

PART 1

To

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PART 2

An SEA Scoping Report is attached for the plan entitled

Aberdeenshire Forestry and Woodland Strategy 2016

The Responsible Authority is:

Aberdeenshire Council

PART 3

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PART 4

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1 Non-Technical Summary

1.1 Purpose of this Environmental Report and Key Stages

We (Aberdeenshire Council) have written this environmental report ("the report") for the Aberdeenshire Forestry and Woodland Strategy 2016 ("the Strategy") under the Environmental Assessment (Scotland) Act 2005. The process taken to write this report is called Strategic Environmental Assessment (SEA). The reason for undertaking this SEA is to identify and address all the effects the strategy is likely to have on the environment, with the overall aim of the process being to protect the environment. Throughout this SEA process we have been taking the views of others into account and will continue to do so as we finalise the Strategy.

The key stages of this SEA are screening, scoping, environmental report and post-adoption statement. We first submitted the Strategy for screening to determine whether there was any need for the SEA. We scoped the Strategy to identify how much information should be in the environmental report and how long we would consult with others on the report. In the environmental report, we show our assessment of the potential effects of the Strategy on the environment; how we could address the effects through a process called mitigation, and how we will monitor any significant effects of the Strategy on the environment. We will consult the public and address concerns raised. When we finalise the Strategy, we must inform everyone about what differences the SEA process and their views have made to the Strategy. And we will do this through a post-adoption statement. This report is the draft environmental report for the Strategy and we welcome comments on it. For more details on how to do this, see section 1.7.

1.2 The Context of the Strategy

The Aberdeenshire Forestry and Woodland Strategy 2016 ('the Strategy') is one of a series of Supplementary Guidance documents prepared to support the Aberdeenshire Local Development Plan 2016 (LDP). It provides further information on the relevant policies set out in the LDP and how to apply them. The Strategy also reflects national policy and is closely aligned to the Scottish Forestry Strategy. It replaces the 'Forest and Woodland Strategy for Aberdeenshire and Aberdeen City' produced in 2005.

Based on extensive input from a wide range of stakeholders, the Strategy presents the key issues and opportunities in relation to forestry and woodlands in the region. In doing so it aims to inform the location, design and management of these highly valued features of our lives and landscapes. It covers both 'rural' and 'urban' issues and focusses strongly on integration between different land uses.

The Strategy's vision is:

The forestry and woodlands of the Aberdeenshire Local Development Plan area are resilient to the effects of climate change, protect and enhance the environment and local culture, benefit and support the local and national economy and are valued and enjoyed by people, both residents and visitors.

The Strategy is split into themed sections within which the key issues and opportunities in relation to its 10 aims are outlined.

Theme 1 **Climate Change and Tree Health** aims to:

- Aid trees and woodlands' resilience to the negative effects of climate change and tree disease
- Promote trees and woodlands as a means to aid Scotland in mitigating and adapting to climate change

Theme 2 **Timber and Business Development** aims to:

- Support expansion of Aberdeenshire's woodland coverage in line with Scottish Government targets
- Promote and support the forest industry

Theme 3 **Communities, Development, Access and Health** aims to:

- Strongly protect and enhance trees and woodlands in the planning and construction of built development
- Promote and support woodland's role in providing opportunities for community development and recreational access

Theme 4 **Environment, Landscape and Historic Assets** aims to:

- Promote woodland creation and management practice which protects and enhances environmental quality and biodiversity
- Promote woodland creation and management practice which protects and enhances landscape and historic assets

The Strategy presents a map of **Preferred Areas for New Woodland Creation**, identifying where new woodlands could go so as to maximise benefits and promote integrated land use.

To shape the Strategy, we have used informal and formal consultations to engage with the public and other stakeholders. We have made use of documents and plans such as Aberdeen City and Aberdeenshire Strategic Development Plan 2014, the Aberdeenshire Local Development Plan 2016 the national Land Use Strategy, the Scottish Forestry Strategy, National Planning Framework (NPF3) and Scottish Planning Policy. We have also used a wide range of documents in the SEA to influence how we have developed the Strategy. These documents cover:

- national frameworks and policies
- land use inc. forestry and agriculture
- rural development
- climate and flooding
- low carbon economy and energy
- the water environment
- biodiversity (plant and animal life on the land and in the water)
- sustainable development
- air quality
- historic environment and landscape
- recreation
- soils
- waste
- ecosystem services

1.3 Baseline/Evolution, Characteristics of Areas & Environmental Problems

We have identified a number of significant environmental problems and issues in the Local Development Plan area and have described them in the Environmental Report. The report also sets out the baseline environmental information for the area. In assessing this information we have identified a number of key issues, and opportunities, which the Strategy needs to encompass and consider:

- Scottish Government targets are to expand woodland cover – new woodland needs to be planned and sited so as to minimise impacts on existing features and deliver multiple benefits
- Biodiversity loss continues in the area

- Climate change mitigation and adaptation measures not being implemented to the extent required to minimise impacts. Tress and woodlands have significant potential to contribute to both mitigation and adaptation
- Forestry and woodlands are important in rural economies
- In general, society greatly values trees and woodlands but there are controversies around landscape impacts and also conflicts with other rural land uses
- The potential benefits of increased physical activity on human health

1.4 Assessment of Effects

The assessment of effects has shown that it is not straightforward to identify the effects of the Strategy on the environmental receptors. The strategy, and the maps contained within, are high level and strategic. The strategy will have an influence on woodland management and creation in the local development plan area. However, actual on-the-ground land use decision making will take account of a wide variety of factors, one of which may be the strategy. The Strategy will inform woodland management and creation rather than dictating action. Given the nature of the Strategy we have carried out a strategic environmental assessment process which is proportionate to its likely direct influence on environmental receptors.

Despite some of the difficulties associated with the strategic nature of the Strategy, the overall assessment of the potential environmental effects is overwhelmingly positive. At the core of the Strategy is an aim to promote both environmental and social benefits (as well as economic ones).

Table 1.1 below presents a summary of the potential effects of the Pilot.

Table 1.1: Assessment of Effects

SEA Issue	Plan Impact
Air	Overall a positive assessment. Trees and woodlands can have a positive impacts on air quality, particularly in urban areas. In general the multiple benefits woodland approach promoted by the strategy aims to have positive impacts. Some localised air quality issues could result from increased timber transport or woodfuel use but these should be outweighed by the benefits of increased woodland.
Climatic factors	Overall a positive assessment. Trees and woodlands provide significant potential in mitigating and adapting to climate change and the Strategy promotes this throughout. Any increase in timber transport could result in increased emissions but this should be outweighed by the positive impacts of an expanded and well managed woodland resource.
Water	Overall a positive assessment. Trees and woodland can have positive impacts on the water environment and the Strategy promotes opportunities. Careful design and planting of woodlands are required to secure these benefits and avoid impacts, as the Strategy highlights. Past management prescriptions such as the planting of peat bogs or extensive commercial conifer planting on the banks of watercourses have caused impacts, but these practices are greatly reduced and the Strategy highlights them as damaging.

SEA Issue	Plan Impact
Soil	Overall a positive assessment. Measures promoted by the Strategy include the protection of peat rich soils and the integration of trees into built development as an alternative to 'hard' surfaces.
Biodiversity (flora and fauna)	Overall a positive assessment. The Strategy promotes sustainable, multiple benefit management of trees and woodlands for environmental protection and enhancement. It identifies the need to protect existing woodlands, to restore sites previously impacted by woodland planting, to protect valuable open ground habitats from woodland, to protect and enhance priority species, to protect and enhance designated sites and to promote habitat networks.
Material assets	Overall a positive assessment. The Strategy promotes woodlands as a key asset for the area and recognises its benefits. It promotes woodland expansion, which has the potential to impact or diminish other material assets. However, the strategy overall promotes the consideration of overall benefit, taking account of the benefits of pre-existing or adjacent resources.
Population	Overall a positive assessment. The Strategy promotes measures which aim to have a range of benefits to society. It highlights the value society places on trees and woodlands in the landscape, the value of woodlands for recreation, the potential to mitigate and adapt to climate change and the economic benefits woodlands bring for example.
Health	Overall a positive assessment. Inactivity is a key health issue. Woodlands in the local development plan area are a key recreational resource. The Strategy promotes increased public access in existing and new woodlands. It highlights the benefits of siting woodland near to where people live.
Cultural Heritage	Overall a positive assessment. The Strategy highlights that trees and woodland are important cultural heritage features in themselves. It also promotes the protection, and where appropriate, enhancement of cultural heritage features in the planning, planting and management of woodlands.
Landscape	Overall a positive assessment. The Strategy promotes healthy, resilient woodlands and thus should help to maintain existing woodland features of the landscape. It promotes good practice woodland creation and management which benefits and enhances landscape features.

