical and mental health and wellbeing nature. There are 940 Council properties at risk of flooding.
- **Risks to PKC Key Supply Chains** – it is difficult to quantify, but potentially significant effects on service provision and operation if supply chains are disrupted.
- **Risks to Leisure Facilities from Flooding** – some leisure facilities lie within flood zones, with potentially large associated cost and impact on residents.

Climate Change in Perth and Kinross – Those Most Vulnerable to Risk

2.51 Climate change does not equally impact upon people, some individuals in our communities are more vulnerable to its effects than others. For example: older people are more vulnerable to heat, due to specific physiological characteristics, and would be more vulnerable if directly exposed to flooding or the impacts of flooding. Young children are also vulnerable to heat, which is mainly due to their lack of ability to understand heat dangers and their reliance on carers. Also, the most deprived members of our communities are often more vulnerable to climate change because they have a lower financial ability to adapt.

2.52 The ARUP Assessment considered this data to better understand how these characteristics vary across the Perth and Kinross Area, and to identify where vulnerable people were most concentrated. Figure 9 to follow shows flood vulnerability across Perth and Kinross, taken from the 2011 Neighbourhood Flood Vulnerability Assessment by the Joseph Rowntree Foundation. The vulnerability categories shown on the map key refer to the scores across the Perth and Kinross Area, with the top 20% most vulnerable being classes as 'High Risk'. The maps are displayed by Data Zone[2].

Figure 9: Flood Vulnerability within Perth and Kinross



[2] Data zones are the **small area geography** used by the Scottish Government to allow statistics to be available across a number of policy areas. Data zones were initially set up to nest within council area boundaries and to have a population of between 500 and 1,000 household residents. Further information on Scottish Government Data Zones can be found here.

Climate Change in Perth and Kinross – Potential Opportunities

2.53 Alongside the risks, opportunities were also identified as part of the assessment. These are areas where climate change might bring improvements to the lives of the people of Perth and Kinross and beyond and create chances for economic growth or cost savings. The key opportunities identified as part of the assessment were:

- Improved health and wellbeing from warmer summers and winters.
- Lower energy demand, for example in terms of winter heating (domestic and non-domestic buildings) helping to reduce fuel poverty and cost to organisations.
- Longing growing seasons with the possibility of new crops and increased agricultural productivity.
- Opportunities for PKC to reduce running costs in some areas, such as less gritting because of warmer winters; reduced energy demand in buildings over winter, and opportunities for more renewable energy generation.

2.54 However, it is important to note that the risk from climate change far outweighs any potential opportunities.

Perth and Kinross Climate Change Risk and Opportunity – Next Steps

2.55 The Council's CCROA has provided us with a good understanding of how the climate in Perth and Kinross is likely to change and what the probable risks will be, along with which of these risks would cause the most impact. However, it is just the first step in adapting to climate change and making the Council Area climate resilient. The key next steps identified in the Assessment are:

- Share the results of the CCROA and continue to engage with key stakeholders.
- Continue engagement with our community councils and community resilience groups in order to strengthen resilience.
- Use the risk assessment to prioritise actions and build on existing adaptation plans.
- Create a framework to allow the regular review of the assessment work to ensure it remains up to date and considers any new evidence. This plan/framework should be appropriately integrated into current Council governance structures.

Environment Strategy for Scotland (2020)

2.56 The Strategy provides an overarching framework for the country's existing environmental strategies and plans, including the Climate Change Plan. It sets out a vision and outcomes to help guide the future development and delivery of the range of strategies and plans through establishing the Scottish Government's long-term direction and shared goals. It sets a clear course for maximising our opportunities, and will help improve decision making for Scotland's future, and the wellbeing of Scotland's people.

2.57 The document sits alongside other existing high-level Scottish Government policy frameworks, including – Scotland's Economic Strategy, the Fairer Scotland Action Plan, the National Transport Strategy, and National Planning Framework. It includes long-term goals to help ensure that following the EU Exit, Scotland remains focused on the most important issues for the country, supporting the Scottish Government's commitment to maintain or exceed existing environmental standards.

2.58 The Strategy is a key pillar of the Scottish Government's approach to environmental policy, governance and monitoring. Its development has been based on evidence, which was used to inform the identification of the vision and outcomes. It emphasises the importance of Scotland's natural environment to the country's identity and economy, and also to the health and quality of life of the people who live here. The document introduces the potential for the development of further legislation to ensure the 4 EU environmental guiding principles continue to influence the development of policy and legislation in Scotland.

2.59 The vision is "One Earth. One home. One shared future. By 2045: By restoring nature and ending Scotland's contribution to climate change, our country is transformed for the better – helping to secure the wellbeing of our people and planet for generations to come."

2.60 To achieve the Strategy's vision, the Scottish Government and partners will focus on delivering 6 shared outcomes:

1. Scotland's nature is protected and restored with flourishing biodiversity and clean and healthy air, water, seas and soils.
2. We play our full role in tackling the global climate emergency and limiting temperature rise to 1.5 degrees Celsius.
3. We use and re-use resources wisely and have ended the throw-away culture.
4. Our thriving, sustainable economy conserves and grows our natural assets.
5. Our healthy environment supports a fairer, healthier, more inclusive society.
6. We are responsible global citizens with a sustainable international footprint.

Land use – getting the best from our land: strategy 2021 to 2026

2.61 This is Scotland's Third Land Use Strategy, and a Fourth Strategy is currently undergoing consultation. It sets out the long term vision for sustainable land use in Scotland, along with objectives and key policies to achieve this. It seeks to make land use more understandable and accessible to everyone, to support a shift in the way we think about land, towards how we use land and who should be involved in those decisions. It takes an overarching holistic approach to what land use in Scotland should look like, rather than a sector by sector one, in order to achieve as many objectives as possible.

Landscape and Ecosystem Services Approach

2.62 The new Strategy seeks to highlight how the benefits and impacts of land use touch us all, through adopting a landscape approach. This helps to demonstrate the interconnection between the different policies and actions currently occurring across Scotland, and how the various land uses interact with one another. This in turn highlights the importance of integrating the different uses of land to support our ecosystems, our society, economy and wellbeing to achieve a sustainable future. Land plays a fundamental role in Scotland's sustainable future – environmentally, socially and economically.

Achieving Sustainable Land Use

2.63 Scotland's natural capital underpins a number of our ecosystem services which our economy relies upon. It is vital that these assets are protected and enhanced to allow them to continue to sustain the people of Scotland now and in the future.

2.64 The Strategy's 2050 vision is 'A Scotland where we fully recognise, understand and value the importance of our land resources, and where our plans and decisions about land use will deliver improved and enduring benefits, enhancing the wellbeing of our nation.'

2.65 The Land Use Objectives set out in the Strategy are:

- Land based businesses working with nature to contribute more to Scotland's prosperity.
- Responsible stewardship of Scotland's natural resources delivery more benefits to Scotland's people.
- Urban and rural communities better connected to land, with more people enjoying the land and positively influencing land use.

Imaging what Sustainable Land Use looks like

2.66 The Strategy describes sustainable land use as meaning 'our land will be fully contributing towards the fight against climate change and biodiversity loss, benefiting the wider natural environment, supporting our communities socially and economically, and underpinning the health and wellbeing of the population.'

2.67 During the lifetime of the Strategy Scotland's tree planting needs to increase to a rate of 18,000 Ha per year by 2024/25; peatland restoration needs to increase significantly to meet the 250,00 Ha by 2030 target, and emissions from other land uses, including agriculture, also need to fall significantly. A balance must be struck between delivering our environmental goals and other demands that are made of our land, such ads producing food.

Platforms for Change

2.68 Some of the mechanisms identified to bring about that change include: National Planning Framework and Regional Land Use Partnerships.

2.69 NPF4 – will embed UN Sustainable Development Goals, align with the National Performance Framework, and incorporate Scottish Planning Policy; guide spatial strategies to help reduce emissions, reflect the people of Scotland's needs and aspirations through the building of quality places, exploring options for local living and 20 minute neighbourhoods; bringing about the future use of vacant and derelict land and buildings, and consider how peatland can be protected from further development to safeguard its carbon sequestration role.

2.70 RLUPs – These partnerships will help national and local government, communities, land owners and stakeholders work together to find solutions to optimise sustainable land use, in a manner which is fair and inclusive, and meets local and national objectives. Five pilot RLUP areas have been identified: Cairngorms National Park; Highland Council Region; Loch Lomond and the Trossach's National Park; North East Region (Aberdeenshire and Aberdeen City Councils), and South Scotland (Dumfries and Galloway and Scottish Borders Councils).

Understanding Land Use through Landscapes

2.71 A landscape, rather than sectoral approach to setting out the Scottish Government's key policies and initiatives, is taken in the Land Use Strategy to achieve its three main objectives. Seven illustrative landscapes have been chosen to broadly represent different aspects of our land in Scotland, and the most relevant policies have been highlighted for each, including:

1. **Settlements** – evolving planning to allow it to continue to have a key role in transforming our settlements now and for the future so they can deliver multiple uses; Regional Spatial Strategies; Open Space Strategy duty; improving green space in cities and towns; the integration of trees and expanding green networks; transforming our vacant and derelict land and investing in our local blue and green infrastructure; Local Place Plans, and developing a Climate Actions Towns Network.
2. **Enclosed Farmland** – minimise the environmental impact of food production and encourage best practice across Scotland (low carbon and environmentally sustainable farming); a growth strategy for farming, fishing, food and drink, recognising the valuable contribution they make to our economy; on-farm woodland and agroforestry opportunities (planting of trees and hedgerows for carbon sequestration); the use of Bioenergy in Carbon Capture Storage, with the potential to form a substantial part of the country's negative emissions sector; the protection and improvement of farm soils to help improve production and maximise profitability, whilst achieving healthy and resilient soils which support biodiversity and store carbon; recognising the importance of wild and managed pollinators to supporting our economy through their contribution to our food and farming industries, and also the use and development of pollinator-friendly pest control, and enhancing our natural capital stocks and supporting employment opportunities through actions which contribute to climate and environment goals.
3. **Semi-natural Land** – a wide ranging landscape category which includes mixed farmland, forests, hills, mountains and moors. The predominant landscape in Scotland. Agricultural activity (particularly livestock grazing) is a prominent feature of this landscape – the Strategy seeks to ensure Scotland continues to produce high quality sustainable food, while at the same time reducing GHG emissions via the establishment of five sector-specific farmer-led groups. This landscape is also important to the crofting community, and via the delivery of the Crofting National Development Plan, the aim is to facilitate crofters to develop and diversify their crofting activity, to secure productive crofting systems and thriving crofting communities, encourage appropriate use of the grazings (including peatland restoration and tree planting), encourage the uptake of vacant and/or underutilised crofts by new entrants, and reduce or remove barriers to entering crofting to create opportunities for a new generation of people in rural communities. Restoring peatlands to support biodiversity, store and sequester carbon, and improve flood management. Increase tree planting (through sustainable forestry practices) at a rapid pace to provide carbon sequestration, and wider environmental benefits and public health gains, including nature flood management, shelter for livestock, and positive impacts on air, water, soils, biodiversity and landscapes. Restore native ecology through protecting and enhancing our ancient pine forest and native broadleaved woodlands. Supporting our living landscapes and making sure rural communities can thrive and offer opportunities to young people and future generations. Helping our land support: Climate change mitigation and adaptation (including onshore wind development, and restoring carbon rich habitats); Nature - through maintaining and enhancing the health of our ecosystems and protecting and restoring

biodiversity and native habitats, and effective deer management; Communities – supporting the repopulation of our rural and island communities (developing population interventions, providing access to digitally connected workspaces and high quality across all tenures, including affordable homes, and promoting the development of small-scale pilot proposals for mixed housing and business unit developments); Tourism – vital aspect of livelihoods and how land is managed and used, particularly in more rural landscapes. Strategy highlights a partnership approach to identifying short, medium and longer term market opportunities (including nature-based tourism) to support and increase visitors, whilst being mindful of the impact increased visitor numbers can have on rural infrastructure and the environment. Funding via Scottish Land Fund to support communities in purchasing assets to allow them to take part in land use decisions in their area. Increased community capacity and empowerment via Community Action Plans in National Park areas.

4. **Rivers and Waterbodies** – The country's rivers, wetlands and lochs are some of our greatest natural assets, contributing to health and wellbeing, supporting wildlife diversity, providing the foundation for sustainable economic activity. A healthy water environment is vital and can be impacted by land use practices. It is important to manage our consumption of water, the way we use land near water, and upstream and downstream impacts to protect and enhance our water environment and to help reach the Scottish waterbodies target of 87% of waterbodies achieving 'good' status by 2027. SEPA's River Basin Management Plans provide a route map to protecting and improving the entire water environment in the Scotland river basin. Extra funding committed by the Scottish Government over five-year period from 2021/22 to complement annual funding to local authorities to support investment in flood risk management measures. The Flood Risk Management (Scotland) Act 2009 ensures a coordinated plan-led approach to managing flood risk, focusing on across catchment solutions. Helping our land support: Climate Change mitigation and adaptation – making our water environment resilient so that Scotland can adapt to an already changing climate, through restoring peatland and increasing riparian tree cover; Nature – careful management of our land, including soils, nutrients and organic matter can reduce waste and protect the water environment (via sustainable land practices by farmers and wider industry). The RBMP sets out those significant issues which affect water quantity, quality, physical condition, water flows and levels, and the migration of wild fish and actions to address them; Communities – a healthy water environment supports the health and wellbeing of local communities, and waterbodies provide strong physical linkages between urban and rural Scotland. Tree planting can help keep downstream communities safer in terms of flooding.

5. **Coastal** – Coastal planning is essential to ensuring the sustainable management of the coastline in an integrated way with the land and water side. Marine plans have to be taken into consideration when development local development plans. Natural Defences: the strengthening of natural defences along coastlines is important in adapting to predicted sea level rises and protecting natural coastal defences from erosion. Blue Economy: development of a Blue Economy Action Plan to launch a programme of collaborative projects across Scotland's public sector, scientific partners, marine industries, and the marine environment sector, and set out actions to make marine industries more resilient. Aquaculture: an important industry, but environmentally impactful – support for sustainable growth of the sector. Helping our land support: Climate change mitigation and adaptation via Shoreline Management and Flood Risk Management plans, and strengthening our natural shoreline defences to help combat the effects of climate change; Dynamic Coast - utilising the project evidence to support more sustainable coastal and terrestrial decision making, likely via more adaptive coastal management approaches; Nature – saltmarshes and sand dune habitat restoration projects are good examples of nature based solutions/approaches to provide important habitats for a range of wildlife, but also improve flood and erosion protection; Communities – increasing concern amongst coastal communities in respect of the impacts of climate change on their way of life, and regional partnerships are important in turning national science and policy into action on the ground. Understanding and investing in coastal communities is also import to support a green recovery and just transition.

6. **Islands** – Our islands have a range of natural resources and unique ecosystems. The National Island Plan sets out 13 strategic objectives looking at key areas, such as increasing population levels, enhancing biosecurity, promoting sustainable economic development etc. and trying to align sustainable land use objectives with practical actions needed to help improve the quality of life for island communities. Native Biodiversity: protecting delicate our ecosystems from invasive non-native species is crucial; Sustainable Land Use – using nature based solutions to climate change in agriculture, crofting, forestry, peatland and habitat restoration, and nature-based tourism can deliver wider benefits to people and nature; Prosperous Island Economies – working to promote a thriving business environment which allows people to pursue a range of economic opportunities from the land and the sea; Local Engagement – working closely with key stakeholders to island communities views are heard on the route to a just transition and net-zero green and sustainable economy, creating opportunities and benefits for island communities too; Helping our land support: Climate change mitigation and adaptation through supporting renewable energy, including converting tidal and wind energy into hydrogen and storing and transporting that hydrogen to be used when needed in Orkney, and using a Community Planning Partnership approach to improving the understanding of climate change in an area, building collaboration across organisations and communities, and developing adaptation actions to be included in the LOIP; Nature – safeguarding Machair from the effects of climate change and rising sea levels; Communities – building on the Community Empowerment Act through implementing the Islands Plan, giving communities the power to shape their individual and collective futures, and improving opportunities for communities to pursue a community right to buy via the Land Reform Act.

7. **Marine** – The terrestrial and marine environments form part of a wider ecosystem. How we manage our land and terrestrial waterbodies affects our marine environment. The effective management of our natural capital must be integrated across our land and seas.

Scotland's Guiding Principles on the Environment: Statutory Guidance. Annex A – Strategic Environmental Assessment and Duties to have Due Regard to the Guiding Principles on the Environment

2.72 This guidance document provides information on how the environmental principles should be applied when developing policy. It provides guidance on the interpretation of the principles, how they relate to one another, and how the duties under Sections 14 and 15 (Scottish Ministers and other public authorities duty to have regard to the guiding principles on the environment), as read with Section 16 of the Continuity Act, relate to other duties with respect to the environment, including duties under the Environmental Assessment (Scotland) Act 2005, and how compliance can be achieved and demonstrated.

2.73 Annex A provides further detailed information regarding these new duties and how they relate to existing duties under the 2005 Act. The SEA process, particularly the preparation of an environmental

report, is regarded as a means by which plan and policy makers can fulfil their duties under the 2021 Act and record compliance.

The UK Forestry Standard (UKFS)

2.74 The fifth edition of the UK Forestry Standard (UKFS) was published in October 2023 and is the reference standard for sustainable forest management in the UK and applies to all UK forests. The document sets out the context for forestry, the approach of the UK governments to sustainable forest management, outlines standards and requirements, and provides a basis for regulation and monitoring.

2.75 Previous editions of the UKFS were supported by a series of guidelines, but since the 2017 edition, these guidelines have been incorporated into the publication and consider separately the key elements of sustainable forest management, which are forests and: biodiversity; climate change; the historic environment; landscape; people; soil, and water. A summary of the key issues and opportunities for each of these elements are provided in Appendix B to this report.

Scotland's Forestry Strategy 2019-2029

2.76 The Scotland's Forestry Strategy sets out the Scottish Government's ambition for forestry in Scotland. It contains a 50-year vision and 10-year framework to action, expand, protect and enhance Scotland's forests and woodlands, and at the same time deliver multiple benefits for the people of Scotland, including greater economic, social and environmental ones.

2.77 It is underpinned by sustainable forest management principles and includes an expansion target to increase the annual level of woodland creation up to 18,000 Hectares (Ha) in 2024/25.

2.78 The Strategy's Vision is that

'In 2070, Scotland will have more forests and woodlands, sustainably managed and better integrated with other land uses. These will provide a more resilient, adaptable resource, with greater natural capital value, that supports a strong economy, a thriving environment, and health and flourishing communities.'

2.79 The Strategy's Objectives are:

- Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth.
- Improve the resilience of Scotland's forests and woodlands and increase their contribution to a healthy and high quality environment.
- Increase the use of Scotland's forest and woodland resources to enable more people to improve their health, wellbeing and life chances.

2.80 It's identified Priorities are:

1. Ensuring forests and woodlands are sustainably managed.
2. Increasing the adaptability and resilience of forests and woodlands.
3. Expanding the area of forests and woodlands, recognising wider land-use objectives.
4. Enhancing the environmental benefits provided by forests and woodlands.
5. Improving efficiency and productivity, and developing markets.
6. Engaging more people, communities and businesses in the creation, management and use of forests and woodlands.

2.81 A Strategic Environmental Assessment was also carried out for the draft of Scotland's Forestry Strategy. The results of that assessment concluded that as a result of its core purpose of promoting and supporting the implementation of Sustainable Forest Management principles, the draft Strategy would have overall positive environmental effects. Cumulative effects were also expected to be positive over all of the SEA topics.