1.5 Proposed Mitigation Measures

The SEA Directive requires that through mitigation measures, recommendations should be made to prevent, reduce or compensate for the negative effects of implementing the Strategy. Our assessment indicates that overall the potential effects of the Strategy are positive for the environment. No potentially negative effects have been recorded. Our mitigation measures will therefore focus on how to enhance the positive effects of the Pilot. There are two over-arching enhancement measures which are outlined below. A number of other specific enhancement measures are identified in the report.

Proposed enhancement measure: An action planning process should take place

The Strategy lists a number of potential actions that could be followed so as to address the key issues it identifies. This aims to be a guide to a wide range of organisations and stakeholders for the types of actions that should take place in relation to forestry and woodland planting and management. However, it is proposed that, to fully realise the potential benefits, a process of defined action planning takes place following the adoption of the Strategy. This could involve key groups such as the Grampian Regional Forestry Forum and would initially be instigated by

Aberdeenshire Council. This measure has been embedded in the Strategy. The action planning process should also consider the enhancements suggested in the full assessment in Appendix 1.

Proposed enhancement measure: The strategy should be reviewed at defined intervals

The SEA identifies that key issues and legislation change over time and that there is merit in updating from the 2005 Strategy. Forestry and woodland planning is long term, so there is significant merit in taking a long term view and the Strategy does this. However, there is also merit in reviewing issues and progress. As such it is proposed that a review process for the strategy is implemented. Creating the Strategy as Supplementary Guidance to the Local Development Plan provides the opportunity for review each five year plan cycle. Thus a review of the strategy should take place in 2020/21 as part of the preparation of the next Local Development Plan. This measure has been embedded in the Strategy.

1.6 Monitoring

The Strategy is required to monitor the significant environmental effects when it is implemented. In doing so, it is required to identify any unforeseen adverse effects at an early stage; and undertake appropriate remedial action. The assessment of the Strategy indicates that there no potential adverse effects from its implementation.

In the absence of potential negative effects, the overall impact of the strategy will be a key element to monitor during the 5 yearly review cycle. This can be based on the proposed actions it identifies – have these been progressed and what consequences have they had.

In the shorter term, the proposed action planning process will create a need for monitoring of the actions. As the actions have not yet been agreed, this monitoring cannot be specified currently but will be a key element of the process. Also in the short term, given the Strategy's focus on new woodland creation, planting rates in the area should be monitored, using Forestry Commission Scotland data.

1.7 How to Comment on the Report

If you would like to express your views on this Environmental Report, please send your comments by **8th April 2016** to:

Forestry and Woodland Strategy
Planning and Building Standards
Woodhill House
Westburn Road
Aberdeen
AB16 5GB

Or e-mail them to: forestryandwoodland@aberdeenshire.gov.uk

This report and the Strategy itself can also be found at the following webpage: <https://www.aberdeenshire.gov.uk/planning/plans-and-policies/Aberdeenshire-Local-Development-Plan-2016/>

2 The Environmental Report

2.1 Introduction

The purpose of this Environmental Report is to provide information on the Proposed Aberdeenshire Forestry and Woodland Strategy 2016 (the Strategy), identify, describe and evaluate the likely significant effects of the PPS and its reasonable alternatives; and provide an effective opportunity for the Consultation Authorities and the public to offer views on any aspect of this document. The SEA process for the Strategy initially involved the preparation of a scoping report. Following analysis and incorporation of comments from consultees, we have prepared this Environmental Report of the Strategy.

With regard to format, the report begins with a Non-Technical Summary in Section 1. Section 2 provides an introduction, key facts and SEA activities to date. Next, Section 3 describes the content and the alternatives of the PPS, while Section 4 discusses the issues that set the context for the strategy, such as other PPS and environmental protection objectives, baseline data, the evolution of the baseline without the PPS; and environmental problems relevant to the plan. Section 5 then looks at the scope and level of detail to be assessed, comprising alternatives, the assessment framework, cumulative effects assessment, mitigation and monitoring, as well as general weaknesses and limitations of the report and difficulties faced. The next steps are outlined in Section 6; with the Appendices following this section.

2.2 Key Facts

Table 2.1: Key Facts relating to the

Name of Responsible Authority	Aberdeenshire Council
Title of the PPS	Aberdeenshire Forestry and Woodland Strategy 2016
What Prompted the PPS	Scottish Forestry Strategy, National Planning Framework 3
Subject	Forestry and Woodlands
Period Covered by the PPS	2016 to 2036+
Frequency of Updates	Every 5 years
Area covered by the PPS	Aberdeenshire Local Development Plan Area
Purpose and/or objectives of the PPS	To set high level objectives for the creation and management of forestry and woodlands in Aberdeenshire
Contact Point	James Davidson Project Officer Aberdeenshire Council Woodhill House Westburn Road Aberdeen AB16 5GB Tel: 01224 664221 j.davidson@aberdeenshire.gov.uk

2.3 SEA Activities to date

Table 2.2: SEA activities to date

SEA Action/Activity	When carried out	Notes
SEA Screening	May 2015	
Consultation with Responsible Authorities and public on Screening	May/June 2015	
SEA Determination	June 2016	
Advertising of Determination	26 th June 2016	
SEA Scoping	September and October 2015	
Consultation with Responsible Authorities on Scoping	4 th November 2015 to 12 th December 2015	
Production of Environmental Report	1 st December 2015 to 10 th February 2016	

3 Outline and Objectives of the Aberdeenshire Forestry and Woodland Strategy 2016

3.1 Outline

Aberdeenshire Council are preparing a Forestry and Woodland Strategy for Aberdeenshire as Supplementary Guidance to the 2016 Local Development Plan. The strategy replaces a joint Aberdeenshire and Aberdeen City document produced in 2005. The production of Forestry and Woodland Strategies by Local Authorities is encouraged by Forestry Commission Scotland (FCS) and the Scottish Government and is supported by the FCS guidance document *The Right Tree in the Right Place*.

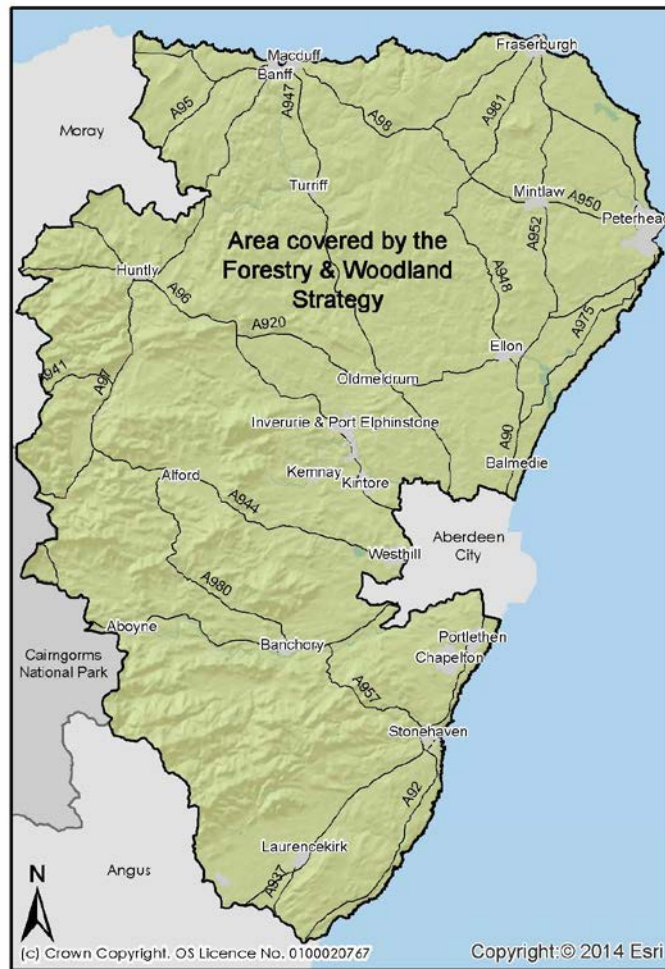
The Aberdeenshire Forestry and Woodland Strategy 2016 sets out high-level objectives for forestry and woodland management and creation, reflecting national policy and regional circumstances for the Local Development Plan area (note this is not the whole of Aberdeenshire but just the LDP area – see Figure 1). Many of the national policies the strategy reflects will already have been subject to Strategic Environmental Assessment.

The strategy covers issues in relation to development management and Council owned woodlands. However, it is an expression of all forestry and woodland stakeholders' priorities and is likely to cover issues relating to climate change, timber and business development, community development and the environment.

The strategy maps preferred areas for new woodland creation in Aberdeenshire. This has been carried out using a GIS based process which identifies significant constraints and opportunities in relation to the planting of new woodland. The map will influence Scottish Rural Development Plan (SRDP) new woodland creation grant award process.

It is important to note that the strategy, and the maps contained within, are high level and strategic. The strategy will have an influence on woodland management and creation in the local development plan area. However, actual on-the-ground land use decision making will take account of a wide variety of factors, one of which may be the strategy. The strategy will inform woodland management and creation rather than dictating action. Given the nature of the strategy we have carried out a strategic environmental assessment process which is proportionate to its likely direct influence on environmental receptors.

Figure 1: Aberdeenshire Forestry and Woodland Strategy area



3.2 Alternatives

There are a number of alternative approaches which could have been taken in developing the new strategy as described in Table 3.1 below.

Table 3.1: Alternatives considered

Alternatives	Description of Options
Business as usual	No new strategy would be created and the 2005 strategy would remain active.
No strategy	No new strategy would be created and the existing 2005 strategy would be revoked
High level strategy	A high-level, strategic strategy would be created which focusses on the key forestry and woodland issues for the region.
Detailed strategy	A detailed strategy would be created which aimed to encompass all local, field scale forestry and woodland issues.

3.3 Chosen themes and objectives

The strategy is split into four interrelated themes. A number of key issues are reflected under each of these themes. The strategy will also map preferred areas for new woodland creation.

Table 3.2 sets out these themes and lists some proposed objectives. It is proposed that these themes and objectives are the basis for the SEA – they are the elements that will be assessed.

Note that the strategy also reiterated policies of the Proposed Aberdeenshire Local Development Plan 2016. These policies have been subject to Strategic Environmental Assessment, through a separate process, already.

Table 3.2: Themes and Objectives

Theme		Objectives	
1	Climate change and tree health	1.1	Aid trees and woodlands' resistance to the negative effects of climate change and tree disease
		1.2	Promote trees and woodlands as a means of mitigating and adapting to climate change
2	Timber and business development	2.1	Support expansion of Aberdeenshire's woodland coverage in line with Scottish Government targets
		2.2	Promote and support the forestry industry
3	Community Development, Access and Health	3.1	Protect and enhance trees and woodlands in the planning and construction of built development
		3.2	Promote and support woodland's role in providing opportunities community development and recreational access
4	Environment, Landscape and Historic Assets	4.1	Promote woodland creation and management practice which protects and enhances environmental quality and biodiversity
		4.2	Promote woodland creation and management practice which protects and enhances cultural and historic assets
5	Mapping of preferred areas for new woodland creation	5.1	Maximise the benefits of new woodland creation
		5.2	Promote integrated land use

4 The Context of Aberdeenshire Land Use Strategy

4.1 Relationship with other PPS and environmental protection objectives

The Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes an outline of the relationships with other relevant PPS and how environmental protection objectives have been taken into account in the PPS preparation. This section covers these issues and describes the policy context within which the PPS operates, and the constraints and targets that this context imposes on the PPS. The PPS's thought to have an influence on or be influenced by the strategy are identified in Table 4.1 and in more detail in Appendix 6.5

Table 4.1: Other PPS of relevance to the development of the strategy

International Level
Nature Conservation
– The Habitats Directive 92/43/EEC
– The Birds Directive 2009/147/EC
– Convention on Wetlands of International Importance 1971 (Ramsar)
– Nature Conservation - the Ramsar Convention
– EU Biodiversity Strategy 2020
Water
– Water Framework Directive 2000/60/EC
– Nitrate Directive 91/43/EC
Climate Change
– UN Framework Convention on Climate Change
– The Second European Climate Change Programme (currently in preparation)
Landscape
– European Landscape Convention 2000
National
Overarching Planning Policy
– The Planning (Scotland) Act 2006
– National Planning Framework for Scotland 3 (NPF3)
– The Scottish Planning Policy 2014
Cross- Sectoral
– The Government's Economic Strategy
– Natural Resource Productivity (2009)
– Getting the best from our land: A land use strategy for Scotland 2011
Air and Climate Change
– Scottish Climate Change Delivery Plan (2009)
– UK Air Quality Strategy (2007)
– SEPA Air Quality Report
– Towards a Low Carbon Economic Strategy for Scotland (2010)
– Changing Our Ways- Scotland's Climate Change Programme (2006)
– Tomorrow's Climate, Today's Challenge: UK Climate Change Programme (2006)
– 2020 Routemap for Renewable Energy in Scotland (2011)
– Online Renewables Advice (Replaces PAN 45) for specific renewable energy technologies.
– Calculating carbon savings from windfarms on Scottish peat lands (2008)
Heritage, Design and Regeneration
– The Scottish Historic Environment Policy (2011)
– Green Infrastructure: Design and Placemaking (2011)
Soil and Landscape

– The Scottish Soil Framework (2009)
– Scottish Landscape Forum: Scotland's Living Landscape (2007)
– Scotland's Living Landscapes: Places for People (2007)
Population and Health
– Let's Make Scotland More Active: A Strategy for Physical Activity (2003)
– Equality Act 2010
– 'Making the Links: greenspace for a more successful and sustainable Scotland' (2009)
– Land Reform (Scotland) Act 2003
– Scottish Outdoor Access Code
– Community Empowerment and Renewal Bill (2012)
Natural Conservation and Biodiversity
– Wildlife and Countryside Act 1981 (as amended)
– The Nature Conservation (Scotland) Act 2004
– Scotland's Biodiversity Strategy- Its in your hands (2004)
– The Conservation (Natural Habitats etc.) Regulations 1994 (as amended)
– The Conservation (Natural Habitats) Amendment (Scotland) Regulations 2007
– Wildlife and Natural Environment (Scotland) Act 2011
– 2020 Challenge for Scotland's Biodiversity: A Strategy for the Conservation and Enhancement of Biodiversity in Scotland (2013)
– Scotland's Biodiversity: a route map to 2020 in the Natural Conservation and Biodiversity (2013)
– UK Biodiversity Action Plan 1994
Forestry and Woodlands
– The UK Forestry Standard
– Scottish Government's Policy on Control of Woodland Removal
– Ancient Woodland Inventory
– Rationale for Woodland Expansion (2009)
– Right Tree, Right Place (2010)
– Scottish Forestry Strategy 2006
– Woods In and Around Towns
– Scotland's Woodlands and the Historic Environment
– Woodland Expansion Advisory Group
Food and Agriculture
– Scotland's National Food and Drink Policy (2009)
– Scottish Rural Development Programme
– Whole farm review scheme (2014)
– Farming For a Better Climate
Water
– Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)
– Water Environment and Water Services (Scotland) Act 2003
– Flood Risk Management (Scotland) Act 2009
– River Basin Management Plan for Scotland (2009)
– SEPA Indicative Flood Maps (2014)
Regional
Overarching Planning Policy
– Aberdeen City and Shire Strategic Development Plan (2014)
Nature Conservation
– North East of Scotland Local Biodiversity Action Plan (2000)
– Forest and Woodland Strategy for Aberdeenshire and Aberdeen (2005)
– River Dee Catchment Management Plan (2007)

Local Level
Air & Climate
– Aberdeenshire Council Climate Change Action Plan 2011 - 2015
– Aberdeenshire Air Quality Reports 2011
Access, Open Space and Landscape
– Aberdeenshire Core Paths Plan 2013
– Aberdeenshire Council Parks and Public Open Spaces Strategy 2010
– Aberdeenshire Landscape Character Assessment
Community Planning
– Community Plans (by Area)
Historic Environment
– Aberdeenshire Council Historic Environment Strategy
Housing
– Aberdeenshire Local Housing Strategy 2012-2017
Land Use
– Aberdeenshire Land Use Strategy Pilot

The key points of relevance for the strategy and the SEA, drawn from the common themes of the plans and programmes above, are to:

- Promote sustainable development within Aberdeenshire;
- Limit or reduce the emissions of greenhouse gases;
- Promote mitigation of and adaption to the effects of climate change;
- Promote the sustainable use of natural resources taking account of an ecosystems approach
- Protect and enhance biodiversity, species and habitats;
- Promote the sustainable management and enhancement of soils;
- Maintain, protect and enhance landscape character and cultural assets;
- Promote sustainable and efficient use of water and enhance the environmental quality of water and the biodiversity it supports;
- Avoid adverse effects on the water environment and any increased flood risk. Actively promote sustainable flood risk management;
- Promote woodland expansion;
- Maintain a sustainable forestry industry;
- Support sustainable food production;
- Enhance opportunities for public access to the natural environment;
- Increase community engagement with the natural environment;
- Promote strategies that do not degrade the coastal environment;
- Reduce social exclusion and inequalities;
- Consider the availability and accessibility of land for development.