2.82 Each of the draft Strategy's priorities were assessed against the SEA objectives topics, and the results for those assessments were as follows:

Priority 1: Promote and develop the concept of sustainable forest management as it applies to Scotland

'Major Positive' environmental effects predicted for all SEA topics.

Likely Environmental Effects:

Scottish Ministers are legally required to promote Sustainable Forest Management (SFM) and have regard to this duty when taking decisions and determining applications as a regulator. Protection of the environment as a whole is inherent to SFM, and through promoting the approach to SFM, the SEA predicted that Priority 1 will have major positive effects over the long term across all SEA topics, from empowering the workforce, through to having positive secondary effects on climatic factors (linked to associated carbon sequestration), and allowing the appropriate protection and conservation of designated sites (biodiversity and historic environment).

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- It is assumed that this is referring to the learning and development of the workforce, engagement and communication on the concept of SFM with stakeholders and interested parties.

Priority 2: Sustainable expand the area of all types of woodlands and forests across Scotland and ensure harvested sites are replanted appropriately.

Most SEA objective topics scored as having the potential for 'Major Positive' environmental effects; Air, Historic Environment and Landscape topics were predicted to have 'Mixed' effects.

Likely Environmental Effects:

- As Priority 2 seeks to deliver the Scottish Government's Climate Change Plan, including the annual woodland creation target, it is expected to have an overall positive effect on Material Assets, which is also likely to result in a major positive effect on Climatic Factors through reducing GHG emissions via carbon sequestration. It is considered that the potential negative impact of releasing carbon from soils through the establishment of new woodland is usually outweighed by the amount of carbon sequestered by the forest, transferred into the soil and then locked up in wood products.
- The creation of sustainably managed forests (Material Assets) applying the SFM principles can have associated medium to long term major positive effects on Soil, Water, Biodiversity, Flora and Fauna, Human Health and wellbeing.
- Inappropriate ground preparation techniques can lead to detrimental impacts on soils e.g. the use of heavy machinery and deep-level cultivation can change the structure of the soil, causing erosion and run-off.
- Poor forestry practices on carbon rich soils can lead to a series of small increases (or cumulative moderate increase) in soil contamination through the transporting of compounds (e.g. fuel oils, lubricants, pesticides and other chemicals, sewage sludge, and inorganic nutrients) in run-off.
- Forestry operations which drain carbon rich soils can lead to a series of small increases (or a cumulative moderate increase) in the amount of organic matter lost from soil, which can also reduce its value as a carbon store (Climatic Factors). However, because of the SFM principles being employed in implementing this priority, it is expected that the effects will be major positive in respect of increasing nutrients and fertility.
- The expansion in coverage of all types of woodlands and forests is likely to lead to positive effects in terms of air quality. However, it may also result in short term negative effects in the form of emissions from forestry-related operations linked to woodland creation. As such the likely impact on the Air SEA topic of this priority is identified as mixed.
- Depending on the scale and nature of changes, impacts on land use change on the wider environment could be mixed e.g. afforestation can have positive or negative effects on SEA topics Landscape, Historic Environment, Biodiversity, and on Population and Human Health because of patterns of recreational use. Impacts cannot be fully defined at the scale of Scotland's Forestry Strategy as they depend on detailed/site specific matters such as siting, location, and practices used. It is assumed that any potential negative effects will be avoided where planting schemes are appropriately designed and delivered in line with UKFS requirements. Local FWS also identify the most appropriate locations for woodlands to maximise the delivery of public benefits and minimise adverse environmental and landscape impacts. Furthermore, specific woodland creation proposals must meet the requirements of statutory HRA and EIA processes. As such, it is predicted that there will be mixed effects on Landscape and Historic Environment topics as a result of the implementation of this priority.

Priority 2: Sustainable expand the area of all types of woodlands and forests across Scotland and ensure harvested sites are replanted appropriately.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assessment of Priority 2 assumes that afforestation and replanting (restocking) will meet the requirements of the UKFS which sets out the requirements for the sustainable management of forests in the UK, and all relevant statutory requirements including HRA and EIA.

Priority 3: Ensure wood fibre availability from Scotland's forests is predicable and increases over time

'Major Positive' effects were predicted for SEA topics Climatic Factors and Material Assets; 'Minor Positive' effects for Population and Human Health and Air; 'Insignificant or No Impacts' for Biodiversity, Flora and Fauna, Soil, and Water; and 'Mixed' impacts for Historic Environment and Landscape topics.

Likely Environmental Effects:

- Implementation of this priority can further stimulate rural development, leading to major positive effects in terms of material asset benefits across the short, medium and long term, and a minor positive impact for the population.
- Exposure to pollution e.g. dust or nuisance, from for example transportation, could lead to a negative impact that could be addressed via mitigation measures. Furthermore, the infrastructure required to maintain a long term supply of wood fibre needs to be sustainably managed to ensure that people and biodiversity in the area are not affected adversely. However, based on the assumption that this will be delivered in accordance with the SFM principles, exposure to pollution and the infrastructure needed to maintain a long term supply

Priority 3: Ensure wood fibre availability from Scotland's forests is predicable and increases over time

of wood fibre is sustainably managed, there effects on biodiversity are likely to be neutral in nature.

- Priority 3 has the potential to result in detrimental impacts on habitats and species, as well as soil biodiversity and stability, which could also in theory result in secondary negative effects in relation to the deterioration of water quality (at odds with RBMP objectives, depending on scale of impact). However, applying the assumption that implementation will be in line with UKFS requirements, impacts on soil and water as a result of Priority 3 will be neutral.
- Through increasing the availability of wood fibre it could also promote the use of locally grown timber as a building material, with major positive benefits to Climatic Factors and minor positive for air quality through replacing more carbon intensive materials, particularly in combination with those initiatives outlined under Priority 6. However, if an increase in the scale and intensity of forestry operations leads to unsustainable pressures on existing infrastructure, like transport routes, there is the potential for negative impact on the Material Assets topic.
- Consideration of landscape is subjective, and although there is the potential for adverse impacts on landscape to arise, it is assumed that new planting will be planned and designed according to UKFS requirements. In some cases, there may be positive effects realised through changes to land use and landscape, for example through the regeneration of vacant and derelict land and by improving the appearance of transport corridors. These considerations are also relevant to the setting of the historic environment, as such both the Landscape and Historic Environment topics are predicted to experience mixed impacts.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assessment of Priority 2 assumes that the creation, management and harvesting of productive forests and woodlands will meet the requirements of the UKFS which sets out the requirements for the sustainable management of forests in the UK.

Priority 4: Protect forests and woodlands from damage caused by new or existing pests and diseases, promote the sustainable management of wild deer and build resilience to support adaptation to climate change

'Major Positive' effects were predicted for SEA topics Biodiversity, Flora and Fauna, Climatic Factors, and Material Assets; 'Minor Positive' effects for Population and Human Health, Soil, Water, Historic Environment and Landscape, and 'Insignificant or No Impacts' for Air.

Likely Environmental Effects:

- The delivery of Priority 4 in connection with climate adaptation i.e. planting diverse species that are well adapted to the site, would lead to more resilient stock and a major positive impact on the Climatic Factors topic. It would result in an improvement in the quality of woodland as well as timber products, with associated major positive effects on the Material Assets topic. The use of a range of management and restocking strategies should help to increase resilience through accounting or a variety of impact and implementation scenarios.
- Prioritising the management of plant pests is likely to result in minor positive effects on the Population and Human Health SEA topics. However, it should be recognised that plant health

Priority 4: Protect forests and woodlands from damage caused by new or existing pests and diseases, promote the sustainable management of wild deer and build resilience to support adaptation to climate change

actions can also have unintended consequences, for example on Biodiversity, as well as positive impacts.

- Investment in deer management provides jobs, supports local communities (Population and Human Health), and preserves the forestry asset (Material Assets). However, unsustainable management of deer populations can impact negatively on woodlands and forests and also lead to an increase in road traffic accidents. Wild deer are an important part of Scotland's biodiversity, but changes in their numbers can create an imbalance between natural woodland processes e.g. regeneration and suppression of scrub encroachment. Applying an ecosystems approach to deer management can have benefits for estate managers, the wider population and environment.
- Applying an integrated, evidence-based approach to pest and disease management takes account of biodiversity, soil and water, and balances these factors to provide a net positive impact on the environment in the medium term.
- Implementation of Priority 4 would prevent damage caused to wider environmental receptors caused by herbivores and deer e.g. water and carbon stores locked in soil and peatland (Climatic Factors). Managing wild deer will help minimise the volume of tree stock requiring replanting, reducing negative impacts on soil. It could also help support a diversification of tree species planted and encouraged through natural regeneration, as those tree species which are more appetising to deer are often disproportionately damaged by high deer densities.
- The protection of forests and woodlands is also considered to be protecting the Historic Environment (ancient woodland) and Landscape topics, with a minor positive impact as a result of Priority 4.
- No significant effects are expected on the Air topic as a result of Priority 4.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- The priority is directly linked to implementing climate change adaptation measures.
- Assumption via scoring that good practice methods will be employed in managing the impact of pest and diseases in accordance with UKFS requirements.

Priority 5: Increase community ownership and management of forests and woodlands

'Major Positive' effects were predicted for SEA topics Population and Human Health. 'Insignificant or No Impacts' expected for all other remaining topics.

Likely Environmental Effects:

- Potential for major positive impacts on Population and Human Health in respect of contributing to increased community empowerment in the short to long term.
- Improved awareness of the environment can also lead to indirect positive effects over the long term in preserving all aspects of the environment e.g. if the local community has ownership of its surroundings and puts into practice Sustainable Forest Management principles.

Priority 5: Increase community ownership and management of forests and woodlands

- A change in ownership is not considered to have the potential to result in impacts on the other SEA topics, therefore its impact is considered to be neutral.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assumes that community woodlands will be managed to meet UKFS requirements.

Priority 6: Increase efficiency, productivity and the value generated from forest products and services and help develop forestry's role in creating a low-carbon economy, by supporting technological innovation, improving the capacity and skills of those working in the sector, and developing existing and new markets

'Major Positive' effects were predicted for SEA topics Population and Human Health, Climatic Factors, and Material Assets; 'Minor Positive' effects are expected for the Biodiversity, Flora and Fauna, Soil, and Water topics; 'Mixed' impacts for Air, and 'Insignificant or No Impacts' for the Historic Environment and Landscape.

Likely Environmental Effects:

- Due to likely benefits to the workforce, Priority 6 is predicted to have a major positive effect on Population and Human Health in the short to long term. Health and safety benefits are expected through improvements in technology, as well as facilitating the creation of jobs and the skills development within the workforce. This can then contribute to long term investment and the potential for positive effects through the implementation of sustainable practices in the timber industry (major positive impacts on Material Assets topic), and the provision of a sustainable timber supply for economic development.
- Supporting innovation and new and emerging technologies can lead to major positive impacts on Material Assets, if these technologies support a circular economy and help to minimise waste generation. Minimising of waste in the forestry sector could also result in secondary benefits for Material Assets and Landscape.
- Effects on Landscape topic are expected to be largely neutral, but the displacement of waste to landfill could be minimised, which would provide secondary benefits through reduced transport emissions and energy consumption during processing (Climatic Factors).
- Generally, the growing of forests sustainably through a more efficient supply chain will help minimise any negative effects of forestry operations on the environment.
- The promotion of wood-based and non-timber forest products could have significant positive effects on a range of SEA topics e.g. substituting much higher embodied energy building materials in construction with timber-based products and systems can have significant benefits relating to carbon storage and emissions reduction, and in certain cases the use of some panelised timber systems can lead to a reduction in construction times and the overall material used. The recycling of wood products can also support reduction in waste.
- In respect of low carbon innovation, Priority 6 extends to the promotion of all raw materials derived from forests to reduce carbon emissions (Climatic Factors) e.g. use of timber in carbon neutral buildings, and use of bio-refining to create alternative materials. This helps increase the value of previously valueless forest products, enhances the value of materials considered to be low value, and benefits Material Assets through enhancing the efficiency of resource use and reducing waste production.
- Promoting a transition towards greater generation and use of low carbon heat will help reduce GHG emissions (Climatic Factors) and will lead to related benefits for air quality and population and human health.
- The use of wood fuel for biomass heating is a growing use of forestry resources.
- Impacts on the Historic Environment topic are predicted to be neutral for Priority 6.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assumes that new technologies will improve sustainability through maximising resource efficiency and helping address issues like the impact and cost of timber transport.
- The assessment assumes restructuring of existing woodlands will meet the UKFS requirements for the sustainable management of forests. It also assumes that any adverse environmental effects will be managed through the application of good practice promoted in the UKFS and associated guidelines.

Priority 7: Increase the natural capital value of Scotland's woodlands and forests by improving the condition of native woodlands and forests, and increasing the positive impacts of forest and woodland management on biodiversity, air, water, soils, flood management, landscapes and the historic environment whilst mitigating the risks of negative impacts

'Major Positive' effects were predicted for all SEA topics.

Likely Environmental Effects:

- Predicted that Priority 7 will lead to major positive impacts on all SEA topics.
- Enhancing woodlands and increasing the amount of woodland cover is expected to have a major positive impact on Climatic Factors through reducing GHG emissions via increased sequestration. There will also be associated positive benefits on the health and wellbeing of the population linked to this.
- It is assumed that mitigation and adaptation to climate change are implicit within Priority 7 due to the predicted significant effects on trees and woodlands as a result of a changing climate, combined with the long time frame linked to this sector.
- Increasing the area of sustainably managed forests via afforestation and improvements to the management of existing forests will lead to major positive effects on Material Assets, along with associated major positive impacts on SEA topics Soil, Water, Biodiversity, Flora and Fauna, Human Health (and wellbeing), and Historic Environment.
- The 2020 Challenge for Scotland's Biodiversity identifies the restoration and expansion of native woodland as a priority. Enhancing native woodlands will result in benefits important populations of priority and protected species, along with a wider range of species (Biodiversity), and through appropriate design can also add value to the quality of the landscape.

Priority 7: Increase the natural capital value of Scotland's woodlands and forests by improving the condition of native woodlands and forests, and increasing the positive impacts of forest and woodland management on biodiversity, air, water, soils, flood management, landscapes and the historic environment whilst mitigating the risks of negative impacts

- Major positive benefits are expected for Biodiversity through the implementation of this priority -the forestry sector has an important role to play in increasing habitat diversity, helping to increase climate change resilience.
- Secondary benefits are expected on Human Health and wellbeing as a result of the increased provision of accessible woodland space for recreational use. It can also help enhance the environmental quality of urban areas in particular.
- Improvements to air quality associated with Priority 7 are expected to lead to major positive effects and will have secondary positive impacts in respect of reducing people's exposure to poor air quality and the likelihood of air quality-related adverse health effects.
- Improvements to soil quality under this priority will increase the viability of natural ecosystems which filter pollutants and help contribute to a better quality living environment. In addition, woodlands and forests contain large amounts of carbon in their soil and vegetation, and are incredibly important in regulating carbon, water, and energy cycles.
- Improved flood management could lead to secondary benefits for Population and Human Health topics and could help support communities in improving their resilience to flood events. The use of natural flood management techniques can also provide additional benefits to biodiversity.
- Impacts on Landscape as a result of implementing Priority 7 are expected to be major positive in nature – by ensuring that forestry activities protect and where possible enhance important aspects of the landscape and historic environment, indirect benefits will also be provided for soil, providing suitable land management principles are used.
- Due to the key role Scotland's historic and cultural environment and landscape play in contributing to our sense of place and providing recreational opportunities, benefits are predicted for the Population and Human Health topics (increased physical fitness and improved mental health).
- Whilst tourism, leisure and sport can help improve our understanding and enjoyment of the natural environment, if not sustainably managed, increased visitor numbers can put additional pressure on these resources. Relevant considerations for forest planning should include enhancing and maintaining public access, carrying out management initiatives, and considering the presentation of significant features.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assumes the key actions linked to this priority will involve the sustainable creation of new woodlands, and the sustainable management of all existing forests and woodlands in accordance with the UKFS.
- The assessment assumes of this priority assumes consideration of climate mitigation.

Priority 8: Increase the use of Scotland's forests and woodlands to improve health and wellbeing, help people better understand forestry, and support wider Scottish Government activity to help children become confident and resilient members of Scottish society.

'Major Positive' effects were predicted for SEA topics Population and Human Health; 'Minor Positive' effects for Air, Water, Climatic Factors, and Material Assets, and 'Mixed' impacts for Biodiversity, Flora and Fauna, Soil, Historic Environment, and Landscape.

Likely Environmental Effects:

- Major positive effects for Population and Human Health through spending time outdoors, giving people space for outdoor activities, a chance to connect with nature, and a place to socialise, which can help to reduce pressures on health services.
- Greater awareness of and respect for the environment can lead to positive effects over the long term through preserving all aspects of the environment, including for SEA topics Air, Water, Climatic Factors, and Material Assets.
- Increase in numbers of visitors to woodlands for recreational purposes, if not sustainably managed, can lead to pressure on the natural environment e.g. through trampling of vegetation, noise creation, wildlife disturbance, and littering. Some of these pressures could also affect historic environment features located within or near forests and woodlands and would require appropriate management. As a result of this, impacts for Biodiversity, Soil, Landscape and Historic Environment topics are expected to be mixed. However, with appropriate mitigation, include applying the Scottish Access Code, and visitor management, predicted adverse effects are not likely to be major overall.
- Indirect major positive effects over the long term for all aspects of the environment are predicted through increased interaction with woodlands by the population, which will lead to an increase in awareness of goods that are derived from it, and an increase in awareness of how important it is to maintain good ecosystem health. Research also shows that exposure to woodlands, with the rich, challenging and diverse play opportunities they offer, can benefit children with behavioural and emotional problems.
- Further benefits are expected for Population and Human Health topics through encouraging children to take part in increased physical activity, which may lead to long term behaviour changes/reduction in health inequalities. Participation in initiatives, like forest schools, can also raise awareness of the environment through practical experience carrying out conservation tasks.

Priority 9: Enhance forestry's contribution to sustaining viable rural communities and increase the positive impact of forest and woodland management on other businesses especially in agriculture and tourism

'Major Positive' effects were predicted for SEA topics Population and Human Health, and Material Assets; 'Minor Positive' effects for Soil, Air, Water, and Climatic Factors, and 'Mixed' impacts for Biodiversity, Flora and Fauna, Soil, Historic Environment, and Landscape.

Likely Environmental Effects:

- Major positive effects predicted for Population, Human Health and Material Assets topics predicted as a result of supporting rural business creation and the local community through employment opportunities and the provision of integrated land management principles, helping farmers to benefit from forestry e.g. income from timber, provision of shelter for stock, or use of timber as a source of biomass energy.
- Important to ensure the use of timber as an energy resource does not negatively impact on local air quality.
- Potential through implementation of Priority 9 to expand opportunities for more people and businesses to benefit from forestry-related tourism over the short to long term.
- Increased awareness of the benefits of the outdoors and conservation will likely result in minor positive effects on soil, air, water and climatic factors. This could also lead to increased physical and mental health benefits through an increase in people's physical activity and improved access to greenspace.
- Increase in numbers of visitors to woodlands for leisure and recreational purposes, if not sustainably managed, can lead to pressure on the natural environment e.g. through trampling of vegetation, noise creation, wildlife disturbance, and littering. As such, SEA topics Biodiversity, Historic Environment and Landscape could experience mixed effects, but the establishment of appropriate mitigation should ensure that any adverse impacts on the environment are minor overall.
- Potential for both positive and negative impacts as a result of land use change and conflict over potential alternative land use options. In terms of the Landscape topic, impacts will depend on the scale and nature of changes. However, increased tourism and the income generated as a result from visitors experiencing the country's landscape quality will make an important contribution to local, regional and national economy. It is predicted that any such effects will be experienced at different spatial and temporal scales, with effects often likely to be local and subjective.
- Major positive impacts predicted for Material Assets topic as Priority 9 could further stimulate further rural development and ensure the timber industry continues to grow into the future, but there is also the potential for positive and negative impacts on Landscape linked to land use change and conflict over potential alternative land use options, depending on scale and nature of changes.
- The effects of land use change on the wider environment and communities could be mixed – depends on the scale and nature of changes and if afforestation is not sensitively undertaken.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Afforestation proposals and forest management will meet UKFS requirements, which sets out the requirements for sustainable management of forests in the UK.