4.2 Relevant aspects of the current state of the environment

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires the Environmental Report to include a description of " *the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the Plan or Programme*", and " *the environmental characteristics of areas likely to be significantly affected*". The provision of this information allows a description of the relevant environmental context within which the strategy will operate and the constraints and targets that this context imposes on the PPS. The detailed tabulation of the baseline data is presented in Appendix 3.

4.3 Likely evolution of the environment

Future changes to the environmental baseline are inevitable due to natural processes but also due to human activity that are unconnected with the strategy. Table 4.2 indicates likely evolution of the baseline in relation to each SEA topic. It will be important to take account of this likely evolution in developing the strategy, recognising the limits imposed by its strategic, high-level nature.

Table 4.2: Likely Evolution of the Baseline

SEA Topic	Likely Evolution of the Baseline
Biodiversity, flora & fauna	Adverse and positive effects on biodiversity caused by other plans and activities will continue. Despite a range of PPS to tackle the issue current trends still suggest continued loss and fragmentation of habitats and the loss of species numbers and biodiversity.
Landscape	The steady evolution of the landscape in relation to human activity, biological process and climate will continue. Landscape will continue to be influenced by a range of plans, policies and by culture.
Cultural Heritage	Existing impacts and benefits on the historic environment in relation to forestry and woodlands will remain. This will include the protection of a range of cultural heritage assets afforded by forestry management practice but also potential damage to assets resulting from practice and new woodland creation.
Air Quality & Climatic Factors	Air quality issues in urban centres are likely to become a focus of plans and policies with significant efforts to improve quality. Measures may include green infrastructure such as trees. The effects of climate change on the environment, economy and society will increase. Some opportunities for early planning and activity to mitigate and adapt to these changes will be missed.
Water	The focus on water environmental quality and management provided by European directives will continue with improvements in quality. However, climate change and associated land use changes, including potentially an intensification of agriculture, will increasingly impact on the water environment.
Population & Human Health	Population is likely to continue to increase in Aberdeenshire. Health issues associated with inactivity and old age are likely to increase. There will be an increasing disconnection between the majority of the population and rural land use. However, there will be increasing demands on some of the services provided by forestry and woodlands, notably recreation and woodfuel.
Soil & Material Assets	In the near future soil quality is unlikely to get the focus it deserves given its significance to society. In the medium to long term soils impacts and soil quality issues are likely to become significant enough for an increased focus and effort in their protection and enhancement.

4.4 Environmental problems

The key environmental problems of relevance to the strategy are presented in Table 4.3 based on an analysis of the baseline and its likely evolution. It will be important to take account of these factors in developing the strategy.

Table 4.3 Environmental Problems

Environmental Topic	Issues/Trends	Possible role of the Forestry and Woodland Strategy
Biodiversity, flora & fauna	<ul style="list-style-type: none"> Continued loss of biodiversity. Continuing requirement to protect locally, nationally and internationally designated sites (including sites identified on the ancient woodland inventory), and enhance where possible. Decrease and/or fragmentation of semi-natural habitats and a widespread failure to appreciate the significance and impacts of such habitat fragmentation. Loss of green space, green linkages and wildlife corridors. 	<ul style="list-style-type: none"> Take account of and protect designated sites Promote woodland creation and management practice that protects and enhances biodiversity and bio-abundance Promote land use changes which reduce habitat fragmentation and restore/re-establish habitat connectivity.
Landscape	<ul style="list-style-type: none"> Loss of diversity in the landscape. Impacts on traditional, rural landscape character. Capacity of landscapes to absorb development and change. Impact on remote and wild countryside and coasts. 	<ul style="list-style-type: none"> Take landscape setting and cultural associations into consideration Aim to promote resilient landscapes.
Cultural Heritage	<ul style="list-style-type: none"> Vulnerability of historic and cultural heritage assets to some land use management and change. Degraded Designed Landscapes and the need to restore and protect them into the future 	<ul style="list-style-type: none"> Take into account the vulnerability and value of cultural and historic assets Consider the contribution the Strategy can make to the restoration and protection of designed landscapes
Climatic Factors	<ul style="list-style-type: none"> Greenhouse gas emissions – related to land use. The need to adapt to predicted climate change and its potential impacts. Opportunities to support development of renewable energy. Tree diseases and other climate related future threats. 	<ul style="list-style-type: none"> Promote opportunities to reduce greenhouse gas emissions from land use Promote potential climate change and flooding adaption and mitigation measures Encourage renewable energy option Promote resilient woodlands and appropriate tree species choice
Air Quality	<ul style="list-style-type: none"> Decreased air quality in town centres. Atmospheric pollutants impacting sensitive habitats. 	<ul style="list-style-type: none"> Promote green infrastructure as a means to improve air quality Increase the resilience of air pollution sensitive habitats

Water	<ul style="list-style-type: none"> • Diffuse pollution from agriculture and forestry impacting the water environment • Soil contamination as a source of groundwater pollution. • Designated water bodies which are sensitive to pollution and hydrological changes. • Morphological alteration of beds, banks and shores of rivers, lochs and coastal waters (such as straightening, culverting and modifying riparian habitats). • Impacts of flooding on land use and vice versa. 	<ul style="list-style-type: none"> • Promote land management and land use change which reduces diffuse and other pollution sources and avoids impacts to designated waterbodies. • Promote land use change which reduces flood risk and minimise flood impacts on land use and communities.
Population	<ul style="list-style-type: none"> • Increasing population • Changing demographics – ageing and increasingly urbanised population. • Continuing trend of losing young educated adults – “brain drain”. 	<ul style="list-style-type: none"> • Aid connecting of communities with the land • Support sustainable economic growth across the region • Consider the needs of all sectors of society.
Human Health	<ul style="list-style-type: none"> • Access to greenspace and active travel opportunities • Elevated levels of NO2 and PM10 have a negative impact on human health, particularly among vulnerable groups. 	<ul style="list-style-type: none"> • Promote the creation of accessible public greenspace. • Promote green infrastructure as a means to improve air quality
Soil	<ul style="list-style-type: none"> • Agriculture and forestry leading to soil erosion. • Contaminated land and its impacts on land use and soil quality. • Loss of soil organic matter (which acts as a carbon store) will result in increased carbon dioxide emissions. 	<ul style="list-style-type: none"> • Promote land use change and management which reduces impacts on soil. • Promote land use change and management which protects and increases soils carbon stores.
Material Assets	<ul style="list-style-type: none"> • Timber resource and the proportion of timber imports • Renewable energy developments • Availability, extent and quality of agricultural land 	<ul style="list-style-type: none"> • Promote wood based renewable energy development • Promote a long-term view of the quality, availability and extent of agricultural land in the region, highlighting issues relating to climate change in particular. • Support a sustainable timber resource and industry in the region.

5 Assessment Framework

5.1 Elements to which SEA has been applied

We have considered the following elements (discussed in Section 3.2 and 3.3 above) to SEA.

- Alternatives to developing the Strategy
- The Strategy's Themes, Proposed Actions and Mapping of Preferred Areas for New Woodland Creation

5.2 Assessment of Alternatives

A full assessment of the alternatives to producing the strategy is presented in Table 7.1 in Appendix 1. Table 5.1 below summarises the findings.

Table 5.1 Summary of Assessment of Alternatives

Alternatives	Description of Options	Summary of Assessment
Business as usual	No new strategy would be created and the 2005 strategy would remain active.	Second lowest scoping option. Opportunity would be missed to update the existing strategy, taking account of legislative and environmental changes since publication in 2005.
No strategy	No new strategy would be created and the existing 2005 strategy would be revoked	Lowest scoring option. Opportunities would be missed to highlight key issues and take a coordinated approach to tackling them.
High level strategy	A high-level, strategic strategy would be created which focusses on the key forestry and woodland issues for the region.	Second highest scoring option. A pragmatic approach to the production of a strategy over a large area. Would pick out the key issues and emphasise the need for a robust, site based appraisal in considering any woodland planting and management.
Detailed strategy	A detailed strategy would be created which aimed to encompass all local, field scale forestry and woodland issues.	Highest scoring option. Highly complex and time consuming to get this option correct – there is unlikely to be the detail/data available to do it sufficiently robustly resulting in a risk of unintended consequences. A prescriptive plan may not be accepted by stakeholders.

The assessment resulted in the detailed strategy approach coming out as the highest scoring option in relation to the potential environmental and social effects. However, the assessment recognises the complexity, resource requirements and risks in furthering this approach. Given these difficulties, it is not the approach that was chosen. A high level, strategic strategy, the second highest scoring option, was seen as the one most likely to deliver actual benefits with least risk.

5.3 Framework for assessing environmental effects

We have assessed the options, themes and objectives in the strategy against SEA objectives. We have predicted whether these effects were likely to be negative, positive, uncertain, mixed or neutral using a series of questions. We have used comment boxes to evaluate the effects to determine their significance in relation to reversibility or irreversibility of affects, risks and duration (permanent, temporary, long-term, short-term and medium-term).

The full assessments are presented in Appendix 1.

5.4 Cumulative Effect Assessment

Consistent with paragraph 6 (e) of Schedule 3, of the Environmental Assessment (Scotland) Act 2005, we have assessed the likely significant effects on the environment, including secondary, cumulative and synergistic effects taking into account the information available to us. In doing so, we have considered the evolution of the environment without the plan; environmental characteristics of areas likely to be significantly affected; and the assessment of effects. In this report, we will assess direct/indirect/secondary, time crowding, time lag, space crowding, cross-boundary, nibbling and synergistic effects in gauging cumulative effects.

We have assessed cumulative (direct, indirect, secondary and synergistic) effects in Table 5.2 below. Note that, the full environment effects of the Strategy in combination with other PPS difficult to judge. The strategy is strategic in nature and suggests a number of action that could be taken so as to address the key issues and opportunities it identifies. It will be one of a number of factors woodland managers take into account when planting and managing woodland. The factors they take account of will be diverse – cultural, social, environmental and economic. Thus understanding the effects of the strategy combination with other PPS on receptors is difficult. The strategy aims to have positive environment effects in all aspects it addresses and promotes.

Table 5.2: Cumulative Effects of the Strategy

	Theme 1	Theme 2	Theme 3	Theme 4	Mapping	Cumulative	Comments
							Cumulative effects including Time crowding (frequent and repetitive effect); Time lag (long delays in cause and effect); space crowding (high spatial density of effects); cross-boundary (effects occurring distances from source); synergistic (effects from multiple sources or combined effects different in nature from the individuals); indirect (secondary effects resulting from a primary activity); nibbling (incremental)
Air	++/-	++/-	++	+	0	++/-	Overall a positive assessment. Trees and woodlands can have a positive impacts on air quality, particularly in urban areas. In general the multiple benefits woodland approach promoted by the strategy aims to have positive impacts. Some localised air quality issues could result from increased timber transport of woodfuel use but these should be outweighed by the benefits of increased woodland.
Water	+	++	++	++	++	++	Overall a positive assessment. Trees and woodlands provide significant potential in mitigating and adapting to climate change and the Strategy promotes this through-out. Any increase in timber transport could result in increased emissions but this should be outweighed by the positive impacts of and expanded and well managed woodland resource.
Climate	++	++	++	++	++	++	Overall a positive assessment. Trees and woodland can have positive impacts on the water environment and the strategy promotes opportunities. Careful design and planting of woodlands are required to secure these benefits and avoid impacts as the Strategy highlights. Past management prescriptions such as the planting of peat bogs or extensive commercial conifer planting on the banks of watercourses have caused impacts, but these practices are greatly reduced and the Strategy highlights them as damaging.
Soil	+	+	++	++	++	++	Overall a positive assessment. Measures promoted by the strategy include the protection of peat rich soils and the integration of trees into built development as an alternative to 'hard' surfaces.
Biodiversity	++	++	++	++	++	++	Overall a positive assessment. The Strategy promotes sustainable, multiple benefit management of trees and woodlands for environmental protection and enhancement. It identifies the need to protect existing woodlands, to restore sites previously impacted by woodland planting, to protect valuable open ground habitats from woodland, to protect and enhance priority species, to protect and enhance designated sites and to promote habitat networks.
Landscape	+	+	++	++	+	++	Overall a positive assessment. The Strategy promotes healthy, resilient woodlands and thus should help to maintain existing woodland features of the landscape. It promotes good practice woodland creation and management which benefits and enhances landscape features.
Material Assets	++	++	+	++	++	++	Overall a positive assessment. The Strategy promotes woodlands as a key asset for the area and recognises its benefits. It promotes woodland expansion, which has the potential to impact or diminish other material assets. However, the strategy overall promotes the consideration of overall benefit, taking account of the benefits of pre-existing or adjacent resources.

Population	++	++	++	++	++	++	Overall a positive assessment. The Strategy promotes measures which aim to have a range of benefits to society. It highlights the value society places on trees and woodlands in the landscape, the value of woodlands for recreation, the potential to mitigate and adapt to climate change and the economic benefits woodlands bring for example.
Human Health	+	+	++	++	++	++	Overall a positive assessment. Inactivity is a key health issue. Woodlands in the local development plan area are a key recreational resource. The Strategy promotes increased public access in existing and new woodlands. It highlights the benefits of siting woodland near to where people live.
Cultural Heritage	+	+	+	++	++	++	Overall a positive assessment. The Strategy highlights that trees and woodland are important cultural heritage features in themselves. It also promote the protection, and where appropriate, enhancement of cultural heritage features in the planning, planting and management of woodlands.
Key	<p>+ = positive effect ++ = significant positive effect - = negative effect -- = significant negative effect ++/- = mixed effects but predominately positive 0 = neutral effect ? = uncertain effect</p> <p>Direct (Strategy → Impact A) Indirect (Strategy → Impact A → Impact B) Induced (Strategy → other PPS → Impact A) Additive (Impact A + Impact B = Impact A+B) Neutralising (Impact A + Impact B < Impact A+B) Synergistic (Impact A + Impact B > Impact A+B)</p>						

5.5 Proposed Mitigation Measures

The SEA Directive requires that through mitigation measures, recommendations should be made to prevent, reduce or compensate for the negative effects of implementing the Strategy. Our assessment indicates that overall the potential effects of are positive for the environment. No potentially negative effects have been recorded. Our mitigation measures will therefore focus on how to enhance the positive effects of the Pilot.

Table 5.3: Proposed enhancement measures

Topic	Significant effects	Enhancement Measures (Policy, Additional Measures)	When should enhancement be considered	Who is responsible for measure
Over-arching	Positive	<p><u>An action planning process should take place</u></p> <p>The Strategy lists a number of potential actions that could be followed so as to address the key issues it identifies. This aims be a guide to a wide range of organisations and stakeholders for the types of actions that should take place in relation to forestry and woodland planting and management. However, it is proposed that, to fully realise the potential benefits, that a process of defined action planning takes place following the adoption of the strategy. This could involve key groups such as the Grampian Regional Forestry Forum and would initially be instigated by Aberdeenshire Council. This measure has been embedded in the Strategy. The action planning process should also consider the enhancements suggested in the full assessment in Appendix 1.</p>	This should be progressed immediately after the Strategy is adopted in December 2016	Initial instigation by Aberdeenshire Council with involvement of other groups