Priority 10: Increase the positive contribution that urban forestry makes in Scotland's towns and cities

'Major Positive' effects were predicted for SEA topics Population and Human Health, Climatic Factors, and Landscape, and 'Minor Positive' impacts for Biodiversity, Flora and Fauna, Soil, Air, Water, Material Assets and Historic Environment.

Likely Environmental Effects:

- Numerous benefits associated with urban trees, forests and woodlands in terms of - local carbon sinks (Climatic Factors); improvements to air quality, and temperature moderation, including reduction in building energy use through lowering temperatures and shading buildings in summer and blocking winds in winter (Climatic Factors and Population and Human Health). However, appropriate tree placement is important to achieve maximum building energy conservation benefits and to avoid shading buildings in winter and blocking summer breezes. Overall effects for Climatic Factors and Population and Human Health are considered to be major positive in nature. Lowering energy use in buildings can have secondary impact of lowering pollutant emissions from power plants, with minor positive impacts on air.
- Trees play an important role in intercepting rainwater run-off and its re-evaporation from their canopies. They also allow rain to percolate into the soil.
- Improved air quality can lead to positive effects on population through lowering asthma levels.
- Trees and woodlands help with flood alleviation through managing the flow of water and protecting personal assets, with positive benefits for Population and Water topics.
- An increase in urban forestry can have minor positive effects by encouraging biodiversity to these areas.
- Major positive effects on quality and appearance of urban landscapes from trees and woodlands, with knock on effects for Population and Human Health in the short to long term by providing opportunities for physical exercise and helping to lower incidences of heart attacks and Type 2 diabetes.
- A greener environment can lead to a greater sense of pride and community cohesion, as well as lowered crime levels in some cases.
- Additional secondary benefits expected for Material Assets and Population by providing small amounts of by-products and as assets to development.
- The setting of Historic Environment buildings and monuments could experience minor positive impacts from this priority being implemented.

Uncertainties/ Assumptions:

- The high level nature of the Strategy means that the detailed actions linked to the implementation of this priority are not specified.
- Assumes that urban forest and woodland creation and management meets the UKFS requirements.

Cumulative Impacts

2.83 In terms of cumulative effects of the Forestry Strategy's priorities, the assessment found that through the implementation of the Strategy, all SEA objectives will experience positive effects, and in particular for those which relate to Population and Human Health, Biodiversity, Flora and Fauna, Climatic Factors, and Material Assets, which are expected to realise major positive cumulative effects.

2.84 Overall, across the priorities, minor positive effects are predicted for Soil, Air and Water topics from a combination of, for example, expansion of woodland, lower pollutant emissions due to the use of low carbon technology, lowering of flood incidence in the urban environment, and a general rise in conservation awareness.

2.85 For the most part minor positive effects are also expected in relation to SEA Objectives linked to the Historic Environment and Landscape. However, there are also several potential mixed effects expected for these objectives, which could be addressed at a lower level.

In Combination Assessment

2.86 The potential for effects of the Forestry Strategy in combination with other PPS was assessed. The outcome was that the draft Strategy has the potential to positively and cumulatively contribute to a wide range of Scottish Government policy areas. Land management within the context of forestry has a key role to play in reducing GHG emissions and adaptation to climate change (Land Use Strategy and Climate Change Plan).

2.87 A range of documents highlight the importance of reducing habitat fragmentation and improving ecosystem health to adapt to a changing climate e.g. the 2020 Challenge which states that improvements to ecosystem health are needed at the catchment or landscape scale, and that the integration of action for wider habitats is required to combat fragmentation and restore important habitats.

2.88 The Climate Change Plan also recognises the important role of increased forestry to help alleviate flooding, and the use of natural flood management measures, such as planting of woodlands, wetland creation, and river restoration have a key part to play in the delivery of Flood Risk Management Strategies and Local Flood Risk Management Plans. Flooding can impact negatively upon population and human health, and there is the possibility for wider benefits to be achieved as a result of the Forestry Strategy, leading to potential improvements in air quality, and an increase in physical activity levels.

2.89 For those priorities which the SEA identified the potential for 'Mixed' effects as a result of the Strategy's implementation, Table 9 of the Environmental Report includes a list of proposed mitigation/enhancement measures. Table 2.1 to follow sets out that information:

Table 2.1: Proposed Mitigation Measures for Scotland's Forestry Strategy

Potential Mixed Impact on SEA Objectives	Mitigation	Responsibility
Biodiversity, Flora and Fauna (Priority 8 and 9)	In addition to the requirements of the UKFS, which requires forest managers to take account of environmental objectives and minimise direct impacts on biodiversity and historic environment sites caused by visitors, long-term forest plans could incorporate a suitable recreation / visitor plan, for sites where the impacts are likely to be a significant issue.	Scottish Government, Landowners and managers
Soil (Priority 8)	[Same mitigation as above 'Biodiversity']	Scottish Government, Landowners and managers
Air Quality (Priority 6)	Use of Environmental Management Plans for site specific mitigation such as enclosing stockpiles of dusty materials, damping down etc.	On site contractor and private companies, landowners and managers
Landscape (Priorities 2, 3, 8 and 9)	The Principles for Sustainable Land Use will be used by public bodies when making plans and taking significant decisions affecting the use of land (Land Use Strategy (2016-2021). Local forestry and woodland strategies also identify the most appropriate locations for woodlands to maximise the delivery of public benefits and minimise adverse landscape impacts. Additional information and guidance on forest landscape design is provided by Forestry Commission Scotland.	Scottish Government, Local Authorities, Statutory Consultees/ public bodies, Landowners and managers
Historic Environment (Priorities 2, 3, 8 and 9)	Local forestry and woodland strategies also identify the most appropriate locations for woodlands to maximise the delivery of public benefits including the protection, and where possible enhancement of the historic environment. Additional information and guidance on protecting the historic environment is provided by Forestry Commission Scotland.	Scottish Government, Local Authorities, Statutory Consultees/ public bodies, Landowners and managers

Scotland's Forestry Strategy Implementation Plan 2022-2025

2.90 This Implementation Plan sets out emerging priorities and actions to be delivered, which will progress the long-term objectives of Scotland's Forestry Strategy. It identifies and considers the 5 Strategic Drivers which reflect more current circumstances and Government priorities since the publication of the national Forestry Strategy. Those drivers are:

1. Resilience
2. Reversing Biodiversity Loss
3. Net-Zero
4. Just Transition
5. Green Recovery

2.91 It also identifies a range of actions linked to the Priorities of Scotland's Forestry Strategy 2019-2029.

The Right Tree in the Right Place: Planning for Forestry and Woodlands

2.92 This Scottish Government guidance, issued by Forestry Commission Scotland (now Scottish Forestry), provides advice to planning authorities on planning for forestry and woodlands. It supports the Scottish Ministers' wish to see a significant expansion in woodland cover across Scotland, delivering with it multiple societal benefits. The guidance note should be used to inform the preparation of development plans and may be a material consideration in planning decisions.

2.93 Section 2 of the document considers the current policy context and drivers and highlights that modern forestry policy and practice has a focus on achieving sustainable development and delivering a wide range of benefits to society from trees and woodlands. The guidance recognises that 'well planned and well managed and integrated effectively into the local mosaic of land use, woodlands can play an important role in delivering a wide range of Government objectives, as well as meeting local priorities and needs.' On the other hand, when poorly planned and managed, opportunities to realise woodland benefits can be lost, or negative impacts on the economy, society, and the natural and historic environment can occur.

2.94 Section 3 provides advice on preparing an up-to-date forestry and woodland strategy, including suggested scope and content and outline process for producing one.

2.95 Section 4 considers the range of Scottish Government outcomes that forestry and woodland can make a contribution towards the delivery of, and details how they can be supported via development planning; such as: sustainable economic growth; sustainable construction; timber transport; energy forests and biomass; woodlands for people (including strengthening communities and improving quality of life and sense of place, and woodlands for recreation, health and wellbeing); woodlands and landscape, biodiversity, the historic environment, water, soils, land restoration, and climate change. This support can either be through policy or guidance.

2.96 Section 5 looks at the subject of woodlands and the development management process. It provides guidance to planning authorities on the consideration of forestry and woodlands, including their protection, creation, restructuring, and removal, in development management, and how to involve Scottish Forestry in decision-making.

2020 Challenge for Scotland's Biodiversity – A Strategy for the conservation and enhancement of biodiversity in Scotland

2.97 This national biodiversity strategy sets out ambitious policy proposals for restoring nature and getting more benefits from it, including improving the condition of native woodlands identified in the Native Woodland Survey of Scotland, and improving places for people and nature through expanding and enhancing green and blue infrastructure and networks to help encourage more physical activity and contact with nature.

2.98 Scotland's 2020 Challenge aims to:

- Protect and restore biodiversity on land and in our seas, and to support healthier ecosystems.
- Connect people with the natural world, for their health and wellbeing and to involve them more in decisions about their environment.
- Maximise the benefits for Scotland of a diverse natural environment and the services it provides, contributing to sustainable economic growth.

2.99 The Strategy advocates applying an Ecosystems Services approach at a river catchment level to help restore ecosystem health in catchments across Scotland. It also recognises the value of natural capital to both people and economy and making the most of our natural assets in the most resource efficient manner.

National Forest Inventory Ecological Condition Assessment Methodology

2.100 Forest Research has created a new methodology for determining the ecological condition of Scotland's woodlands (both plantation and semi-natural) to help inform policy and land management decisions. The Woodland Ecological Condition assessment is based on National Forest Inventory data and uses 15 indicators of woodland ecological condition and a further classification of woodland habitat into it condition status of favourable, intermediate and unfavourable.

The Scottish Government's Policy on Control of Woodland Removal

2.101 Under the Scottish Government's Control of Woodland Removal Policy, loss of woodland should only be permitted if it results in significant public benefits. Planting in other areas to make up for any loss of woodland is often expected. The Policy outlines the following 5 Guiding Principles:

- There is a strong presumption in favour of protecting Scotland's woodland resources.
- Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits. In appropriate cases a proposal for compensatory planning may form part of this balance.
- Approval for woodland removal should be conditional on the undertaking of actions to ensure full delivery of the defined additional public benefits.

- Planning conditions and agreements are used to mitigate the environmental impacts arising from development and Forestry Commission Scotland [now Scottish Forestry] will also encourage their application to development-related woodland removal.
- Where felling is permitted but woodland removal is not supported, conditions conducive to woodland regeneration should be maintained through adherence to good forestry practice as defined in the UK Forestry Standard.

Scottish Forestry Technical Note on Preparing a Forestry and Woodland Strategy (2026)

2.102 Scottish Forestry recently issued this Technical Note to provide information support to planning authorities in the preparation of a new Forestry and Woodland Strategy (FWS) or the updating of an existing strategy. The note sets out what a FWS is, alongside a list of the benefits to be achieved from an up to date strategy, and the legal requirements for their content. It also provides a clear definition as to what a woodland of high nature conservation value is.

2.103 FWS's are required to set out a planning authority's policies and proposals for forestry, including their development, protection and enhancement, their resilience to climate change, and the expansion of a range of woodland types to provide multiple benefits. The note reiterates that activities associated with woodland creation and the management of existing woods and forests need to be undertaken in line with the UK Forestry Standard and its associated guidelines to achieve these outcomes, and that planning authorities have a duty to promote sustainable forest management under Section 2(2) of the Forestry and Land Management (Scotland) act 2018.

2.104 Table 1 of the document outlines the connections between a FWS and key NPF4 policies relating to climate mitigation and adaptation; biodiversity; natural places; forestry, woodland and trees; green belts; sustainable transport; design, quality and place; local living and 20 minute neighbourhoods; blue and green infrastructure; play, recreation and sport; flood risk and water management; community wealth building; business and industry, and tourism.

2.105 In terms of areas for new woodland in a FWS, the note highlights that indicative maps are used to "identify areas according to how easily they could accommodate new woodland", and these are usually categorised as "preferred", "potential", and "sensitive" land areas. The commonly understood definition of these categories is described as follows, and woodland creation grant applications in any of these areas will need to meet the requirements of the UK Forestry Standard and Forestry Grant Scheme.

- **Preferred land –** has the greatest scope to accommodate the expansion of a range of woodland types and so deliver a wider range of benefits. Preferred areas are likely to have fewer considerations to address.
- **Potential land –** has considerable potential to accommodate future creation of a range of woodland types but with at least one significant consideration to address. The extend to which these can be addressed at the design stage will determine if a woodland creation proposal can be accommodated.
- **Sensitive land –** has limited scope to accommodate further woodland creation because of a combination of considerations. Limited expansion might be possible in these areas but only if it is of a scale and character that can be accommodated without significant negative impacts on those considerations and/or where it would positively enhance features of local interest.

Perth and Kinross Forest and Woodland Strategy (2020)

2.106 Our current Forest and Woodland Strategy (FWS) Supplementary Guidance provides a strategic framework for the development of forestry in the area and includes a map of sensitivities and opportunities. The map categories of preferred, potential, sensitive and unsuitable are used to inform forestry and woodland creation proposals. The Strategy's 'Opportunities' Map highlights the opportunities for: forestry, forest habitat networks, water management through planting, and enhancement of existing woodland.

2.107 The Strategy's Vision is to ensure that:

'Perth and Kinross will be an area of exceptional trees, woods and forests, which enhance the natural and cultural environment, support and strengthen the local economy adding value where possible and are accessible to local people and visitors alike across a range of activities and interests.'

2.108 The Strategy identifies 4 Priorities, 7 Themes and a range of Opportunities for Action, which will contribute to the delivery of its vision and priorities. The details of these are set out in the tables to follow.

Priority 1: Maximising the role of forests and woodlands in addressing climate change and adapting to its impacts
Trees, woodlands and forests have a crucial and important role in addressing climate change. The latest modelling suggests that winters are likely to become milder and much wetter, while summers will become warmer and drier. Trees and woodlands can help us adapt to some of the challenges that will result from this changing climate.
Theme 1 – Climate Change Increase the contribution of trees, woodlands and forests to help mitigate and adapt to the effects of climate change.
Opportunities for Action • Encourage the expansion of appropriate new woodlands to secure carbon sequestration benefits and minimise woodlands removal. • Optimise the potential for forestry in Perth and Kinross to contribute to carbon management across the range of land uses and to contribute to fully accredited and audited carbon off-setting schemes. • Support the development of renewable energy, particularly heat but utilising the potential for small-scale CHP where appropriate from wood in line with Scottish Government policy. • Expand forest habitat networks. • Encourage the management and expansion of riparian and floodplain woodland and protection woodlands to adapt to the effects of climate change as part of a catchment approach.

Priority 1: Maximising the role of forests and woodlands in addressing climate change and adapting to its impacts

- Encourage sustainable forest management as defined by the UKFS and associated guidelines and seek to minimise future risks from climate change, for example from tree pathogens, through the creation of forest habitat networks, and using diverse tree species, including hardwoods, and continuous cover silvicultural systems.

Priority 2: Maximising the role of forests and woodlands in supporting the economy

Trees and woodlands will make an increasingly important contribution to the area's economy. As well as supporting a healthy timber sector, trees and woodlands will help create an environment which attracts investment and encourages high-quality development.

Theme 2 – Timber

Encourage a diverse forest estate and maximise the economic potential of the area's timber resources.

Opportunities for Action

- Plant and promote the planting of diverse tree species which enhance the landscape, recreational and biodiversity value of new productive woodland. This should include:
  - The planting or regeneration of native species;
  - Maintaining the traditional wider mix of species and age ranges of non-native timber producing trees;
  - The planting of broadleaves for timber where appropriate; and
  - Woodland structure.
- The inclusion of open spaces in forests.
- Tailor financial incentives and Forest Design Plans for new productive woodland towards encouraging these objectives.
- Encourage use of long-term Forest Design Plans as a basis for felling approval, to assist with the restructuring of existing productive plantations to enhance their landscape, biodiversity and recreational value.
- Adopt 'best practice' silviculture in forest areas designed with timber production as an aim, in order to produce a high-quality, high-value future crop.
- Develop the timber transport infrastructure through mechanisms such as the Strategic Timber Transport Fund and through partnerships such as the Timber Transport Forum and Timber Transport Group.

Theme 3 – Business Development

Support rural diversification and promote a diverse range of forest-based enterprises.

Opportunities for Action

- Encourage valued-added processing within Perth and Kinross, especially new opportunities offered by biomass heating.
- Support farm diversification through encouraging the expansion of farm forestry and agro-forestry and related on-farm enterprises.
- Promote local co-operation and clusters such as the Carse of Gowrie Initiative to secure new markets and increase the business potential of woodland-related activity including sustainable non-timber forest products and services.

Priority 2: Maximising the role of forests and woodlands in supporting the economy

- Support the role of the area's forests and tree heritage in supporting rural tourism particularly in supporting the 'Big Tree Country' initiative.
- Encourage forest-based, sport and active recreation as a way of diversifying and contributing to the rural economy.
- Encourage the development of local timber markets by local businesses, particularly markets based on wood fuel and added value craft products.
- Promote increased use of sustainably produced timber and timber products in construction.
- Encourage wider uptake of forest certification.

Priority 3: Maximising the role of forests and woodlands to improve the quality of life of residents of Perth and Kinross

Trees and woodlands have a key role to play in creating healthy and sustainable communities. They will help improve the quality of places where we live and work, create opportunities for communities to get involved in managing and owning woodlands, encourage healthier lifestyles and support education, training and social enterprises.

Theme 4 – Community Development

Improving the quality of life and wellbeing of people by supporting community development.

Opportunities for Action

- Promote the provision of welcoming and well-managed woodlands in and around communities that contribute to quality of life and provide opportunities for exercise, learning, relaxation and enjoyment.
- Encourage significant woodland expansion within the Perth greenbelt and around other towns and villages and promote new street trees and urban tree planting through development opportunities.
- Support the use of woodlands as a way of improving derelict, underused and neglected land.
- Encourage greater use of woodlands for outdoor learning.
- Maintain constructive and proactive engagement with communities on forestry-related issues.
- Encourage and promote community management and involvement in community woodlands.

Theme 5 – Access and Health

Encouraging public access and enjoyment through woodlands and forests to help improve physical and mental health.

Opportunities for Action

- Improve access to high-quality open space for the local population and contribute to the health, quality of life and social inclusion agendas.
- Encourage the implementation of responsible access (Scottish Outdoor Access Code) and the development of multi-use local and Core Path Networks as well as promoting the role of woodlands through the Local Access Forum.
- Encourage the development of new active travel route through new and existing woodland where appropriate.

Priority 3: Maximising the role of forests and woodlands to improve the quality of life of residents of Perth and Kinross

- Encourage participation in woodland activities, e.g. woodland management and new tree planting for exercise and wellbeing and support the development of a 'forests for health' partnership programme.
- Encourage the development of appropriate tourism infrastructure, such as interpretive centres, Core Path Networks and long-distance footpaths that maximise delivery of public benefit.

Priority 4: Maximising the role of forests and woodlands in contributing to the quality of the environment

Trees and woodlands make an important contribution to the environmental character and quality of Perth and Kinross. They support internationally important wildlife habitats, help sha[e the wider landscape, contribute to our cultural heritage and help maintain the quality of air and water resources. The strategy aims to increase this.

Theme 6 – Environmental Quality

Protecting and enhancing the environmental quality of our natural resources (water, soil and air), contributing to and improving our scenery, and helping to make the most of our historic environment.

Opportunities for Action

- Encourage the use of UKFS and relevant Forest Guidelines to protect water and soil resources particularly in sensitive catchments (such as the Lunan Lochs).
- Collaborate with SEPA, Scottish Forestry and private landowners to deliver woodland-related benefits in support of River Basin Management Plan.
- Protect and support the environmental functions and benefits of forests particularly where they underpin other national and local strategies.
- Recognise unique local landscapes and safeguard and restore sensitive landscapes.
- Encourage sensitive forest management to enhance the visual impact of woodlands on internal and external views.
- Plant new, and manage existing, site-appropriate woodland and trees alongside and visible from important transport routes whilst ensuring that important views are retained.
- Encourage good stewardship of the historic environment through forest design planning process and sensitive forest management using initiatives such as 'Perthshire Big Tree Country', the Historic Orchards and the 'iCONic' projects to underpin the long-term future of historic landscapes and tree-related features.
- Encourage the use of archaeological and historical sites for interpretation and education.
- Allan Water Catchment Project which includes riparian planting and is a partnership project with SEPA, SNH, Forth Fisheries Trust and RSPB Scotland

Priority 4: Maximising the role of forests and woodlands in contributing to the quality of the environment

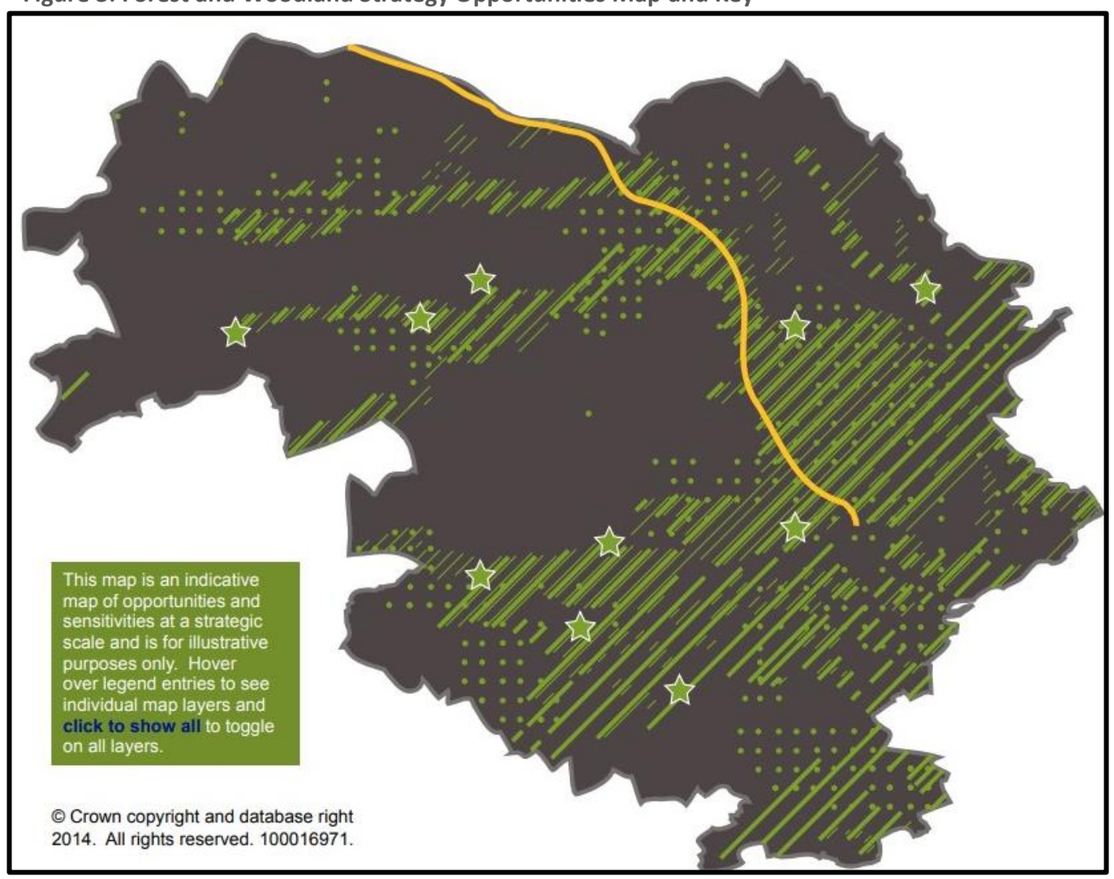
Theme 7 – Biodiversity

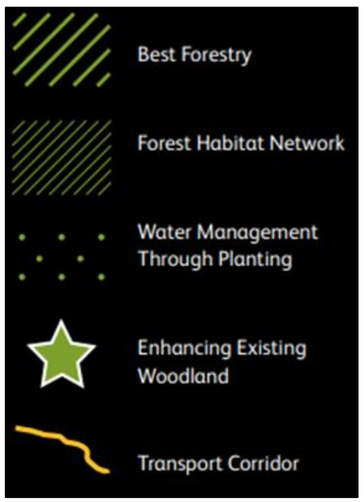
Helping to restore, maintain and enhance biodiversity, and increasing awareness and enjoyment of it.

Opportunities for Action

- Promote, encourage and increase planting of native trees, either as the main element or as a component of new woodland planting for any of the purpose described in this Strategy, including as a substantial component associated with woodland which has timber production as a key objective in line with UKFS and which contribute to forest habitat network proposals for Perth and Kinross.
- Encourage good management of all habitats including the enhancement of habitats for key species including red squirrel, black grouse and montane forest edge species (including juniper and other treeline montane species) in line with the Local Biodiversity Action Plan and the provisions for management of designated sites.
- Manage existing areas of native woodland for a range of benefits, with sustainable woodland regeneration and biodiversity as key outcomes.
- Promote connectivity through the development and expansion of forest habitat networks whilst maintaining networks of adjacent open ground habitats such as Forest of Clunie and Rannoch Moor.
- Encourage woodland expansion in areas which would not impact on priority non-woodland habitats and key sites.
- Restore priority open ground habitats in forested areas where there are clear environmental benefits for so doing.
- Restore and improve the condition of ancient, native and semi-natural woodlands in line with the priorities identified by the NWSS and in helping bring all woodlands designated for conservation up to favourable conservation status.
- Increase awareness, understanding and enjoyment of biodiversity value of all woodland types.

Figure 3: Forest and Woodland Strategy Opportunities Map and Key





JHI Carbon Sequestration Study for the Perth and Kinross Area (December 2021)

2.109 The Council commissioned the James Hutton Institute (JHI) to undertake a Carbon Sequestration Study of the Perth and Kinross Council Area. The project focussed on the sectors of land-based industries and natural resources, and how these can be considered when looking at the carbon resources of the area, and its potential for sequestering or reducing greenhouse gas emissions.

2.110 In terms of woodland expansion potential, the project report identifies significantly higher levels of carbon sequestration potential from the planting of Production Sitka Spruce, and lower from the expansion of Native Broadleaf (after 25 years). It is important to remember the national objective of expanding native woodlands, and policy of planting the right tree in the right place. As such, it is most likely that a mixed approach to planting will be most appropriate for the area.

SEA Scoping Question:

1. Are there any plans, programmes, strategies, legislation, or policy guidance of relevance to FWS review that you consider should be added to the list in Appendix A?

3 ENVIRONMENTAL BASELINE AND KEY ISSUES

Introduction

3.1 The identification of the current environmental baseline conditions, and their likely evolution, is an important part of the SEA process. A knowledge and understanding of existing conditions, and the consideration of their significance helps with the issues which the Forestry and Woodland Strategy should be addressing and allows the Strategy to be successfully implemented and monitored.

3.2 The 2005 Act requires that the likely evolution of the environmental baseline of the area, without the Strategy being implemented, to be identified. This is useful in the assessment of the significance of effects, particularly with respect to those conditions which may already be improving, or worsening, and the rate of that change.

3.3 The type of data and evidence collected for the environmental assessment will largely be determined by:

- The environmental topic to which it relates
- The SEA Objectives
- The aspects of each environmental topic chosen for the basis of the assessment
- The level of assessment proposed
- The availability of relevant data

Establishing the Current State of the Perth and Kinross Environment

3.4 The purpose of including data gathered at this stage in the SEA process is to help build a picture of the social, economic, and environmental characteristics of the area, and the key environmental issues which it faces. Data has been collected for a range of topics likely to be influenced by FWS. Appendix C to this Scoping Report details the list of data which has already been collated or is in the process of being collected and analysed to inform the development of the SEA Environmental Baseline. Where available spatially, the data has been provided in a mapped format.

Key Baseline Facts

3.5 The tables to follow provide some key baseline facts for the area covered by the Forestry and Woodland Strategy and are grouped under the SEA Topic themes.

Table 3.1: Biodiversity, Flora and Fauna Key Baseline Facts

Biodiversity, Flora and Fauna
• There are 8 Special Protection Areas wholly or partially within Perth and Kinross covering 232,318.36 Ha in total (includes Cairngorms Massif SPA, only part of which is within Perth and Kinross).
• There are 22 Special Areas of Conservation wholly or partially within Perth and Kinross covering (75,691.17 Ha in total).
• There are 112 Special Sites of Scientific Interest (SSSI) covering 71,008 Ha in total. 92 of these sites are Biological SSSI sites covering a total area of 51193.91 Ha; 13 Geological SSSI sites covering a total area of 616.68 Ha, and 7 Mixed SSSI sites covering a total area of 19197.29 Ha. • 10 Biological, 1 Geological, and 3 Mixed SSSI sites are wholly or partially within the Cairngorms National Park Area.
• There are 4 RAMSAR sites within Perth and Kinross – Firth of Tay and Eden Estuary, Loch Leven, Rannoch Moor, and South Tayside Goose Roosts.
• In 2023/24, 33.5% of the land within the Perth and Kinross Council Area is protected for nature.
• 75.3% of protected biological and mixed SSSI site features within Perth and Kinross are in favourable condition (June 2022) • There are 23 SSSIs with a woodland feature/interest within the Perth and Kinross LDP area. 8 of these were identified as being in Favourable condition, 13 in Unfavourable condition, and 3 Recovering. The main pressures noted for those SSSIs are: Dumping/storage of materials; invasive species; over grazing; forestry operations; games/fisheries management; natural event(s); water management; plant pests and diseases; recreation/disturbance; and no proactive management. (Protected Nature Sites)
• 75.5% of protected nature sites features within Perth and Kinross are in favourable condition (June 2022)
• There are currently 124 Proposed Local Biodiversity Sites.
• 51.4% of all 1 Km grid squares in Perth and Kinross had recordings of protected species (protected by European and UK legislation) (June 2020)
• There are 3 National Nature Reserves wholly or partially within Perth and Kinross (Ben Lawers, Loch Leven and Mar Lodge Estate).
• The Perth and Kinross Council Area adjoins 7 Important Bird and Biodiversity Areas (IBA's) covering nearly 44,000 Ha (Atholl/Glen Tilt, Drumochter Hills, Firth of Tay, Forest of Clunie, Loch Leven, South Tayside Goose Roosts, and Tay-Isla Valley).
• There is approximately 293,100 Ha of wetlands within Perth and Kinross.
For the Perth and Kinross Local Development Plan Area i.e. excluding the part of Perth and Kinross Council within the Cairngorms National Park: • In 2025 (NFI), there were 99,353 hectares of woodland, covering approximately 21% of the LDP land area. • Ancient Woodland Inventory (AWI) sites cover approximately 30,739 Ha or 6.6% of the land area, which is 30.9% of the total woodland coverage for Perth and Kinross. The breakdown of AWI sites is: Ancient of Semi-Natural Origin (9,658 Ha or 9.7% of total area covered by AWI site); Long-Established of Plantation Origin (19,985 Ha or 20.1% of total area covered by AWI sites), and Other (On Roy Map) (16,146 Ha or 16.3% of area covered by AWI sites). • There are 853 Ancient Tree Inventory (ATI) Sites on the Woodland Trust's ATI within the area. • In 2025, the NFI profile of woodland cover was: Broadleaved (16,516 Ha or 16.6% of total woodland cover); Conifer (38,006 Ha or 38.2% of total cover); Mainly Broadleaved Mixed (1,494 Ha or 1.5% of total cover); Mainly Conifer Mixed (1,502 Ha or 1.5% of total cover); Young Trees (8,228 Ha or 8.3% of total cover), and Assumed Woodland (13,403 Ha or 13.1% of total cover). • In 2025, there was a total area of 28,297 Ha of Native Woodland Survey of Scotland (NWSS) Sites within Perth and Kinross, accounting for 28.5% of the total woodland cover for the area, and 6.1% of the LDP land area. The breakdown of NWSS Sites was: Native (23,424 Ha or 23.6% of total woodland cover); Nearly-Native (557 Ha or 0.6% of total woodland cover); Plantations on Ancient Woodland Sites (2,430 Ha or 2.5% of total woodland cover), and Open Land Habitat (1,886 Ha or 1.9% of total woodland cover). • In 2024/25, 3182 trees had been plated on Council land and maintained open space, up from 670 in 2023/24. • There are 2 Caledonian Pinewood Inventory sites within the Perth and Kinross Area - Black Wood of Rannoch and Meggernie. The Crannach CPI site also immediately adjoins the Council's western boundary.

Table 3.2: Population and Human Health Key Baseline Facts

Population and Human Health
• 154,420 residents (Mid-Year Estimates 2024) • Population is projected to rise by 7% between mid-2022 – mid-2032. Over the same period, the population of Scotland is estimated to increase by 4.4%. • 54.2% - 44.8% Urban to Rural population split across the PKC Area (2022 Census). • Based on the Scottish Government 6-Fold Categories: – 1.2% of the population live in Large Urban areas. – 31.7% of the population live in Other Urban areas. – 22.3% of the population live in Accessible Small Towns. – 35.6% of the population live in Accessible Rural areas. – 9.2% of the population live in Remote Rural areas.
Health and Wellbeing
ScotPHO Health and Wellbeing Indicators: • **Environment -** Under this category, the PKC Area is performing statistically significantly worse compared to the Scotland average in terms of the percentage of the area's population who are living in the 15% most 'access deprived' areas. In relation to the indicators on neighbourhood rating and proximity to a derelict site, the Perth and Kinross Area is performing statistically significantly better than the Scotland average figures for the same indicators. • **Ill Health and Injury** - For all indicators under this category, the PKC Area is performing statistically significantly better than the Scotland average. • **Mental Health -** When considering the results of this category's indicators, we can see that the PKC Area is performing statistically significantly better than the Scotland average in terms of the percentage of the population who have been prescribed medication for anxiety, depression, or psychosis. However, the recorded number of deaths from suicide across the area from 2017 to 2021 per 100,000 of the population is just slightly higher than the Scotland average figure, and the level of psychiatric patient hospitalisations between 2019/20 to 2021/22, per 100,000 of the population is significantly worse than that of the Scotland average for the same period.
• In 2020, 20.97% (39 out of 186) of all datazones are ranked in the Scottish Index of Multiple Deprivation (SIMD) 40% most deprived; 3.76% (7 out of 186) are within the 15% most deprived, and 1.61% (3 out of 186 datazones) are within the 10% most deprived. 23.66% (44 out of 186 datazones) are within the 20% least deprived areas in Scotland. • The most deprived areas within Perth and Kinross can be found in Perth, and Blairgowrie East.
Life Expectancy
• **Life Expectancy and Mortality** - Looking at the results under this category, the PKC Area is performing, for most indicators, statistically significantly better than the Scotland average, or about the same for a few of the indicators. – In terms of life expectancy in Perth and Kinross, at birth, the life expectancy for females is higher than for males, at 82.7 years and 78.9 years respectively (2019-2021). However, male life expectancy at birth has increased at a faster rate than that for females between 2001-03 and 2019-21. The life expectancy at birth in Perth and Kinross is higher than at a Scotland level for both females and males. – Leading causes of death in Perth and Kinross for males in 2022 - Ischaemic heart diseases was responsible for 11.1% of all deaths, followed by Dementia and Alzheimer's Disease (7.8%). This mirrors the leading cause of death for males in Scotland overall, with 14.0% being attributed to Ischaemic heart diseases, followed by Dementia and Alzheimer's Disease at 6.8%. – Leading causes of death in 2022 for females was Dementia and Alzheimer's Disease (12.7% of all female deaths), followed by Cerebrovascular disease (7.9%). For comparison, in Scotland overall for the same period, Dementia and Alzheimer's Disease was the leading cause of death for females (13.1%), followed by Ischaemic heart diseases (8.7%).
Vacant and Derelict Land, and Empty Buildings
• Overall, less 0.01% of the Perth and Kinross Area is derelict land which would suggest that it is not a significant issue for the area. Although the overall land area is small, a key planning consideration is the percentage of the Perth and Kinross population which are living near to derelict land: • 24% of the population of Perth and Kinross are living 500m – 1,000 from derelict land. • 11.5% are living less than 500m from derelict land. • 7.6% have been living less than 500m from land which has been derelict long-term (prior to 2008).
Health Needs of the Population
The Perth and Kinross Integration Joint Board Strategic Commissioning Plan 2020-2025 tells us that the key challenges and messages with respect to health needs of the population of Perth and Kinross are:

Population and Human Health
– Life expectancy is lower in the most deprived areas, primarily Perth City. – An increase in the over 85-year-old age group and with increasingly complex needs is expected. – There is a growing population of older people in North Perthshire. – 31.5% population are access deprived due to the rural nature of Perth and Kinross. – Approximately 30% of people are living with long-term conditions and this is associated with age and income deprivation. – Poor mental health affects more people in deprived areas. – Uptake of support from the Drugs and Alcohol Team is greater in Perth City than in either the North or South Perthshire Localities. – There is a growing ageing population of people with learning disabilities. – Several specific long-term conditions are more prevalent in Perth and Kinross than in Scotland as a whole. These are: Hypertension, Hypothyroidism, Coronary Heart Disease, Cancer, and Dementia.
Woodland Access for Leisure and Recreation
There are Woodland In and Around Town (WIAT) Forestry Grant Scheme Eligible Areas at: Alyth; Auchterarder; Blairgowrie and Rattray; Bridge of Earn; Coupar Angus; Crieff; Gleneagles; Invergowrie; Kelty/Keltybridge; Kinross; Perth; Pitlochry, and Scone. The purpose of WIAT is to bring neglected woodland into active management and work with people to help them to use their local woodland. Woodlands must be close to where people live and/or work (within 1km of settlements of over 2000 people). Within the WIAT area, deprived areas are a priority – within Perth and Kinross priority areas are identified in line with SIMD high multiple deprivations areas within Perth and Blairgowrie/Rattray.