		<p><u>The strategy should be reviewed at defined intervals</u></p> <p>The SEA identifies that key issues and legislation change over time and that there is merit in updating from the 2005 Strategy. Forestry and woodland planning is long term, so there is significant merit in taking a long term view and the Strategy does this. However, there is also merit in reviewing issues and progress. As such it is proposed that a review process for the strategy is implemented. Creating the Strategy as Supplementary Guidance to the Local Development Plan provides the opportunity for review each five year plan cycle. Thus a review of the strategy should take place in 2020/21 as part of the preparation of the next Local Development Plan. This measure has been embedded in the Strategy.</p>	Next review date will be in advance of the 2021 Local Development Plan so approx. 2020	Aberdeenshire Council
Air	Positive	Targeted planting of trees in areas of poor air quality could be explored through the action planning process as a further enhancement to the suggested actions.	The potential of this action should be considered during the action planning process in 2017	The group created to manage the action plan
Water	Positive	A better understanding of the location and quality of wetlands, and indeed all natural and semi-natural habitats in the area, could enhance the data used in the mapping process.	Efforts are on-going by Aberdeenshire Council on habitats generally and SEPA specifically on wetlands.	Aberdeenshire Council, SEPA
Climatic Factors	Positive	Evidence is growing of the benefits targeted tree planting can have in reducing flood risk in upland areas. Further work is required however. There is a need to keep in touch with the science and with demonstration sites with a view to securing further enhancements to proposed actions.	This work is on-going currently in the area and nationally.	Aberdeenshire Council, SEPA and the James Hutton Institute

		Protecting peat rich soils from inappropriate tree planting is a highly worthwhile action. However, many of these peat rich soils in lowland parts of the area are drying and eroding releasing carbon and clouding watercourses. Some are planted with trees and the Strategy identifies removal as desirable. However, as an enhancement, the value of restoring these habitats (whether covered in trees or not) could be highlighted.	This action could be progressed immediately. Some initial work has been done exploring options and groups but nothing progressed.	Aberdeenshire Council to explore other options but would be multi-partner
Soil	Positive	None proposed		
Biodiversity (flora and fauna)	Positive	The ways in which our climate will change and how our habitats will respond remains unclear. There is a need to keep in touch with the science so as to better plan for the future and enhance proposed actions.	On-going	Aberdeenshire Council
		Opportunities to restore sites on the ancient woodland register planted with commercial conifers are suggested as an action in the Strategy. Undoubtedly this requires a particular focus on the practicalities and management options in the action planning process so as to further it.	Further exploration of this could begin immediately	Forestry Commission Scotland and Aberdeenshire Council
		Compensatory planting of woodland lost to development is identified as an option in the Local Development Plan and in the Strategy. As an enhancement, the exact nature of any scheme which might secure this needs further work with the Local Authority, Developers and the public to better understand how it would function. It also need to be fully communicated that it is not a means to allow inappropriate development but a last resort in cases of over-riding public interest.	Further exploration of this could begin immediately	Aberdeenshire Council
Landscape	Positive	None proposed		
Material Assets	Positive	Appropriate commercial conifer species choice remains uncertain with regards to climate change. Research is on-going. There is a need to communicate results, when available, to woodland owners so as to enhance proposed actions.	Research and communication is on-going	Forestry Commission Scotland

		As an enhancement to proposed actions, exploration of the potential for non-traditional woodland uses such as wildlife tourism or wild foods could be beneficial so as to maximise their economic and social worth.	Further exploration of this could begin immediately	North East Scotland Tourism body
Population	Positive	It is clear that woodlands are a key recreational resource in the area. It is also clear that to maximise this resource facilities such as paths, signs and carparks are required. With reduced resources in the public sector, there is a need to explore alternative funding mechanisms to deliver this as an enhancement to the proposed actions, be it through communities themselves or private sector investment (e.g. sponsorship).	Further exploration of this could begin immediately	Forestry Commission Scotland and Aberdeenshire Council
Human Health	Positive	None proposed		
Cultural Heritage	Positive	None proposed		

5.6 Monitoring

The Strategy is required to monitor the significant environmental effects when it is implemented. In doing so, it is required to identify any unforeseen adverse effects at an early stage; and undertake appropriate remedial action. The assessment of the Strategy indicates that there no potential adverse effects from its implementation.

In the absence of potential negative effects, the overall impact of the strategy will be a key element to monitor during the 5 yearly review cycle. This can be based on the proposed actions it identifies – have these been progressed and what consequences have they had. In the shorter term, the proposed action planning process will create a need for monitoring of the actions. As the actions have not yet been agreed, this monitoring cannot be specified currently but will be a key element of the process. Also in the short term, given the Strategy’s focus on new woodland creation, planting rates in the area should be monitored, using Forestry Commission Scotland data.

Table 5.4: Monitoring

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When could the remedial action be considered?	Who is responsible for undertaking the monitoring?	How could the results be presented?	What remedial actions could be taken?
Impact of strategy	A wide range of information sources given the breadth of the proposed actions	<ul style="list-style-type: none"> A wide range of information sources given the breadth of the proposed actions 	When the Strategy is reviewed in 2020	Aberdeenshire Council	Report form during Strategy review	Depends on findings of review but could involve modifications to the Strategy and/or its mapping
Achievement of Actions	A range of information likely to be required – this will be defined in the action planning stage which should follow adoption of the Strategy	<ul style="list-style-type: none"> Wide range of sources depending on action adopted 	The group created to monitor the action plan will define the review and remedial action process	To be defined	To be defined	To be defined
Woodland planting rates	SRDP woodland planting rates and any other available figures	<ul style="list-style-type: none"> Forestry Commission Scotland 	There will be a continual review within Forestry Commission Scotland of planting rates and grant awards	Forestry Commission Scotland	Annual figures	If rates are low then better information sharing or targeted publicity could be explored.

6 Next Steps, Anticipated Milestones and Consultation Responses

6.1 Proposed Consultation Timescale

Aberdeenshire Council will ensure an early and effective consultation on the Strategy and the accompanying environmental report. In this connection, the minimum consultation period Aberdeenshire Council intends to specify under Section 16(1)(b) and notify under Section 16(2)(a)(iv) is eight (8) weeks.

6.2 Anticipated Milestones

Table 6.1 shows the remaining steps needed for the SEA of the strategy and how these steps would be carried out and described in the final environmental report.

Table 6.1 Proposed consultation timescale and methods

Expected time frame	Milestone	Comments
8 weeks	Consulting on the Environmental Report and the Proposed Strategy	
3 weeks	Collating views on the Consultation	
3 weeks	Take the appropriate action on the environmental report and the strategy as the result of the consultations	
2 weeks	Finalise the environmental report	
2 weeks	Take post-adoption measures	

6.3 Consultation Responses

Table 6.2 Analysis of Comments from Consultation Authorities on the Scoping Report

Consultation Authority	Comment about	Comment	Action
Scottish Natural Heritage	Scope of assessment and level of detail	Subject to the small number of specific comments, SNH is content with the scope and level of detail proposed for the environmental report.	Noted
Scottish Natural Heritage	Consultation period for the environmental report	SNH notes that a period of 8 weeks is proposed for consultation on the Environmental Report and is content with this proposed period.	Noted
Scottish Natural Heritage	Relationship with other PPS and environmental protection objectives	Page 9, Table 4.1 I would recommend including Scotland's Biodiversity: a route map to 2020 in the Natural Conservation and Biodiversity section at the national level. This should also feed through to other relevant tables e.g. 2.1 in Appendix 1.	Added in Environmental Report
Scottish Natural Heritage	Relationship with other PPS and environmental protection objectives	Page 10 In the list of bullet points following Table 4.1 it would be useful to explicitly mention the emphasis now placed on an ecosystem services approach. Perhaps that could be done in a rewording of bullet point 4.	Change made in Environmental Report
Scottish Natural Heritage	Environmental problems	Page 11 The 2nd bullet point (Issues/Trends) in Table 4.3 against the Biodiversity, flora and fauna topic quite rightly recognises the continuing requirement to protect <i>internationally, nationally and locally designated sites</i> . While it is normal to rank sites in this way, there is an unavoidable implication that the ranking also implies relative importance. This is misleading, especially in the case of woodland, where the particular importance of habitat connectivity and a functioning habitat network is not always fully appreciated. I would suggest that the 3rd bullet point here could be reworded to read <i>Decrease and/or</i>	Changes made to Environmental Report