Table 3.3: Soil, Water and Air Key Baseline Facts

Soil, Water and Air
Soil
• 58,983.89 Ha of Class 1 Nationally Important Soils in Perth and Kinross (2016) • 29,4373.70 Ha of Class 2 Nationally Important Soils in Perth and Kinross (2016) • 22,685.4 Ha of Class 5 Soils in Perth and Kinross (2016)
Prime Agricultural Land (PAL) • 62,432.10 Ha (11.81% of PKC Area) covered by Classes 2 and 3.1 • 57, 877.5 Ha (11% of PKC Area) covered by Class 3.2 land, as defined in the National Scale Land Capability for Agriculture in Scotland Map. Class 3.2 is not PAL but is capable of average production, though high yields of barley, oats and grass can be obtained. • The majority of Prime Quality Agricultural Land is located in the south and eastern areas of Perth and Kinross. • Since the adoption of the Perth and Kinross Local Development Plan 2 (late November 2019) approval has been granted for planning applications covering 82 Ha of Class 2 land, and 468 Ha of Class 3.1 land. This equates to 0.88% of the overall PAL resource within Perth and Kinross, as identified in the National Scale Land Capability for Agriculture in Scotland Map.
Risks to soils have been identified in Scotland's Soil Map. These maps only partially cover Scotland, and are available for the area around Perth, and eastern and southern areas of Perth and Kinross. • The Subsoil Compaction Risk Map shows that most of these areas are between moderately vulnerable and extremely vulnerable to the risk of subsoil compaction. • The Topsoil Compaction Risk Map shows low to moderate risk of topsoil compaction for most of the area covered by the map, but there are some patches of high risk areas around Bridge of Earn, Kinfauns, the Carse of Gowrie, and between Glenalmond, Methven, Fowlis Wester and Madderty. The map also shows areas of organic topsoil where the risk of compaction has not been assessed. • The Soil Erosion Risk Map classifies the areas covered by the map using a series of categories. Much of the area along the Carse of Gowrie is categorised as L2 and L3 (low erosion risk), and the majority of the rest of the area of Perth and Kinross covered by the map is M1 to H2, and some H3 (moderate to high risk) patches. • The Soil Leaching Potential Map is a mixed picture for the area of Perth and Kinross which it covers. Much of the area has been categorised as I1 (intermediate risk), and there is a large area of L (low risk) covering the Carse of Gowrie. However, there are areas of H1 (high) and H2 (high) identified which intersperse the I1 areas. • The Soil Run-Off Risk Map shows some patches of low risk, large parts of the area of Perth and Kinross which is covered by the map as at moderate risk, and there are some areas, particularly to the North, North East, North West, West, and South West of Perth which have been categorised as at high risk for soil run-off.

Soil, Water and Air
Water Environment
• In 2024, approximately: 9% of surface waters in Perth and Kinross were classified as having an overall high quality water status; 43% were classified as overall good status; 32% as having overall moderate status; 12% as having overall poor status, and 4% as having an overall bad water quality status. Areas in the North, North West and West contained areas of bad surface water quality status, and areas primarily to the North, East and South contained areas of poor surface water quality status. • The whole of the Perth and Kinross Council Area is a ground water drinking protected area (SEPA 2014).
The existing woodland cover within the Water Framework Directive (WFD) Catchment Areas in Perth and Kinross is: - Allan Water – 1,509 Ha - Dundee Coastal – 895 Ha - Earn Coastal – 694 Ha - Perth Coastal – 502 Ha - River Devon – 1,907 Ha - River Earn – 8,570 Ha - River Eden – 116 Ha - River Leven (Fife) – 1,594 Ha - River Tay – 32,416 Ha - Stirling Coastal – 357 Ha
Air
• Generally good air quality in most areas of Perth and Kinross i.e., it meets all of the Government's targets except at a few traffic hotspots. • There are currently 1 Air Quality Management Area (AQMA) in Perth and Kinross in Perth. • In 2022, Atholl Street, Perth was identified as Scotland's most polluted street for PM_{10}, and the third most polluted street for NO_2 • In 2019, all four Perth and Kinross monitored air quality locations fell below the annual mean targets for Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10}).

Table 3.4: Climatic Factors Key Baseline Facts

Climatic Factors
Greenhouse Gas Emissions
• The latest Department for Energy Security and Net Zero (DESNZ) data (2023) show that the Perth and Kinross Area-wide territorial GHG emissions (kt CO_2e) was 1180 kt CO_2e. This represents a -3% change over the previous year. • The 2023 Perth and Kinross Area-wide territorial greenhouse gas per Capita emissions (t CO2e - Net) was 7.7 kt CO_2e, which represents a -4% change over the previous year. • The Perth and Kinross Council Scope 1, 2, and 3 emissions (t CO_2e) was 23,457 t CO_{2e}, which represents a -2% change over the previous year.
• In 2024, 71% of the Council's Climate Change Key Performance Indicators were showing positive change.
• The latest DESNZ data (2023) shows that in Perth and Kinross, Land Use Land Use Change and Forestry (LULUCF) accounted for 33% (667.3 $ktCO_2$) of the total area-wide greenhouse gas emissions for Perth and Kinross, and was also responsible for sequestering -851.9 $ktCO_2$, leaving a net -184.6 $ktCO_2$. • Agriculture accounted for 35% of the total area-wide CO_2 emissions (414.4 $ktCO_2e$).
Flood Risk Management
• The floodplain in Perth and Kinross remains relatively undeveloped, and the majority of watercourses affect only agricultural or hill land. • Areas, within Perth and Kinross, identified as having high potential for floodplain storage (Current SEPA 1:200 year flood outline) are: Kinross and Milnathort, Blackford and Greenloaning, Dunning, Crieff, Madderty and Balgowan, Bridge of Earn, Perth, Huntingtower, Ruthvenfield, Scone, Luncarty, Errol Station, Inchture, Rait, Grange, Spittalfield, Dalguise, Dowally, Guay and Kindalachan, Ballinluig, Logierait, Blair Atholl, Tummel Bridge, Aberfeldy, Weem Village, Meikleour, Coupar Angus, Kettins, Meigle, Alyth, Blairgowrie • Wetlands are natural water-storage features on the landscape. There is approximately 293,100 Ha of wetlands within Perth and Kinross. • In 2018 there were 21 Potentially Vulnerable Areas (PVAs) within, overlapping or immediately adjoining the Perth and Kinross Council Area: Aberfeldy, Alyth, Auchtermuchty, Bankfoot, Blackford, Blair Atholl, Blairgowrie and Rattray, Bridge of Earn, Comrie, Coupar Angus, Cowdenbeth, Dalwhinnie, Dundee, Broughty Ferry and Invergowrie, Dunkeld and Birnam, Hillfoot villages, Kinross, Milnathort and Glenrothes, Luncarty

Climatic Factors

and Stanley, Perth and Almondbank, Pitlochry, and Scone. PVAs are geographical areas that are designated for flood management under the Flood Risk Management Act (Scotland) 2009. They show parts of catchments and coastal areas where nationally significant flood risk exists now or is likely to occur in the future.

- In 2021, there were 22 Flood Risk Management Target Areas within Perth and Kinross: Blair Atholl, Spittalfield, Weem, Aberfeldy, Almondbank, Alyth, Bankfoot, Blackford, Blairgowrie and Rattray, Bridge of Earn, Comrie, Coupar Angus, Dunkeld and Birnam, Invergowrie, Kinross, Luncarty, Methven, Perth, Pitlochry, Scone, Dalguise, and Milnathort. Flood Risk Management Target Areas are geographical areas used to identify locations which are the focus of targeted risk management objectives and actions as identified in Scotland's National Flood Risk Management Plans 2021. Target Areas are located within PVAs but are not formally designated under the Flood Risk Management (Scotland) Act.

Climate Risk and Opportunity

Current Impacts of Climate Change within Perth and Kinross –

- Increasing incidences of both flash surface water flooding in urban areas and river flooding, linked to an increase in rainfall over Scotland in the past decades; causing significant damage to properties, impacted multiple communities and businesses, as well as assets. Also, serious secondary impacts occurring e.g. landslips and increased scour to bridges.
- A recent increase in temperature – heat waves are becoming more frequent and intense and can cause heat related illness and mortality, and also wildfires.

Potential Risks within Perth and Kinross - The risks identified to the various sectors are:

- Risks to Health, Communities, and the Built Environment – higher temperatures can have direct health risks (heat stroke/heat stress), lead to an increase in disease prevalence, cause buildings to overheat, and result in a reduction in air quality. Increased precipitation can lead to flooding, which will impact people and communities, and an increased occurrence of water damage, condensation, and damp in homes.
- Risks to Business and Industry – possible increase in energy costs due to additional cooling needed, and reduced productivity for employees during times of high temperature. Flooding, drought (especially for agriculture) and possible water scarcity because of precipitation changes. Risks to supply chains as a result of global climate impacts causing supply problems. Climate will impact on the transition to Net Zero.
- Risks to Nature – species which are currently at upper temperature limits, particularly in higher areas, may not be able to survive in the area in the future. Reduced snowfall is likely to have a big impact on upland wildlife as well as hydrology within the area. Generally, threats are expected to both specific species and habitats from pests, pathogens, and invasive non-native species which thrive more due to changes in climate.
- Risks to Infrastructure – higher temperatures are likely to lead to increased energy requirements because of an increased cooling demand, and roads melting during times of extreme heat. Increased precipitation will lead to flooding, scour to bridges, and landslips – all potentially damaging infrastructure directly. A decrease in precipitation could result in private water supplies drying up.

The risks identified to Council assets, operations, and net zero transition include:

- Risks to Council-Maintained Community Spaces from Flooding – Some of the community spaces which PKC maintain lie within flood risk zones, which brings the risk of potential large financial costs and impacts on residents.
- Risks to PKC Estates from Flooding – Potential large financial costs and impacts on residents of social housing, Council offices, or possibly equipment damage which could affect service operation. There are also five schools and HMP Perth at risk from flooding.
- Risks to Road Infrastructure from Flooding – some Council-maintained roads lie within flood risk zones and are at risk from scour which will result in significant repair costs.
- Risk to Housing and Housing Provision from Flooding – there will be financial costs associated with protecting and repairing housing affected by flooding, with associated effects of both a physical and mental health and wellbeing nature. There are 940 Council properties at risk of flooding.
- Risks to PKC Key Supply Chains – it is difficult to quantify, but potentially significant effects on service provision and operation if supply chains are disrupted.
- Risks to Leisure Facilities from Flooding – some leisure facilities lie within flood zones, with potentially large associated cost and impact on residents.

Potential Opportunities within Perth and Kinross - These are areas where climate change might bring improvements to the lives of the people of Perth and Kinross and beyond and create chances for economic growth or cost savings. The key opportunities identified as part of the assessment were:

- Improved health and wellbeing from warmer summers and winters.
- Lower energy demand, for example in terms of winter heating (domestic and non-domestic buildings) helping to reduce fuel poverty and cost to organisations.
- Longing growing seasons with the possibility of new crops and increased agricultural productivity.
- Opportunities for PKC to reduce running costs in some areas, such as less gritting because of warmer winters; reduced energy demand in buildings over winter, and opportunities for more renewable energy generation.

Table 3.5: Material Assets Key Baseline Facts

Material Assets
Recreation
• National Cycle Network Routes 1, 7, 77, and 775 pass through Perth and Kinross, connecting within and outside of the Council Area to the north, north east, south, east and west.
Within the Perth and Kinross Council Area there are: • 12 Major Parks located within Crieff, Perth, Kinross, Coupar Angus, Aberfeldy, Blairgowire/Rattray, Scone, Auchterarder, Pitlochry, and Alyth. • 4 Countryside sites at Birks of Aberfeldy, Kinnoull Hill Woodland Park (Perth), St. Magdelene's Hill and Buckie Braes (Perth), and Den O'Alyth. • 2,043 Km of Perth and Kinross Core Path Network • There is an extensive network of signposted paths covering Perth and Kinross – approximately 2,319 sections of signposted paths measuring approximately 1,542 Km in total. • The Cateran Trail is a 103 Km circular long distance walking route maintained by the Perth and Kinross Countryside Trust. It is typically walked in 5 stages starting at Blairgowrie and taking a clockwise direction towards Kirkmichael, Spittal of Glenshee, Kirkton of Glenisla, then Alyth. • A variety of locations throughout the area are used for a number of water-based recreational activities, including for wild swimming, kayaking/canoeing, stand up paddleboarding, canyoning, fishing, and boating/sailing.
Minerals
• There are 5 active mineral sites and a number of dormant sites (sand and gravel, and crushed rock). • There are significant Barite reserves at Duntanlich. • Perth and Kinross forms part of the Tay Area in the 2019 Aggregate Mineral Survey for Scotland. The results of the survey show that the Tay Area has reserves of sand and gravel and crushed rock, with respectively, a 9 year and a 24 year reserve of maximum supply from active sites at 2019 sales levels.
Geology and Geodiversity
• 47 Geological Conservation Review Sites within the Perth and Kinross Council Area, but 35 in the LDP3 Area. Most of these sites are covered by a SSSI designation, but 20% are not. • 51 Proposed Local Geodiversity Sites, plus a further 2 potential sites. • 112 SSSIs within or intersecting with the Perth and Kinross Council Area - 13 of which are designated for Geological reasons (covering a total area of 616.68 Ha) and 7 for Mixed Geological and Biological reasons (covering a total area of 19,197.29 Ha). It is worth noting that 1 of the Geological SSSIs (Glen Garry) is located on the Cairngorms National Park – Perth and Kinross Council border. The Caenlochan and Beinn O'Ghlo Mixed SSSI sites also straddle both the National Park and Council borders.
Vacant and Derelict Land
The 2023 Scottish Vacant and Derelict Land Survey key statistics for the Perth and Kinross Council Area are: • There was 24 Ha of derelict land across 44 sites. • There was 26 Ha of urban vacant land across 14 sites. • The total derelict land area increased by 12% from 21 Ha in 2017 to 24 Ha in 2023. • The total urban vacant land area reduced by 31% from 38 Ha in 2017 to 26 Ha in 2023. • The total derelict and urban vacant land area reduced by 15.4. • 5% from 59 Ha in 2017 to 50 Ha in 2023. • 43% of the derelict land in Perth and Kinross (15 sites) is located within settlements whilst 57% (29 sites) is in the countryside.
Forests, Woodlands and Trees
• The National Land Capability for Forestry Map identifies that 38.7% or 204,400 Ha of the Perth and Kinross Council Area is covered by Classes F1-F4. • Private owners manage 65% of the area's forests and woodlands, and 35% is managed by Forestry and Land Scotland. • Perthshire's Big Tree Country offers more than 8,000 Ha of woodlands with a range of different experiences to discover, including: Carie and Rannoch Forest; Falls of Bruar; Diana's Grove, Blair Castle; Allean Forest and Queen's View; Pass of Killiecrankie; Faskally Wood; Birks of Aberfeldy; Cluny House Gardens; The Hermitage; Craigvinean and Pine Cone Point; Dunkeld House Tree Trail; Loch of Lowes; Birnam Oak; Glen Lednock; Lady Mary's Walk; The Knock; Kinnoull Hill Woodland Park, and Scone Palace. • Forestry and Land Scotland manage the following forests within the Perth and Kinross Council Area: Allean; Braes of Foss; Carie; Craigvinean; Deuchny Hill Bike Trail; Douglas Fir Wood; Drummond Hill; Faskally; Grandtully; Kilvrecht Campsite; Kinnoull Hill; Queen's View, Tummel Bridge, and Weem.

Table 3.6: Cultural Heritage Key Baseline Facts

Cultural Heritage
In August 2024, there were 3,782 designated sites and places in the Perth and Kinross Council Area. These can be broken down as follows: • 683 Designated Scheduled Monuments (2025) • 36 Conservation Areas, with guidance available for 22 out of 36. • 3121 Listed Buildings – 168 Category A; 1443 Category B, and 1510 Category C. • 105 of the Listed Buildings are included on the Buildings at Risk Register for Scotland (2025) – 95 are categorised as 'At Risk', and 10 as 'Restoration in Progress'. • 41 designated Gardens and Designed Landscapes (2025) • 4 Inventory of Battlefields sites within Perth and Kinross: Battle of Duplin Moor, Battle of Dunkeld, Battle of Killiecrankie, and Battle of Tippermuir. • 88 confirmed Tree Preservation Orders (TPO) in the Perth and Kinross Council Area. • There are approximately 15,472 undesignated archaeological sites/remains contained on the Historic Environment Record.

Table 3.7: Landscape Key Baseline Facts

Landscape
• There are 10 main Landscape Character Types present within the Perth and Kinross Council Area, as identified within the National Landscape Character Assessment. These are: – Summits and Plateaux – Tayside (22.5%) – Summits and Plateaux – Cairngorms (10.7%) – Traditional Moorland and Forest (8.9%) – Lowland Hills – Tayside (8.8%) – Lowland Hill Ranges (8.6%) – Mid Upland Glens (7.1%) – Lower Upland Glens (6.3%) – Mid Upland Glens with Lochs (4.7%) – Lowland Basins (3.3%) – Upland Glen – Cairngorms (3.0%)
• There is a clear distinction between scrub, health and moorland in the upland area in the north west and agriculture in the lowland areas of the south east and river valleys. • Nature Scot's Habitat Map of Scotland (HabMoS) identifies the following land cover types as the most prevalent across the Perth and Kinross Area: – Woodland, Forest, and Other Woodland Land – Regularly, or Recently Cultivated Agricultural, Horticultural, and Domestic Habitats – Grasslands and Lands Dominated by Forbs, Mosses, or Lichens – Heathland, Scrub and Tundra – Mires, Bogs and Fens – Inland Surface Waters
• The landscape within Perth and Kinross is divided into two main units: Highland Perthshire and Lowland Perthshire and Kinross. This division is in line with the Highland Boundary Fault and reflects the geology, topography, vegetation, and land use of those areas.
• There are 4 National Scenic Areas (NSA) within Perth and Kinross (Loch Rannoch and Glen Lyon, Loch Tummel, River Tay, and River Earn). The Ben Nevis and Glen Coe NSA is also partially within the Perth and Kinross Council Area.
• A large proportion of Perth and Kinross (19%) is within the top fifth of overall relative wilderness values. Comparatively just 5% of Scotland falls within this quintile. • There are 5 designated Wildland Areas – Breadalbane/Schiehallion, Lyon/Lochtay, Ben Lawers/Rannoch/Nevis/Mamores/Alder, and Cairngorms.
• There are 11 Local Landscape Areas (LLAs) spread across Perth and Kinross. They consist of a range of highland and lowland areas covering 144,400 Ha or around 27% of the Area. **Note:** PKC are currently undertaking a review of our designated LLAs to inform LDP3.
• Across the Perth and Kinross Area:

Landscape
- Between 2003 and 2006, 57 Scottish Forestry Grant Scheme Management Plans were approved covering around 7,707.43 Ha. - Between 2001 and 2006, 20 Scottish Forestry Grant Scheme Forest Plans where approved covering around 11,379.06 Ha. - Between 2011 and 2025, 70 Scottish Forestry Management Plans had their start dates agreed, covering around 2,891.46 Ha.

Identified Data Gaps and Uncertainties

3.6 The Environmental Assessment (Scotland) Act and the SEA Directive both require the recording of any difficulties encountered in compiling the information necessary for the assessment. This is particularly important as it is essential to describe those measures that will be used to monitor the implementation of the Forestry and Woodland Strategy.

3.7 The following table highlights specific areas where data gaps, uncertainties or problems were identified through both the development of this Scoping Report and through the production of our LDP3 Evidence Report. They are grouped under the relevant SEA topics.

Table 3.8: Table of Identified Gaps and Uncertainties

SEA Topic	Identified Gaps, Uncertainties or Problems
Biodiversity, Flora and Fauna	• Many of the assessments for protected areas are out of date, not all protected areas are still of the quality of the last assessment, or the qualifying features may no longer be relevant, or valuable features may be present. • Protected species information and trends at a national level are not collated at a local authority level, furthermore there is no records centre for Perth and Kinross. • No single dataset provides a comprehensive overview of all trees and woodland of high biodiversity value within Perth and Kinross, and smaller scale woodlands, tree belts and hedgerows may be omitted from those datasets which in combination provide the best available information. • The Ancient Woodland Inventory (AWI) is not definitive and should be used with care. Nature Scot advise that when evaluating woods it is important to - examine the site on the ground, looking for archaeological, biological and other indicators of antiquity and of its current biodiversity value; examine old maps (woods not shown on the AWI, but present on the historic maps, are likely to be ancient and should be treated as such unless evidence is available to the contrary), and to seek specialist advice if in doubt. It is proposed that we will follow these additional steps in identifying ancient woodland within the Perth and Kinross Area as part of the review of our Forest and Woodland Strategy. • The Ancient Tree Inventory (ATI) data is often supplied by members of the public but is verified by local recorders, as such although it is publicly available, it needs enhancement via citizen engagement. Engagement will be carried out as part of the development of our Forestry and Woodland Strategy, and we will seek further information from the public and key stakeholders in respect of ancient trees identified on the ATI. • The Tree Preservation Orders identified in the Council's Interactive Heritage Map require a review to ensure the records remain up-to-date and relevant.
Population and Human Health	• Not all brownfield land and vacant buildings will be included within the Scottish Vacant and Derelict Land Survey (SVDLS), only those which meet the criteria for inclusion in the national survey.
	• Data in relation to the economic benefits of the Timber industry within the Perth and Kinross area.
Water	• Data relating to specific waterbodies where forestry operations are identified as a pressure affecting water quality.
Climatic Factors	• Data in Scotland Wetland Inventory has been developed by assimilating spatial data from Scottish Natural Heritage (now Nature Scot). The whole country has not been surveyed, and the data only displays known wetlands.
Material Assets	• Not all brownfield land and vacant buildings will be included within the Scottish Vacant and Derelict Land Survey (SVDLS), only those which meet the criteria for inclusion in the national survey. • Data in relation to softwood availability within the Perth and Kinross area.

SEA Scoping Questions:

2. Do you agree the baseline data collected is appropriate to our FWS review?
3. Are you aware of any additional baseline evidence that would help inform the assessment process?

4 FWS REVIEW – PROPORSED PRIORITIES, THEMES AND OBJECTIVES

Relevance of Current Forest and Woodland Strategy

4.1 The vision, objectives, priorities and opportunities for action contained within the Council's current Forest and Woodland Strategy (FWS) are set out in detail under Section 2 of this Scoping Report. Although, it is considered that the Strategy still remains relevant, for the most part, it is in important to undertake a review of it in light of the 2019 Planning Act requirement for local authorities to prepare up-to-date strategies to inform the development of new Local Development Plans. In addition, since the publication of the FWS there have been a number of changes to the national policy landscape, with implications for our FWS, including the most recent Scottish Forestry Strategy.

Current Resource – Woodland and Forestry in Perth and Kinross Today

4.2 The area has a rich legacy of planted woodland and some of the earliest initiatives to re-establish woodland in Scotland. The Planting Dukes of Atholl started reforesting bare land, in what was probably the first example of establishing significant new conifer plantations in the British Isles more than 250 years ago using European larch (*Larix decidua*). There are 22 of Scotland's recognised heritage trees in Perth and Kinross, which is more than any other Council area in Scotland.

4.3 With this woodland heritage and tradition, it is perhaps not surprising that these long-established woodlands have been a major contributor to the area's tourism industry, helping provide much of the scenic backdrop which attracts locals and overseas visitors alike.

4.4 The most recent National Forest Inventory data update (2025) tells us that:

- There are 99,353 hectares of woodland in the Perth and Kinross, covering approximately 21% of the Local Development Plan land area i.e. excluding the area of Perth and Kinross within the Cairngorms National Park.
- The woodland cover breakdown for Perth and Kinross in hectares and as a percentage if the total woodland cover for the area is:

NFI Category	Area in Hectares (Ha)	% of Total Woodland Cover	% of LDP Area
Broadleaved	16,516	16.6%	3.5%
Conifer	38,006	38.2%	8.1%
Felled	17,888	18.0%	3.8%
Failed	84	0.08%	0.02%
Ground Prepared for Planting	1,245	1.25%	0.3%
Low Density	156	0.16%	0.03%
Mixed (Mainly Broadleaved)	1,494	1.5%	0.3%
Mixed (Mainly Conifer)	1,502	1.5%	0.3%
Young Trees	8,228	8.3%	1.8%
Assumed Woodland	13,403	13.1%	2.8%
Grassland	1,530	1.5%	0.3%

4.5 The most recent Native Woodland Survey of Scotland (NWSS) data update (2025) tells us that:

NWSS Category	Area in Hectares	% of Total Woodland Cover	% of LDP Area
Native Woodland	23,424	23.6%	5%
Nearly-Native Woodland	557	0.6%	0.1%
Open Land Habitat	1,886	1.9%	0.4%
PAWS	2,430	0.5%	2.5%

4.6 Maps showing the spatial distribution of the existing woodland resource across the area are provided in Appendix C to this Scoping Report.

Current Opportunities and Challenges

4.7 Due to the complex challenges being faced, such as climate change and biodiversity loss crises, woodland and forests offer many opportunities to provide multiple benefits and nature-based solutions for the benefit of nature and people. Many of those key opportunities and challenges are outlined in the tables to follow.

Table 4.1: Key Opportunities linked to Forestry and Woodlands within Perth and Kinross

Opportunities
✓ Woodland expansion: The Perth and Kinross Area has favourable soils and climatic conditions to make a key contribution to creation of new woodlands that will help to tackle climate change and meet the Government's aspiration to increase woodland and forestry cover to 21% of the total area of Scotland by 2032.
✓ Broadleaves for quality timber: Perth and Kinross is well-suited for the growing of broadleaves for quality timber, and this should be encouraged to expand to form a significant part of the future forest and woodland resource.
✓ Connecting and protecting habitats at a landscape scale: It is now clear that all aspects of biodiversity - native woodlands, designated sites, open ground habitats - need to be managed conserved and enhanced at landscape as well as site scale in order to provide ecosystem connectivity.
✓ Climate Change Adaptation: Woodland absorbs CO_2; timber products lock up CO_2 and wood fuel can replace fossil fuels as a source of energy. Accordingly, woodland creation and sustainable woodland management have a key role is delivering the Scottish Government's climate change targets. Woodland can also help us adapt to a changing climate by helping us manage the water environment to reduce flooding.
✓ Placemaking: Trees and woodlands can make an important contribution to successful places. Incorporating trees and woodlands into new and existing places that link with existing habitat networks can provide a range of benefits for people and nature.
✓ Community and urban-fringe forestry: There are opportunities to build on progress of recent years and expand woodlands in and around towns and to foster community engagement in the management of woodlands.
✓ Enhancing existing woodlands
✓ Transport corridor creation

Table 4.2: Challenges linked to Forestry and Woodlands within Perth and Kinross

Challenges
∇ Our woodland heritage: There is significant pressure on some of our most rich and ancient woodlands from development leading to loss and fragmentation often pre-emptively before a planning application is considered.
∇ Woodland removal: Many individual types of woodland have been removed due to development including renewable energy.
∇ A changing climate will likely increase the number of pests and diseases that threaten tree species. Considerable loss of ash (*Fraxinus excelsior*) trees because of ash dieback can be seen across Perth and Kinross. The amount of local tree nurseries has increased over the last few years to ensure provenance, but more nurseries are required.
∇ Climatic changes may alter the suitability of growing tree species in certain areas and may lead to a reduction in native species and more non-native species, including invasive species. In 2021, PKC undertook a Climate Risk and Opportunity Assessment which included trees, woodland and forestry. Climate Change Risk and Opportunity assessment - PKC_CCROA_2024_V2-1.pdf Perthshire contains remnants of Caledonian forest, both coniferous and broad-leaved native woodland along with extensive tracks of timber forest. An assessment of Priority Habitats response to climate change predicted the complete loss of native pinewood from its case study sites by 2080 indicating that climate pressure on native Caledonian forest sites is likely to be severe. Other than sub-arctic and montane communities susceptible to general warming, it is the pattern of rainfall, extreme events, grazing and the potential spread of pathogens that will determine woodland response to a warming climate. Summer water stress is likely to increase the incidence of crown die back and make trees more susceptible to grazing pressures.
∇ There is likely to be an increase in losses to windthrow and flood damage, and the recent rapid spread of ash die back illustrates the impact of new pathogens. Of particular concern in Scotland are Phytophthora ramorum, a fungus-like pathogen that is a particular threat to larch, and Dothistroma needle blight (DNB), which poses a particular threat to Scotland's commercial forestry and also to native Caledonian pinewoods. As with many broad habitat types of woodlands are likely to persist, subject to management, but there is likely to be a marked shift in species composition. Future storms can also have an impact on trees, with changes to the intensity and frequency of storms being a major risk factor.
∇ Falling trees can have a wider impact causing blockages or damage to other infrastructure. An increase in summer storms is particularly risky, due to trees being in full leaf and therefore heavy. The removal of vulnerable/unsuitable species like *Populus ombardii* has a cost impact for those undertaking management.
∇ Lack of active management in existing woodlands can result in a less diverse range of species, age classes and open ground. In addition, high grazing pressure by deer, sheep and hare reduces natural regeneration and damages newly planted and young trees and results in increased use of fencing.
∇ Less financial support is available for applicants pursuing natural regeneration, native broadleaf planting and smaller sized schemes.

FWS Review – Vision, Themes, Priorities and Objectives

4.8 The current FWS vision for the area is – 'Perth and Kinross will be an area of exceptional trees, woods and forests, which enhance the natural and cultural environment, support and strengthen the local economy adding value where possible and are accessible to local people and visitors alike across a range of activities and interests.' Whilst this vision sits well with the Scotland's Forestry Strategy 2019-2029 vision, it does not specifically highlight the importance of implementing sustainable forest management, and achieving better integration with other land uses to deliver more resilient and adaptable trees, woodlands and forests, in response to a changing climate and nature crisis, to realise multiple benefits for people and nature. It is therefore recommended that the following expanded vision is included within our FWS review to incorporate these priorities:

'Trees, woods and forests of Perth and Kinross will be valued, protected and enhanced through all land uses. Woods and forests will be utilised as nature-based solutions, contributing towards climate change mitigation and adaptation. Native and ancient woodlands will be protected, restored and well managed to create well connected nature networks. Our productive forests will be diverse, sustainable, climate-resilient, and provide for a range of purposes, and deliver a number of benefits. Woods and forests will provide multiple benefits for nature and people and offer opportunities for people to connect with nature.

Perth and Kinross will be an area of exceptional trees, woods and forests, which enhance the natural and cultural environment, support and strengthen the local economy adding value where possible and are accessible to local people and visitors alike across a range of activities and interests.'

4.9 In terms of the current FWS priorities, objectives and opportunities for action, again these are still very much relevant, but initial work on the FWS review has identified a chance to update these to ensure they are in keeping with the national Forestry Strategy. Table 4.3 outlines what those possible updated priorities, contributing themes and associated objectives could be.

4.10 It is our intention to seek feedback on these draft priorities, themes and objectives, and a revised vision, through our consultation and engagement exercises for the draft Perth and Kinros Forestry and Woodland Strategy. The comments received will be used to refine these elements of the final Strategy.

Table 4.3: Possible Updated Perth and Kinross FWS Priorities, Themes and Objectives

Priority	Contributing Theme	Objectives
Forests and Climate Change – improving the resilience of our forests and woodlands, and maximising their role in addressing climate change	1. Climate Change Mitigation, Adaptation and Resilience	– Diversify existing woodland and enhance species diversity – Connect and expand habitat networks – Protect and restore peatlands and wetlands – Expand urban forests – Expand native riparian woodland – Unlock nature-based investment
Natural Assets, Environmental Quality, and Biodiversity - Maximising the role of forests and woodlands in contributing to the quality of the environment, and tackling the global nature crisis	2. Protect and enhance the environmental quality of our natural resources (air, water, soil)	– Promote the protection and enhancement of the area's air, water and soils
	3. Help to protect, restore, maintain, and enhance biodiversity across Perth and Kinross	– Protect, enhance and restore areas designated for nature conservation purposes – Protect and prevent damage to protected species and their habitats – Protect, enhance and restore rare and important habitats – Encourage long-term sustainable deer management – Identify, protect, restore and connect woodlands of high nature conservation value
	4. Contribute to and help improve our landscapes and scenery	– Promote the safeguarding and enhancement of the area's important landscapes, wildland areas and sense of wilderness
	5. Help make the most of our historic environment	– Continue the protection of trees covered by a Tree Preservation Order – Promote good stewardship of the historic environment through forest design and management operations to ensure the protection of historic environment assets
Forests and the Economy – Maximising the role of forests and woodlands in supporting the economy of Perth and Kinross	6. Productive Forests	– Promote the sustainable management of our forests and forestry good practice – Support the development of timber transport infrastructure through relevant funding mechanisms and related partnerships
	7. Sustaining Thriving Rural Communities	– Continue to promote Perthshire's reputation as 'Big Tree Country' – Support rural diversification and promote a diverse range of forest-based enterprises through partnership with landowners, communities and stakeholders – Promote whole-landscape approaches which integrate woodland creation with other land uses/functions – Encourage the development of appropriate tourism infrastructure, such as interpretative centres, Core Path Networks, and long-distance footpaths – Promote use of locally grown timber to reduce imports within construction industry
Forests, Woodlands and People – Maximising the role of forests and woodlands to improve the quality of life of residents of Perth and Kinross	8. Access for Health and Wellbeing	– Increase Urban Canopy Cover and encourage woodland expansion in and around villages and towns to increase access for physical and mental health and wellbeing, and to bring people closer to nature – Encourage tree planting and/or food growing opportunities as a way of improving the appearance of underused, derelict and neglected land – Encourage greater uptake in community woodland ownership and management – Support the development of active travel routes through new and existing woodland (where appropriate) to increase access and encourage participation in woodland activities
	9. Integration with Other Land Uses	– Encourage greater integration of forest and woodland planting and management with other land uses and objectives to deliver multiple benefits (particularly at the landscape scale); such as those relating to increased access to open space for health and wellbeing benefits, nature networks, biodiversity protection and enhancement, landscape protection and enhancement, blue green networks and infrastructure, natural flood management solutions, protection and restoration of nationally important soils, sustainable soil management, rural enterprises and tourism, agriculture, and agroforestry.
Expanding our Forest and Woodland Resource	10. Identifying Preferred and Potential Areas for New Woodland Creation	– Identify areas suitable for new woodland creation

5 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

Proposed Scope and Level of Detail for the Assessment

5.1 The environmental topics which will be included in the environmental assessment for the Forestry and Woodland Strategy, and the reasons for their inclusion are set out in Table 4.1 below. The identification of topics is based on those specified under the 2005 Act, the issues identified in the baseline study carried out for the Scoping exercise, and the range of issues that the Strategy is likely to cover.

Table 5.1: Scope of the Environmental Assessment

SEA Topic	Reason for Scoping In
Biodiversity, Flora and Fauna	The Strategy is likely to have significant positive effects in terms of Biodiversity, Flora and Fauna, through expanding, better connecting and protecting habitats at both landscape and local/site level scales, particularly through promoting a Sustainable Forest Management (SFM) approach, with its inherent protection of the environment. The restoration and enhancement of native woodlands will lead to significant positive benefits to important populations of priority and protected species, and also a wider range of species. Furthermore, if appropriately designed, added positive impacts can also be realised for landscape quality within the area. There is also the potential for mixed implications, both positive and/or negative in nature on the area's biodiversity because of increased woodland creation, including through the restructuring of existing forestry. However, the nature of the impacts will be dependent on the specific location, siting and design of any planting proposals, and the practices used in implementing them. If planting schemes are designed and delivered in line with the requirements of the UK Forestry Standard, it is anticipated that potential negative impacts can be avoided. By promoting the right tree in the right place, the Strategy can assist in the creation of woodlands which are ecologically rich and biodiverse, and resilient to the effects of a changing climate, such as threats from pests, diseases and environmental stresses. Increasing urban forestry can also encourage biodiversity to these areas, with some positive effects in terms of these SEA topics. The promotion of locally grown timber for use within the construction industry can help reduce imports from other regions, which could also help improve biosecurity by minimising the risk of pests, diseases and invasive non-native species being introduced. The promotion of long-term sustainable deer control can lead to significant positive impacts on the ecological condition of protected areas, peatlands and forests and woodlands. It will also have secondary positive impacts in terms of SEA topics Population and Human Health (reduction in road traffic accidents), and Landscape (an increase in deer fencing can negatively impact on our landscapes and create barriers to access opportunities for people).
Population and Human Health	There is the potential for mixed implications, both positive and/or negative in nature on the area's population and their health as a result of increased woodland creation. However, the nature of the impacts will be dependent on the specific location, siting and design of any planting proposals, and the practices used in implementing them. If planting schemes are designed and delivered in line with the requirements of the UK Forestry Standard, it is anticipated that potential negative impacts can be avoided. Major positive effects for Population and Human Health through the creation of greater opportunities to spend time outdoors, giving people space for outdoor activities, a chance to connect with nature, and a place to play and to socialise, which can help to reduce pressures on health services. There are likely to be associated positive impacts in terms of reduced exposure to poor air quality and the likelihood of air-quality related health issues. An increased uptake in community ownership and management of forests and woodlands has the potential to result in significant positive impacts on these SEA topics by contributing to a greater feeling of community empowerment in the short to long term. Whilst these effects might initially be more localised in nature, they could become wider spread as good practice case studies are shared and inspire other communities to follow their example. An increased awareness and appreciation of our forests and woodlands through greater interactions with them, and also the wider natural environment, can lead to positive long-term implications for a number of SEA topics, including Air, Water, Climatic Factors, and Biodiversity, Flora and Fauna. The promotion and use of wood fuel for biomass heating will help reduce GHG emissions and lead to related benefits for air quality and population and human health. Numerous benefits associated with urban trees, forests and woodlands, including improvements to air quality, and the quality and appearance of urban landscapes, with knock on positive effects on Population and Human Health topics. Using a Sustainable Forest Management (SFM) approach has the potential to result in significant positive impacts through workforce empower as a result of learning and development opportunities, and engagement and communication on the concept of SFM within both the forestry industry and with other interested parties. Promoting forest products, services and forest-enterprises should lead to significant positive effects on SEA topics Population and Human Health linked to new employment opportunities and an increase in skills development of the workforce. There is potential for some localised negative impacts on these topics through dust or noise nuisance linked to transportation of timber products. However, this could be addressed through the application of SFM principles and the identification of mitigation measures for individual proposals.
Soil	The creation of sustainably managed forests through the application of SFM principles can have associated significant positive effects in the medium to longer term on SEA Topics Soil. There is the potential for detrimental impacts on soils through the use of inappropriate ground preparation techniques; for example, the use of heavy machinery and deep-level cultivation which can change the structure of the soil, causing erosion and run-off. The application of poor forestry practices can result in issues of contamination, compaction and soil erosion. With particular respect to carbon rich soils poor