Consultation Authority	Comment about	Comment	Action
		<i>fragmentation of semi-natural habitats and a widespread failure to appreciate the significance and impacts of such habitat fragmentation.</i>	
Scottish Natural Heritage	Environmental problems	Page 12 Against the topic of Biodiversity, flora and fauna, the 3rd bullet point under the <i>Possible role of the Forestry and Woodland Strategy</i> , should explicitly stipulate <i>-Promote land use changes which reduce habitat fragmentation and restore/re-establish habitat connectivity.</i>	Change made in Environmental Report
Scottish Natural Heritage	Framework for assessing environmental effects	Page 16, Table 5.2 Against the Objective - <i>to ensure the protection and enhancement of biodiversity, priority habitats and species, ecological functions, capacity and habitat connectivity</i> – the emphasis is placed on protecting and enhancing where appropriate. What isn't really acknowledged is that these habitats have sustained extensive loss and fragmentation in past decades and the current "position" is a long way short of what is desirable. I would suggest that the first entry in column 3 should read – <i>Protect and enhance priority species, habitats and sites designated for their nature conservation value, given the significant loss and fragmentation of woodland which has already occurred in previous decades?</i>	Change made in Environmental Report
Scottish Natural Heritage		Page 55 I am surprised that SNH's website is given as the data source for Sites of Interest to Natural Science, Scottish Wildlife Trust Reserves, RSPB Reserves and District Wildlife Sites. These data are not available on the SNH website and Aberdeenshire Council's own records would be more likely. In addition, I understand that Aberdeenshire Council has now reviewed its Sites of Interest to Natural Science and District Wildlife Sites, compiling a new suite of Local Nature Conservation Sites.	Changes made to Environmental Report
SEPA	Alternatives	We are satisfied with the alternatives outlined and would be interested in seeing any subsequent results.	Noted

Consultation Authority	Comment about	Comment	Action
SEPA	Alternatives	The alternatives should be assessed as part of the SEA process and the findings of the assessment should inform the choice of the preferred option. This should be documented in the Environmental Report.	Assessment of alternatives detailed in the report
SEPA	Relationship with other Plans, Policies and Strategies (PPS)	We note that "Many of the national policies the strategy reflects will already have been subject to Strategic Environmental Assessment." Where this is the case you may find it useful to prepare a summary of the key SEA findings that may be relevant to the Forestry and Woodland Strategy. This may assist you with data sources and environmental baseline information and also ensure the current SEA picks up environmental issues or mitigation actions which may have been identified elsewhere. We note you have already identified the key points of relevance for the strategy and the SEA from the common themes of the PPS in Table 4.1.	This is felt to be an exercise requiring significant time as resource – given the overwhelmingly positive assessment of the strategy it was not undertaken
SEPA	Relationship with other Plans, Policies and Strategies (PPS)	In addition the Forest Research publication Woodland For Water: Woodland measures for meeting Water Framework Directive objectives should be included in Appendix 1: Other Relevant Plans and Environmental Protection Objectives. This publication explains where woodland planting for natural flood management and diffuse pollution is and is not appropriate.	Added to Environmental Report
SEPA	Relationship with other Plans, Policies and Strategies (PPS)	We note under Table 4.1: National/Overarching Planning Policy reference is made to The Scottish Planning Policy (SPP) 2013. The current version of SPP was published in June 2014.	Change made to Environmental Report
SEPA	Baseline Information	As a minor point the report states that "The detailed tabulation of the baseline data is presented in Appendix 3." instead of Appendix 2. It would appear you are aware of the environmental data we hold which may be of interest to you in preparing the environmental baseline, identifying environmental problems, and summarising the likely changes to the environment in the absence of the PPS, all of which are required for the assessment. Many of these data are now readily available on SEPA's website.	Change made to Environmental Report and noted

Consultation Authority	Comment about	Comment	Action
SEPA	Baseline Information	<p>Appendix 2.3 states that "It is important that development does not prevent water bodies in the LDP area achieving at least 'good' ecological status in order for the area to reach the targets." The Environmental Report should include a list of all the water bodies in the plan area which are downgraded as a result of forestry pressures.</p> <p>Please contact us if you do not already have this information. Additional local information may also be available from our Access to Information unit at our Corporate Office (Telephone 01786 457700 or email dataenquiries@sepa.org.uk).</p>	Data has been requested from SEPA but not yet supplied
SEPA	Environmental Problems	We consider that the environmental problems described generally highlight the main issues of relevance for the SEA topics within our remit. In relation to Section 3.2 above and Table 4.3, water bodies in the plan area which are downgraded as a result of forestry pressures are an environmental problem that will need to be taken into consideration as the Strategy goes forward.	Based on the data we receive from SEPA on downgraded waterbodies, we will assess whether this is a significant pressure in the area. However, the strategy will not get describe individual measures for all waterbodies – it includes a key action that forestry management must contribute to the achievement and

Consultation Authority	Comment about	Comment	Action
			maintenance of good ecological status.
SEPA	Environmental Problems	<p>For your information, we are currently in the process of updating our SEA Guidance in relation to our interests. Guidance for air, soil and water are now complete and available through our website. Direct links are provided here for your convenience.</p> <p>LUPS-SEA-GU1 - Guidance on consideration of air in Strategic Environmental Assessment (1 attachment)</p> <p>LUPS-SEA-GU2 - Guidance on consideration of soil in Strategic Environmental Assessment (1 attachment)</p> <p>LUPS-SEA-GU3 - Guidance on consideration of water in Strategic Environmental Assessment (1 attachment)</p>	Noted
SEPA	Scoping in / out of environmental topics	We agree that in this instance all environmental topics should be scoped into the assessment.	Noted
SEPA	Framework for assessing environmental effects	We note "The strategy will map preferred areas for new woodland creation in Aberdeenshire". If there are any specific actions, or any proposals or objectives that are map based, these also need to be assessed in addition to the themes and objectives.	This is a strategic, high level map that doesn't not identify individual actions or objectives
SEPA	Framework for assessing environmental effects	We welcome the proposals to include a commentary section within the matrices in order to state, where necessary, the reasons for the effects cited and the score given, this helps to fully explain the rationale behind the assessment results. This allows the Responsible Authority to be transparent and also allows the reader to understand the rationale behind the scores given.	Noted

Consultation Authority	Comment about	Comment	Action
SEPA	Environmental Objectives and Questions	We would recommend that the wording of the following SEA objective(s) be revised as follows: Water – amend question to “Contribute towards achieving or maintaining Good Ecological potential/Status”.	Change made in Environmental report
SEPA	Environmental Objectives and Questions	In addition if there are specific water bodies downgraded in this area due to forestry pressures then we would request a question is added relating specifically to this.	Data has been requested from SEPA but not yet supplied
SEPA	Environmental Objectives and Questions	Under Air it is not clear what the question “Limit the ability of the natural systems to provide clean air, climate regulation and personal wellbeing?” means. As such we recommend rewording this question to make its meaning clearer.	‘natural systems’ changed to ‘environment’
SEPA	Mitigation and enhancement	One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA.	No significant negative effects have been found. The SEA will identify if there have been any changes so as to further enhance positive effects.
SEPA	Mitigation and enhancement	We would also recommend you include a Proposed Timescale column in Table 5.4.	Added to Environmental Report
SEPA	Monitoring	Although not specifically required at this stage, monitoring is a requirement of the Act and early consideration should be given to a monitoring approach particularly in the choice of indicators. As such we welcome that a monitoring framework will be incorporated.	Noted

Consultation Authority	Comment about	Comment	Action
SEPA	Consultation period	We are satisfied with the proposal for an eight week consultation period for the Environmental Report.	Noted
SEPA	Outcomes of the Scoping exercise	We would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken into account.	Summary Included in Environmental Report
Historic Environment Scotland	Environmental Problems	Table 4.3 sets out the environmental problems relevant to the Strategy, and the possible role of the Strategy in addressing these problems. I agree with the issue and possible role identified for cultural heritage, but also suggest that it would be helpful here to recognise the issue of degraded designed landscapes and the role which the Strategy could play in creating positive opportunities for enhancement. Our letter of 8 October in response to the Strategy's Call for Views consultation provides more information on this issue.	Designed Landscapes statement added to list of Environmental Problems. These have been considered as part of the strategy.
Historic Environment Scotland	Alternatives	I note that the options (table 3.1) and themes and objectives (table 3.2) are the elements of the Strategy that you intend to assess, and that you have already determined the themes and some of the objectives. You should ensure that any reasonable alternatives to the themes and objectives that have been considered, or will be considered as part of the iterative plan making process, are also assessed and reported upon. Some of these alternatives may arise as a result of mitigation identified earlier in the process (see my comments on mitigation measures).	There have been some minor text changes to the themes and objectives since their creation. However, there have been no alternatives proposed by Aberdeenshire Council or by stakeholders. The themes essentially follow those of the