SEA Topic	Reason for Scoping In
	practices can lead to small increases in soil contamination due to the transporting of compounds (e.g. fuel oils, lubricants, pesticides and other chemicals, sewage sludge and inorganic nutrients) via run-off, with the potential for cumulative impacts across the FWS area. Potential for moderate cumulative impacts on carbon rich soils through forestry operations which drain these soils. This can result in a series of small increases in the amount of organic matter lost from soil, leading to a decrease in its value as a carbon store. However, if SFM principles are employed it would be expected that any potential impacts would be positive in nature in relation improving the nutrient and fertility levels of soils.
Water	There is the potential for significant negative impacts on the water environment as a result of forestry, including: the effects of run-off into watercourses (affecting quality and quantity). Forestry can also intensify acidification due to the capturing of airborne pollutants and planting conifer species near watercourses. The creation of sustainably managed forests through the application of SFM principles should help to avoid any such detrimental impacts and can also have associated significant positive effects in the medium to longer term on SEA Topic Water. Forestry and woodlands can contribute positively to catchment-wide approaches to flood management through reducing the flow rate of run-off response times.
Air	Potential for significant positive impacts on this SEA topic through the expansion in coverage of all types of woodlands and forests. However, there could be short term negative impacts as a result of emissions from forestry-related operations linked to woodland creation. The promotion and use of wood fuel for biomass heating will help reduce GHG emissions and lead to related benefits for air quality and population and human health. However, it is important that the use of timber as an energy source doesn't negatively impact on local air quality. Through expanding forestry and woodland coverage, improving the condition of existing native woodland resource, and promoting an increase in the positive impacts of forests and woodland management on a range of SEA topics (Biodiversity, Air, Water, Soils, Climatic Factors (Flood Management), Landscape and Cultural Heritage). Numerous benefits associated with urban trees, forests and woodlands, including improvements to air quality, with knock on positive effects on Population and Human Health topics. There is potential for some localised negative impacts on the Air topic linked to transportation of timber products, however this could be addressed through mitigation measures for individual proposals.
Climatic Factors	Enhancing existing woodlands and increasing the amount of woodland cover is expected to have a major positive impact on Climatic Factors through helping contribute to the Scottish Government's woodland creation targets, and by reducing GHG emissions via increased sequestration. There will also be associated positive benefits on the health and wellbeing of the population linked to this. Promoting the enhancement of species diversity in existing and new forests and woodlands and promoting the application of SFM principals can help with climate change adaptation by making them more resilient to pests, diseases and

SEA Topic	Reason for Scoping In
	environmental stresses, as well as helping to create woodlands which are ecologically rich and biodiverse. This also has the potential to have secondary positive effects on Soil and Water topics. The promotion and use of wood fuel for biomass heating will help reduce GHG emissions and lead to related benefits for air quality and population and human health. The promotion of a long-term supply of locally grown timber, and the use innovation and new and enhanced technologies within the sector could minimise waste generation with secondary positive implications for SEA topic Climatic Factors as a result of reduced transport emissions and energy consumption in processing. Potential for negative impacts in the short term through the release of carbon from soils when establishing new woodland. However, it is likely to be outweighed by the amount of carbon sequestered by the forest or woodland overall. Trees and woodlands have an important role in flood alleviation, through managing the flow of water. Encouraging the incorporation of natural flood management improvements in association with forest and woodland creation and enhancement, including protecting and enhancing riparian corridors; protecting natural flood storage areas; safeguarding and improving soil conditions, and planting to help reduce the flow of water, can result in significant positive improvements in respect of the Climatic Factors SEA topic, with additional benefits particularly in respect of Water, Soil, Population and Human Health, and Biodiversity, Flora and Fauna. Increasing urban canopy cover can result in a number of significant positive benefits, including providing local carbon sinks; air quality improvements, and temperature moderation (including reducing building energy consumption through shading in the summer and blocking winds in the winter). Trees also have an important role to play in interrupting rainwater run-off, and the re-evaporation of water from their canopies. They also permit rain to trickle down into the soil.
Material Assets	Increasing the area of sustainably managed forests via afforestation and improvements to the management of existing forests will lead to major positive effects on Material Assets, along with associated major positive impacts on SEA topics Soil, Water, Biodiversity, Flora and Fauna, Human Health (and wellbeing), and Historic Environment. Promoting the maintenance of a long-term supply of locally grown wood, forest products and services, for example for use in the construction industry, should lead to significant positive effects on SEA topics Material Assets, Air, Climatic Factors, and Population and Human Health. Wider proposals could lead to potential significant negative impacts either directly or indirectly on this SEA topic as a result of transportation, processing, and waste related to forestry operations and activities. However, supporting innovation and new and emerging technologies, and the recycling of wood products, can aid a circular economy and help to reduce waste generated in forestry related enterprises. Promotion of maintaining a long-term locally grown wood supply should also help to reduce detrimental impacts linked to the transportation of timber.

SEA Topic	Reason for Scoping In
	Encouraging the creation of forest and tourism related enterprises, and sport, leisure and recreational activities, with their associated infrastructure can have positive effects in relation to Material Assets, and Population and Human Health. However, there is also a risk that, if not given proper consideration during design and development of a proposal, and without being sustainably managed, increased visitor numbers could also place additional pressure on the area's natural and historic environment assets, and on other SEA topics such as Biodiversity, Flora and Fauna, Soil, Water and Cultural Heritage. For example, the trampling of soils and vegetation, noise creation, wildlife disturbance, habitat destruction, littering, pollution (soils and water), damage to historic assets etc. However, through the application of appropriate mitigation measures, including the Scottish Outdoor Access Code, and visitor management plans, any such anticipated detrimental impacts could be minimised or avoided.
Cultural Heritage	The Strategy and wider proposals following on from it could lead to significant negative impacts on elements of the historic environment and their setting, as a result of planting (damage to assets and their settings through alterations to the water table and waterlogging; changing land use affecting historic landscapes or the setting of features; damage or disturbance to previously unidentified archaeological features through woodland creation and expansion; accidental damage through poor management). However, the use of a Sustainable Forest Management approach to planting schemes and proposals should help avoid any such impacts and could result in secondary positive impacts on historic assets through the appropriate protection and conservation of designated and non-designated sites and features and their settings. The protection of the area's trees, forests and woodlands will result in significant positive impacts in terms of historic assets (ancient woodlands, and individual trees, tree lines and groups of trees protected through Tree Preservation Orders, including those within Conservation Areas). Increasing urban forestry can also positively impact on the setting of historic assets and places. Potential for mixed implications, both positive and/or negative in nature on the area's historic and cultural environment because of increased woodland creation. However, the nature of the impacts will be dependent on the specific location, siting and design of any planting proposals, and the practices used in implementing them. However, if planting schemes are designed and delivered in line with the requirements of the UK Forestry Standard, it is anticipated that potential negative impacts can be avoided.

SEA Topic	Reason for Scoping In
	Opportunities exist in terms of the FWS promoting the enjoyment and understanding of historic environment features in woodland areas and also encouraging the growth and supply of Scottish timber for traditional construction techniques, to be used in both the restoration of historic buildings and for new structures.
Landscape	The protection of trees, forests and woodlands should result in significant positive impacts on the area's landscapes, particularly those of local and national importance, both visually and culturally. New planting proposals in urban and fringe settings could lead to positive impacts on the landscape settings of places. There are also likely to be positive secondary impacts for Population and Human Health SEA topics due to the contribution the landscapes of the area have to people's sense of place and identity. Depending on the scale and nature of any changes, the impacts on the wider environment because of land use changes linked to increased woodland planting and forest-based enterprises and tourism could be mixed. For example, afforestation can have both positive and negative impacts on SEA Topics relating to Landscape, Cultural Heritage, Biodiversity, and Population and Human Health, and the creation of new hill tracks can create visible scars, as well as lead to poor drainage, peat damage and biodiversity loss. However, these impacts will very much depend on the specific location, siting and design of any proposals, and the practices used in delivering them. If planting schemes are designed and delivered in line with the requirements of the UK Forestry Standard, it is anticipated that potential negative impacts can be avoided. Potential for tension or conflicts to arise from land use change linked to forestry proposals and operations, with other land use options. For example, increased tourism can have significant positive benefits in terms of income generated and the economy but have the potential to impact detrimentally on landscape and biodiversity, depending on scale and nature of change. There may also be tensions between objectives for the protection and enhancement of existing forest and woodland resources, and tackling the dual nature and climate crises, with agricultural practices. However, the application of sustainable principles in forestry, tourism and agricultural sectors should help to mitigate any potential impacts.

SEA Scoping Questions:

4. Does your organisation agree with the proposed vision, priorities, contributing themes and objectives for the FWS review outlined under Section 4 of this Scoping Report?
5. Does your organisation agree that all the significant environmental issues relevant to the FWS review have been included under Section 5? If not, can you suggest further issues you believe should be included?
6. Do you agree with the proposed scope for the SEA of our FWS review?

6 PROPOSED SEA OBJECTIVES AND INDICATORS

Identifying Objectives and Indicators

6.1 The SEA Directive does not require the identification of specific SEA objectives, but their development is recognised as an effective way in which the environmental effects of the relevant Plan, Programme or Strategy (PPS) can be described, analysed and compared. Identifying SEA objectives is also a useful way of focusing the collation exercise for the baseline data and assists with the establishment of realistic indicators which can be monitored, in order to help identify any effects as a result of implementing the PPS.

6.2 Although a comprehensive set of objectives and relevant indicators were developed as part of the SEA for previous iteration of the Perth and Kinross Forest and Woodland Strategy, due to the publication of an updated national strategy, and the changes introduced under the 2019 Planning Act and NPF4, it is considered beneficial to review and refresh these objectives and indicators for the Forestry and Woodland Strategy SEA process.

6.3 Table 6.1 to follow contains the Proposed SEA Objectives and Indicators for our FWS review and have been linked to our 10 Contributing Themes. The corresponding SEA Topic for each of the proposed objectives has been identified in the final column of the tables to provide clarity that all topics have been addressed. Where availability of data sources is unknown or uncertain they have been highlighted in red in the 'Relevant Indicators' column. The indicators may be repeated under different SEA Topics due to the overlapping nature of issues. They may also subject to change following consultation with the Consulation Authorities and key stakeholders on this Scoping Report.

SEA Scoping Questions:

7. Do you agree the proposed SEA Objectives (Table 6.1) cover the breadth of environmental issues appropriate for the area covered by the Strategy?
8. Do you agree that the proposed Indicators (Table 6.1) provide a relevant measure for the associated objective? If not, can you suggest additional/alternative indicators?

Table 6.1: Proposed SEA Objectives and Indicators

Ref.	SEA Objective	SEA Criteria	Relevant Indicators	SEA Topic(s)
Contributing Theme 1: Climate Change Mitigation, Adaptation and Resilience				
SEA 1	**Maximise the role of woodland and forestry in climate change mitigation and adaptation, and improve the resilience of our existing forest and woodland resource**	Will the FWS policy… • Ensure that woodland and forestry planting and management takes account of the need to adapt to and mitigate for a changing climate? • Promote the diversification of existing woodlands and help to enhance species diversity? • Promote improved ecological resilience and connectivity of woodland and other habitats and the creation of nature networks? • Promote the expansion and enhancement of native riparian woodland? • Promote the expansion of urban and peri-urban forests and woodlands? • Protect and promote the restoration of peatlands and wetlands? • Help to unlock nature-based investment?	• Number of forest management and restoration plans which - ➢ Seek to build in adaptation to climate change in the management of existing and creation of new woodlands and forests ➢ Provide protection from flood risk, and mitigation against the effects of flooding and drought • Number of Forestry Grant Scheme (FGS) grants awarded for 'Target Woodlands for Riparian Benefits' proposals/projects • Area (Ha) of woodland cover in Perth and Kinross • % area of woodland cover in Perth and Kinross and diversity breakdown • % change in woodland cover since baseline year (2014 FWS adoption) • Area (Ha) of new woodland and forest creation • Area (Ha) of new native woodland and forest creation • Proportion of protected woodland and forest natural features in favourable condition • % of Perth and Kinross Nature Network actions delivered	**Climatic Factors** **Biodiversity, Flora and Fauna** **Population and Human Health** **Material Assets**
SEA 2	**Increase the contribution of woodland and forestry in achieving carbon sequestration**	• Will the FWS policy enhance the net contribution of woodland and forestry to carbon sequestration within Perth and Kinross?	• Area (Ha) of new planting in Perth and Kinross covered by forest management and restoration plans • Area (Ha) of carbon-rich soils, deep peat and priority peatland habitat lost to forest and woodland planting (Nationally Important Soils, Classes 1, 2, and 5) • Total area-wide LULUCF sequestration (including forest land and grassland CO_2 emissions) $ktCO_2e$ • % increase in LULUCF sequestration $ktCO_2e$ within Perth and Kinross since baseline	**Climatic Factors** **Air** **Soils**
SEA 3	**Increase the potential of the forestry sector in contributing to Scotland's renewable energy resources**	• Will the FWS policy promote woodland and forestry's potential contribution to national net zero emissions targets via renewable energy generation in appropriate locations?	• Total domestic energy consumption for Perth and Kinross (kWh) • Proportion of energy demand generated by renewable energy sources • Installed capacity of forest renewable energy (wind and hydro) schemes in Perth and Kinross	**Climatic Factors** **Material Assets**
Contributing Theme 2: Protect and enhance the environmental quality of our natural resources (air, water, soil)				
SEA 4	**Maximise the role of woodlands and forestry in contributing to the protection and enhancement of air quality**	Will the FWS policy… • Promote the role of woodlands and forestry in improving air quality? • Promote a reduction in the potential for unnecessary timber miles and associated emissions, and contribute to sustainable travel and transport objectives? • Identify where there is the potential to contribute to further improvements in air quality through planting?	• Mean annual levels of key air pollutants within Perth and Kinross • Number of days air quality exceed legislative limits in Perth AQMA • Area (Ha) of woodland created in and around towns, villages and Perth City	**Air**
SEA 5	**Promote forestry and woodland management which contributes positively to the sustainable management of the water**	Will the FWS policy… • Help prevent further deterioration of, and promote the protection and enhancement of the ecological status of the water environment?	• % of waterbodies in forested catchments classified as having overall high, good, and bad quality status • % of groundwater area in forested catchments failing to meet quality standards	**Water**

Ref.	SEA Objective	SEA Criteria	Relevant Indicators	SEA Topic(s)
	environment and achievement of Water Framework Directive objectives	• Promote sustainable water use based on the long-term protection of available water resources? • Promote the integration of forestry planning with river basin management planning?	• % of waterbodies for which forestry operations or activities have resulted in direct pollution of the water environment • % of forest management and restorations plans which include protection for the water environment and sustainable water use • Number of Scottish Rural Development Programme (SRDP) grants awarded for water quality management projects/initiatives	
SEA 6	**Contribute to sustainable soil management through forestry and woodland planning and management**	Will the FWS policy… • Promote forestry management which reduces the accumulative of harmful substances in soils? • Help minimise and reverse changes such as soil erosion, compaction, sealing, acidification and eutrophication associated with poorly executed forestry operations? • Promote the use of protective forestry to increase soil stability and reduce erosion? • Promote the protection and enhancement of nationally important soils, including carbon rich soils, through individual forest plans?	• % change in the areas of land covered by carbon rich, deep peat and priority peatland habitats as a result of forest and woodland planting in those areas covered by forest management and restoration plans • Area of peatland sites restored (Ha) • % of the Perth and Kinross Council Area identified as having 'At Risk' soils based on Scotland's Soil Map (Risk from Compaction, Erosion, Leaching and Run-Off) • Number of Sottish Rural Development Programme (SRDP) grants awarded for projects/initiatives which seek to improve the health and condition of soils through sustainable forestry and soil management practices • % of forest management and restoration plans which – ➢ Provide protected for nationally important soils ➢ Promote sustainable soil management practices to improve soil health and functionality ➢ Prioritise peatland restorations (where relevant)	**Soils**
Contributing Theme 3: Help to protect, restore, maintain and enhance biodiversity across Perth and Kinross				
SEA 7	**To protect, restore, maintain and enhance the diversity of habitats and species**	Will the FWS policy… • Protect, enhance and restore areas designated for nature conservation purposes? • Protect and prevent damage to protected species and their habitats within or adjacent to woodlands and forests, and promote their conservation, expansion and restoration? • Protect, enhance and restore rare and important habitats? • Promote the conservation, expansion and restoration of native woodlands? • Promote improved ecological resilience and connectivity of woodland and other habitats and the creation of nature networks? • Encourage long-term sustainable deer management? • Identify, protect, restore and connect woodlands of high nature conservation value? • Promote the restoration of priority open ground habitats in forested areas where there are clear environmental benefits for doing so?	• % of protected features with a woodland interest in favourable or recovering condition • % of designated or special sites with a woodland interest in favourable or recovering condition • Area (Ha) of native woodland cover in Perth and Kinross • % area of woodland cover in Perth and Kinross and diversity breakdown • % change in woodland cover since baseline year (2014 FWS adoption) • Area (Ha) of new woodland and forest creation • Area (Ha) of new native woodland and forest creation • Area (Ha) of Ancient Woodland Inventory sites lost to development • Area (Ha) of Native Woodland Survey of Scotland sites lost to development • % of all 1Km grid squares in Perth and Kinross with recordings of protected species (protected by European and UK legislation) • Abundance of terrestrial breeding birds • Number and area of identified Nature Networks • % of Perth and Kinross Nature Network actions delivered • Number of Sottish Rural Development Programme (SRDP) grants awarded for biodiversity conservation and enhancement projects/initiatives • Proportion of forest management and restoration plans which:	**Biodiversity, Flora and Fauna**

Ref.	SEA Objective	SEA Criteria	Relevant Indicators	SEA Topic(s)
		• Encourage increased awareness, understanding and enjoyment of the biodiversity value of all woodland types?	➢ Provide protection for designated sites and species ➢ Promote the conservation and enhancement of priority species and habitats ➢ Prioritise improve ecological resilience and connectivity of woodland and other habitats • Number of Forestry Grant Scheme (FGS) grants awarded for deer management projects/initiatives • Area (Ha) of woodlands of high nature conservation value in Perth and Kinross	
Contributing Theme 4: Contribute to and help improve our landscapes and scenery				
SEA 8	**Conserve and enhance the distinct character of the area's most important landscapes and scenery**	Will the FWS policy… • Promote the safeguarding and enhancement of Local Landscape Areas and National Scenic Areas? • Promote the safeguarding of wildland areas and sense of wilderness in parts of Perth and Kinross?	• Number and area (Ha) of designated landscape areas (National and Local) • % of woodlands covered by approved forest management and restoration plans in those areas designated for their landscapes • Change in number and/or area (Ha) of nationally designated landscape areas within locations covered by approved forest management and restoration plans • % change in area (Ha) of core wild land in areas covered by approved forest management and restoration plans • % of planting taking place within FWS 'Preferred' areas since baseline (2014) • Number of SRDP grants awarded for landscape enhancement projects/initiatives	**Landscape**
SEA 9	**Increase the contribution of forests and trees to scenic values, including distinctiveness and diversity of landscape**	Will the FWS policy… • Promote the restructuring and enhancement of existing forests in nationally and locally important landscapes? • Promote landscape conservation and enhancement in upland, lowland and urban landscape areas?		
Contributing Theme 5: Help make the most of our historic environment				
SEA 10	**Protect and enhance, where appropriate, historic places and assets**	Will the FWS policy promote… • Good stewardship of the historic environment through forest design planning process and sensitive forest management using initiatives such as 'Perthshire Big Tree Country' and the Historic Orchards of the Carse of Gowrie to underpin the long-term future of historic landscapes and tree-related features? • Conservation and sympathetic management of nationally important historic sites and assets, including scheduled monuments, historic gardens and designed landscapes, and historic battlefields? • Consideration of the historic environment in decision-making frameworks relating to woodland and forestry planning and management in Perth and Kinross?	• % of forest management and restoration plans which provide for the protection and enhancement of the historic environment • Area (Ha) of AWI and semi-natural woodland sites lost to development • Number of key archaeological sites within core woodlands • Number of forest management plans environmental statements identifying where there are potential conflicts between proposals and the protection of the historic environment	**Cultural Heritage**
Contributing Theme 6: Productive Forests				
SEA 11	**Encourage a diverse forest estate and maximise the economic potential of the area's timber resources**	Will the FWS policy promote… • The application of the UK Forestry Standards?	• % of forest management and restoration plans which seek to sustainably manage existing forests and woodlands	**Material Assets** **Climatic Factors**

Ref.	SEA Objective	SEA Criteria	Relevant Indicators	SEA Topic(s)
		• The sustainable expansion of forests and woodlands, and direct productive forest related proposals to appropriate locations within Perth and Kinross? • The sustainable management of the area's productive forests and woodlands? • Support farm diversification through encouraging the expansion of farm forestry and agroforestry, and related on-farm enterprises? • Encouragement for the development of local timber markets by local businesses, particularly markets based on wood fuel and added value craft products? • Increased use of sustainably produced timber and timber products in construction? • The wider uptake of forest certification?	• Number of FGS grants awarded for sustainable creation, production, harvesting and processing, and infrastructure projects/initiatives • Contribution of woodlands, forests and the forest sector to the economy of Perth and Kinross (GVA and jobs)	
SEA 12	**Support the development of timber transport infrastructure**	Will the FWS policy promote… • The sustainable management of timber traffic to sustain the road network and minimise disruption? • The maintaining and improving of minor roads used for timber haulage? • The transportation of timber by other modes of transport where possible? • The minimisation of impacts of timber transportation on communities and the environment?	• Number and length (Km^2) of Agreed Timber Transport Routes within Perth and Kinross • Number and length (Km^2) of Consultation Timber Transport Routes within Perth and Kinross • Number of Strategic Timber Transport Fund funding awarded for projects/initiatives to reduce the impact of timber transport on roads, communities, and the environment, within Perth and Kinross	**Material Assets** **Population and Human Health** **Air** **Climatic Factors** **Landscape**
Contributing Theme 7: Sustaining Thriving Rural Communities				
SEA 13	**Promote the area's existing tourism assets and potential for rural diversification**	Will the FWS policy… • Support rural diversification and promote a diverse range of forest-based enterprises, including forest tourism? • Encourage the role of the area's forests and tree heritage in supporting rural tourism, particularly through supporting the 'Big Tree Country' initiative? • Encourage forest-based, sport and active recreation as a way of diversifying and contributing to the rural economy? • Encourage the development of appropriate tourism infrastructure, such as signposting, interpretative centres, Core Path Networks and long-distance footpaths?	• Number of annual visits to forests and woodlands within Perth and Kinross • Number of forest-based enterprises within Perth and Kinross • Contribution of woodlands, forests and the forest sector to the economy of Perth and Kinross (GVA and jobs)	**Population and Human Health** **Material Assets** **Climatic Factors**
SEA 14	**Protect key mineral sites from sterilisation through inappropriate planting**	• Will the FWS policy direct woodland expansion proposals to appropriate locations?	• % of active mineral sites in Perth and Kinross impacted by forest and woodland creation proposals	**Material Assets**
Contributing Theme 8: Access for Health and Wellbeing				
SEA 15	**Increase opportunities for access and enjoyment of forests and woodlands**	Will the FWS policy promote…	• % of datazones within Perth and Kinross ranked most deprived (SIMD)	

Ref.	SEA Objective	SEA Criteria	Relevant Indicators	SEA Topic(s)
	by all to help improve physical and mental health and wellbeing	• Promote the provision of welcoming and well-managed woodlands in and around communities that contribute to quality of life and provide opportunities for exercise, learning, relaxation and enjoyment? • Encourage an increase in urban canopy cover through development opportunities, and encourage woodland expansion in and around Perth City, towns and villages to increase access for all, and bring people closer to nature? • Encourage tree planting and/or food growing opportunities as a way of improving the appearance of underused, derelict and neglected land? • Encourage greater use of woodlands for outdoor learning? • Encourage greater uptake in community woodland ownership and management? • Improve access to forests and woodlands for the local population and contribute to the health and wellbeing, quality of life and social inclusion agendas? • Support the development of active travel routes through new and existing woodland (where appropriate) to increase access and encourage participation in woodland activities?	• % of datazones within Perth and Kinross ranked most access deprived (SIMD) • % performance of Perth and Kinross Area Council against ScotPHO Health and Wellbeing Indicators • Area (Ha) of community woodland created and managed in and around towns under FGS WIAT funding scheme • % increase in Tree Equity Score for urban areas across Perth and Kinross • % of vacant and derelict sites reused for tree planting or food growing opportunities • % of population who live within 500m or less from at least one area of accessible woodland of no less than 2Ha in size (Woodland Access Standards) • % of population who have at least one area of accessible woodland of no less than 20Km in size within 4Km of their home (Woodland Access Standards)	**Population and Human Health** **Material Assets** **Climatic Factors**
SEA 16	**Maximise the role of woodland and forestry in contributing to the quality of life and wellbeing of the residents of Perth and Kinross**			
Contributing Theme 9: Integration with Other Land Uses				
SEA 17	**Promote the integration and coordination of forestry and woodland with other land uses to deliver multiple benefits**	• Will the FWS policy encourage the integration of forestry and woodland with a range of other land uses in order to deliver multiple benefits for people and for nature?	• Number of SRDP grants awarded for a variety of projects/ initiatives linked to forestry and woodlands	**All SEA Topics**
Contributing Theme 10: Identifying Preferred and Potential Areas for New Woodland Creation				
SEA 18	**Promote woodland expansion in appropriate locations**	• Will the FWS policy promote the sustainable expansion of woodlands, and direct proposals to appropriate locations within Perth and Kinross?	• % of land area in FWS 'Preferred' and 'Potential' areas taken up for new planting	**All SEA Topics**

7 PROPOSED ASSESSMENT METHODOLOGY

Introduction

7.1 This section of the Scoping Report aims to provide information on the tools and techniques proposed for use in the assessment in order to allow the Consultation Authorities and other stakeholders to form a view on their appropriateness. However, it should be noted that these may be subject to change following consultation with the Consultation Authorities and key stakeholders, and as the assessment gets under way and other methods are found to be more appropriate.

Assessment Methods

Framework for Assessing Environmental Effects – SEA Objectives

7.2 To provide a framework for the environmental assessment of the Forest and Woodland Strategy (FWS) review, a set of proposed SEA Objectives, relevant sub-criteria, and key related indicators, have been developed and reported under Section 6 of this report. Feedback is sought through this Scoping Report consultation from the Consultation Authorities and key stakeholders as to whether, in their view, the proposed objectives cover the breadth of environmental issues appropriate for the area and subject matter covered by the Strategy, and if the associated indicators provide a relevant measure for those proposed objectives.

7.3 Although the use of objectives provides a good framework for the assessment of the potential environmental effects of implementing the FWS, it is considered appropriate to use different assessment methods to assess the various parts of the Strategy. All of the proposed assessment methods for the relevant stages/ elements of the FWS are described below.

Assessing the Strategy's Priorities, Themes and Policies

7.4 The first stage in the assessment will be the thematic or objective based assessment, applying a traditional matrix approach, to consider each of the Strategy's 5 Priorities and associated 10 Contributing Themes and policies against the proposed 18 SEA Objectives. As highlighted under Section 6, these proposed SEA Objectives may be subject to further refinement following feedback received on this Scoping Report. It is also worth noting that although they have been grouped under the 10 Contributing Themes proposed for the FWS review, each of the environmental topics under Schedule 3, Section 6(a) of the Environmental Assessment (Scotland) Act 2005 have been represented (see final column of Table 6.1 for details).

7.5 The outcome of the assessment of potential environmental impacts (both positive and negative) of implementing each of the FWS priorities and their contributing themes will provided using the proposed matrix and evaluation scoring system under Tables 7.1 and 7.3 to follow. The matrix shown at Table 7.2 will also be used to assess the possible effects of the Strategy's policies alongside the same evaluation scoring system.

Table 7.1: Proposed Framework for Assessing Potential Effects of Priorities and Contributing Themes

FWS Priority and Contributing Theme					
SEA Objective	**Overalll Evaluation**	**Timeframe (Short/Medium/ Long Term)**	**Duration (Temporary/ Permanent)**	**Summary of Potential Effects**	**Proposed Mitigation/ Enhancement Measures**

Table 7.2: Proposed Framework for Assessing Potential Effects of FWS Policies

	SEA Objective						Comments
FWS Policy	**1**	**2**	**3**	**4**	**5**	**14**	
Policy 1	++	++	++	++	-	+	
Policy 2	0	0	0	0	-	+	
Policy 3	+	+	-	-	-	-	

Table 7.3: Proposed Evaluation Scoring System

++	+	0	~	-	--
Significantly Positive	Postive	Neutral	Uncertain/ Unknown	Adverse	Significantly Adverse

Proportional Assessment

7.6 Given the strategic nature of the Strategy, i.e. it will set a Perth and Kinross landscape scale framework which lower level forestry, woodland and trees policy will follow in respect of the creation and determination of individual plans and proposals, in order to maintain proportionality, it is deemed appropriate that the environmental assessment will focus on the likely significant *strategic* effects of implementing the Strategy, rather than drill down to a site specific level. Therefore, the data used in the assessment and the outputs reported will have a landscape scale focus.

Map-Based Assessment

7.7 As the FWS will idenitfy spatial recommendations, namely areas of 'Preferred', 'Potential' and 'Senstive' land categories, it is considered appropriate that the environmental assessment should also apply a spatially-based methodology for that part of the Strategy. As such, it is proposed that the SEA applies a Water Framework Directive (WFD) Inter-catchment Management Areas approach to the analysis of likely significant impacts, and for reporting on the potential for forestry and woodland expansion across Perth and Kinross. This same map-based approach was also used for the SEA of previous iterations of Perth and Kinross FWS.

7.8 For information, the WFD inter-catchments within Perth and Kinross are:

- Allan Water
- Dundee Coastal
- Earn Coastal
- Perth Coastal
- River Devon
- River Earn
- River Eden
- River Leven (Fife)
- River Tay (Higher Altitude)
- River Tay (Lower Altitude)
- Stirling Coastal

7.9 Within each of those inter-catchments, the map-based analysis will identify the following key considerations for the 'Preferred', 'Potential' and 'Sensitive' FWS categories (see Table 7.4 to follow), and identify what area (Ha) of 'Preferred' and 'Potential' exists within the individual inter-catchments. The SEA Environmental Report will also highlight key opportunities within those inter-catchments relating to the delivery of the Strategy's Priorities and Contributing Themes.

7.10 As a reminder, the recent 'Scottish Forestry Technical Note on Preparing a Forestry and Woodland Strategy (2026)', highlights, in terms of areas for new woodland in a FWS, that indicative maps are used to "identify areas according to how easily they could accommodate new woodland", and these are usually categorised as 'preferred', 'potential', and 'sensitive' land areas. The commonly understood definition of these categories is described as follows, and woodland creation grant applications in any of these areas will need to meet the requirements of the UK Forestry Standard and Forestry Grant Scheme.

- **Preferred land** – has the greatest scope to accommodate the expansion of a range of woodland types and so deliver a wider range of benefits. Preferred areas are likely to have fewer considerations to address.
- **Potential land** – has considerable potential to accommodate future creation of a range of woodland types but with at least one significant consideration to address. The extend to which these can be addressed at the design stage will determine if a woodland creation proposal can be accommodated.
- **Sensitive land** – has limited scope to accommodate further woodland creation because of a combination of considerations. Limited expansion might be possible in these areas but only if it is of a scale and character that can be accommodated without significant negative impacts on those considerations and/or where it would positively enhance features of local interest.

Table 7.4: Key Considerations for FWS Preferred, Potential and Sensitive Categories

Preferred	Potential	Sensitive
Proposed WHNCV (native non-commercial planting)	Land Capability for Forestry Map Areas (Classes F1-F3)	Designated Areas (e.g. Wildland, Local Landscape Areas, National Scenic Areas, Local Nature Conservation Sites (biodiversity and geodiversity))
Potential WHNCV Expansion Zones (native non-commercial planting)	NFI Ecological Condition Survey – target action to support improvements to condition	Caledonian Pine Inventory, TPOs, ATI
Existing Forestry and Woodland Resource	James Hutton Institute Carbon Sequestration Potential Study	Important Bird Habitats
Floodplains and areas predicted to flood	Nature Networks	Nationally Important Carbon Rich Soils, Deep Peat and Peatland Habitats
Riparian Woodland Corridors	Open Space Strategy	Prime Agricultural Land
Woodlands In and Around Towns (WIAT) Target Areas	Green and Blue Infrastructure	Drinking Water Protected Areas
		Landscape Character Type – Summits and Plateaux
		Approved Windfarms and Hydro Schemes
		Cultural Heritage Assets

7.11 As highlighted under Sections 3 and 4 of this Scoping Report, the National Forestry Inventory (NFI) 2025 update reported an existing 99,353 hectares of woodland in the Perth and Kinross, covering approximately 21% of the Local Development Plan land area i.e. excluding the area of Perth and Kinross within the Cairngorms National Park. The Scottish Government's vision is to expand woodlands to cover 21% of Scotland's land area by 2032. Existing planting across the Perth and Kinross FWS area already makes a strong contribution towards this, as such, it is not proposed to set woodland expansion targets for the FWS review, but rather consider what the potential is within each of the inter-catchments and where the best locations are to deliver upon the Strategy's priorities and themes, and in turn realise multiple benefits for people's health and wellbeing, and to tackle the climate and nature crises.

Assessing Alternatives

7.12 Part 2, Section 14(2) of the Environmental Assessment (Scotland) Act 2005 requires the responsible authority (in this case Perth and Kinross Council) to identify, describe and evaluate within the

Environmental Report the likely significant effects on the environment of implementing the FWS, and the reasonable alternatives to the Strategy, considering its objectives and geographical scope.

7.13 The preparation of an up to date Forestry and Woodland Strategy is required under the Planning (Scotland) Act 2019 and National Planning Framework 4 to inform the spatial strategy for new Local Development Plans prepared under the Act. The current Perth and Kinross FWS was first prepared in 2014, following the carrying out of an SEA process. It was then reviewed with minor updates in 2020 to form part of the suite of documents which sit alongside the Adopted Perth and Kinross Local Development Plan 2 (2019). Therefore, it is not considered that there are any reasonable alternatives to preparing the FWS review i.e. to continue with the current adopted FWS, as due to changes to national policy and drivers, a review is necessary to ensure it aligns with these changes at a national level and properly informs the development of the Council's LDP3 spatial strategy. However, should reasonable alternatives become apparent during the SEA and draft Strategy development process, these will be assessed as part of the environmental assessment.

Cumulative Assessment

7.14 The SEA Act requires the consideration of potential cumulative and synergistic effects. It is intended tha this part of the assessment will use professional judgement, informed by the evidence based, and follow a 3-pronged assessment approach of:

1. **Assessment of Priorities and Contributing Themes against the SEA Objectives** – this step will also include the identification of any cumulative and synergistic effects of implementing the FWS within the Perth and Kinross Area.
2. **Policy Assessment against the SEA Objectives** – as per step 1, this will consider and identify the potential cumulative and synergistic impacts of implementing the FWS.
3. **Map-Based Assessment** – will consider the potential cumulative and synergistic impacts on the individual intercatchment areas, and the Perth and Kinross Area as a whole, of identifying opportunities for woodland expansion and/or appropriate planting under the 'Preferred', 'Potential' and 'Sensitive' land categories through the FWS.

7.15 Any potential effects identified through these 3 steps will be dealt with under a separate section of the SEA Environmental Report and tested through the consultation process with the Consultation Authorities and key stakeholders.

Mitigation and Adaptation Measures, and Opportunities for Enhancement

7.16 The Environmental Report will identify recommendations for mitigation, adaptation and enhancement measures to prevent, reduce and offset potential adverse impacts, and to enhance those positive effects that are predicted to arise as a result of the Strategy's implementation.

Monitoring Framework

7.17 The Environmental Report will contain a proposed framework for monitoring the on-going effects arising from the implementation of the FWS. The monitoring framework will be clearly linked to the SEA Objectives and Indicators developed through the SEA process and will help to appraise the effectiveness of the mitigation and enhancement measures.

SEA Scoping Questions:

9. Do you agree with the proposed approach to undertaking the environmental assessment of the FWS review as set out under Section 7 of this Scoping Report?

8 NEXT STEPS

Proposed Consultation and Engagement

8.1 Section 15(1) of the Environmental Assessment (Scotland) Act 2005 sets out certain statutory requirements for formal consultation on this Scoping Report. Responsible authorities i.e. in this case Perth and Kinross Council, are required to send a copy of their SEA Scoping Report to each of the 3 Consultation Authorities – Historic Environment Scotland, Nature Scot, and Scottish Environment Protection Agency. The Consultation Authorities will then send their views within a 5 week period from receiving the SEA Scoping Report, particularly with regard to:

- The scope and level of detail of the information to be included within the SEA Environmental Report;
- The consultation period which the Council proposes to specify for the SEA Environmental Report, and
- The address to which opinions expressed should be sent, and within which time period.

8.2 This will be done through submitting this Scoping Report to the 3 Consultation Authorities via the SEA Gateway Team at the Scottish Government. We will also share it with identified key stakeholders with an interest in the Strategy's subject matter. Comments received as part of this formal consultation process will be considered, and where appropriate used to inform the further refine of the SEA methodology and the development of the Strategy.

8.3 Table 8.1 sets out the template which we propose to follow in order to keep track of and analyse comments received on the Scoping Report, and record how and where it has been addressed. At the end of the consultation period, the comments received will be used to amend the information contained within this Report prior to it being used to inform the next stages in the SEA process.

Table 8.1: Framework for Analysing Comments on Scoping Report

Individual/Organisation	Section of Scoping Report	Comment(s)	How it has been addressed

Indicative Timetable

8.4 The timeline to follow at Table 8.2 shows the timescales for each stage of the Forestry and Woodland Strategy review process and identifies where the various SEA stages align with that overall process. The star on the timeline indicates where we currently are in the overall process.

Table 8.2: Forest and Woodland Strategy Review and SEA Timeline

Stage	Indicative Timeframe
Undertake SEA Scoping Exercise aligned with early identification of proposed FWS Priorities, Contributing Themes and thematic policies	Autumn - Winter 2025/26
Submit SEA Scoping to SEA Gateway and consult key stakeholders (6 week period)	April - June 2026 ★
Review feedback and refine SEA Methodology accordingly	June 2026
Development of draft FWS and undertaking of SEA environmental assessment in parallel	May – July 2026
Present Draft FWS to Economy and Infrastructure Committee	26 August 2026
Publish Draft FWS and SEA Environmental Report for period of consultation and engagement (including online surveys and in person events over a 6-8 week period)	September – October 2026
Review feedback and amend FWS accordingly	November 2026
Present Finalised FWS to Economy and Infrastructure Committee for approval	Early 2027

SEA Scoping Questions:

10. Is the proposed consultation period and means of undertaking that consultation and engagement adequate?