Consultation Authority	Comment about	Comment	Action
			Scottish Forestry Strategy and the objectives follow from them.
Historic Environment Scotland	Environmental Objectives and Questions	Whilst you may consider battlefields and designed landscapes to be covered under the landscape topic, it is important to ensure that effects on the heritage value of these sites, as well as their landscape value, are fully assessed, and are reported clearly in the Environmental Report. In view of this, I recommend that the first question under the historic environment objective should be extended to explicitly include battlefields and designed landscapes.	Change made to Environmental Report
Historic Environment Scotland	Proposed Mitigation Measures	I welcome your intention to use a framework (Table 5.4) to record mitigation measures and to set out how, when and by whom the mitigation measures will be implemented. Whilst this will address post-implementation effects of the Strategy, frequently the most effective mitigation will be achieved by using the assessment findings to identify and make iterative changes to the content of a PPS itself. You should ensure that the development of the Strategy and the assessment process are closely linked, to optimise this form of mitigation. The Environmental Report should indicate where the Strategy has been changed or influenced as a result of the assessment process.	No significant negative effects have been found. Mitigation will focus on, where possible, changes made to maximise positive effects.
Historic Environment Scotland	Monitoring	I welcome the approach you propose to monitoring, and consider that use of the framework set out in Table 5.5 should deliver a robust and effective monitoring strategy.	Noted

7 Appendices

Appendix 1: Assessments

In Table 7.1 below we have assessed the effects of the alternatives in producing the Aberdeenshire Forestry and Woodland Strategy 2016.

Table 7.1: Assessment of alternatives

Alternative s	Air	Water	Climate	Soil	Biodiversity	Landscape	Material Asset	Population	Human Health	Cultural Heritage	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary)
Business as usual	+	+	+	+/-	+	+/-	+	+	+	+	<p>No new strategy would be created and the 2005 strategy would remain active.</p> <p>Much of the content of the 2005 strategy is still relevant. However, there are a number of issues that have moved on, particularly in relation to integrated land use and our understanding of climate change. Politically, woodland expansion has become more prominent and thus requires a greater focus so as to maximise its benefits. The 2005 strategy is now not that 'visible' or widely used so its many potentially beneficial actions are not being translated to on-the-ground action. As a result the current trends and issues in relation to trees and woodland would remain under this scenario. These include generally positive management of existing woodland and improvement in recreation facilities. However, integration with agricultural and sporting land uses would remain limited, the woodlands skills shortage wood continue and the effects of climate change would not be fully factored into woodland planning. Also the opportunity to further boost the visibility and potential benefits of woodland management would be lost along with the chance to highlight</p>

											community benefits and to promote, smaller, niche woodland operations. Thus, many of the existing environmental and cultural benefits would remain but may not be maximised. Mixed effects on landscape and soil due to woodland management practice wood continue.
No strategy											<p>No new strategy would be created and the existing 2005 strategy would be revoked</p> <p>The management of Aberdeenshire's woodland resource is judged to have a number of positive environmental and social impacts currently. Based on national policy, organisational practice and culture, these are likely to continue into the future. However, the chance to tackle some key issues in a coordinated fashion in the region would be lost without any strategy existing. Also, the focus on woodland expansion may result in conflict with other land uses without a regional consideration of the benefits and impacts of woodland planting. Thus it is suggested there would be missed effects on material assets, landscape and soil based on existing practice and un-coordinated woodland expansion.</p>
High level strategy											<p>A high-level, strategic strategy would be created which focusses on the key forestry and woodland issues for the region.</p> <p>The Local Development Plan area is large and a high level, strategic strategy could be a proportionate response to the need to guide woodland management and creation on an area of this scale. The strategy would pick out the key issues for the region based on extensive consultation and aim to highlight/coordinate them so as to maximise benefits and minimise impacts. By focussing on the key issues, it would aim to optimise time and resource availability. It would aim to add value to existing practice, consider woodland creation in a coordinated way and raise the profile of the issues which do not currently receive enough focus. Thus it would built on existing positive environmental and social effects of 'Business and Usual' as well as tacking some of the mixed effects on soil and landscape. The strategy would emphasise the need for local knowledge, consultation and site based consideration for woodland management and creation, recognising that it</p>

											could not cover every issue of relevance at the field/individual woodland scale.
Detailed strategy	++	+ +	++	+	++	+	++	+	++	++	<p>A detailed strategy would be created which aimed to encompass all local, field scale forestry and woodland issues.</p> <p>A detailed, field scale type strategy would aim to encompass all relevant woodland creation and management issues for the region in an all-encompassing way. It would map preferred areas for new woodland creation in detail and create a 'plan' for the region. In theory, this approach could create significant benefits however, this would have to be based on a detailed knowledge of site based issues over a large area. It would also have to have a detailed understanding of landowner/manager's wishes and opinion of local communities. Thus, it would be a complex, detailed and time-consuming exercise. Without extensive work and a detailed understanding, such a plan could also have unintended consequences. It is a difficult option to assess – done perfectly and with full detail, it could have significant benefits. However, the complexity of the task means that, to achieve it is extremely difficult and resource intensive for an area as large as that covered by the Local Development Plan. So the potential effects of this approach are judged to be overwhelmingly positive, however, there is a very strong note of caution that has to be applied – actually realising these benefits through this approach would be an extremely difficult, resource intensive and time consuming option. It also neglects the considerable good practice and local knowledge that already exists in the region – it is an approach that could be difficult for communities and stakeholders to accept. Without acceptance, the benefits will not be realised.</p>

The assessment in table 7.1 above shows that the detailed strategy approach comes out as the highest scoring option in relation to the potential environmental and social effects. However, the assessment recognises the complexity, resource requirements and risks in furthering this approach. Given these difficulties, it is not the approach that was chosen. A high level, strategic strategy, the second highest scoring option, was seen as the one most likely to deliver actual benefits with least risk.

Table 7.2: Assessment of the environmental effects – Climate change and tree health

Theme 1 Climate Change and Tree Health: Aims: <ul style="list-style-type: none"> • Aid trees and woodlands' resistance to the negative effects of climate change and tree disease • Promote trees and woodlands as a means of mitigating and adapting to climate change 				
SEA Topic/Objective	Will the theme and aims.....	Scores (+, ++, -, --, 0, ?)	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary)	Mitigation/ Enhancement
General summary of theme and aims			The theme aims to address the key climate change and tree disease issues for forestry and woodlands in the Local Development Plan area. It does not try to pick out every issue of relevance, only those which require highlighting and which the strategy can contribute to. Climate change will have an effect on Aberdeenshire and its woodlands. There is a need to increase resilience but also to highlight the mitigating and adapting effects that trees and woodlands can have. Tree health and disease issues are also a significant threat, this is likely to increase with climate change.	
Air <ul style="list-style-type: none"> • Regulate and maintain the quality of the air 	Limit the ability of the environment to provide clean air, climate regulation and personal wellbeing?	++/-	The theme and aims promote natural systems as a means of mitigating and adapting to the effects of climate change, including providing clean air, reducing urban heat effects and mitigating flooding. Some localised negative effects could result from the promotion of woodfuel as an alternative heating and electricity source. However, this is likely to be outweighed by the positive effects of increased tree planting.	Targeted planting of trees in areas of poor air quality could be explored through the action planning process as a further enhancement to the suggested actions.

<p>Water</p> <ul style="list-style-type: none"> Protect and enhance the quality of the water environment and surface and groundwater resources 	<p>Protect and improve surface, groundwater and coastal water quality?</p> <p>Result in changes to river flows?</p> <p>Result in changes to groundwater levels?</p> <p>Contribute towards achieving or maintaining Good Ecological potential/Status?</p> <p>Maintain and enhance the ecosystem services provided by the water environment?</p>	<p>+</p>	<p>The themes and aims are not specifically focussed on the water environment. Positive effects are likely to result from the promoting of healthy, diverse woodlands that can sustain themselves long-term in the face of a changing climate. These woodlands can stabilise soil, reduce diffuse pollution, and help maintain the water cycle and slow surface flow, reducing flooding. Steady woodlands loss as a result of climate change would reduce these effects. The theme and aims promote long term positive effects.</p>	
<p>Climatic factors</p> <ul style="list-style-type: none"> Limit the causes, effects of and adaptation to climate change 	<p>Result in the implementation of appropriate adaptations to reduce vulnerability to the effects of climate change?</p> <p>Reduce or minimise greenhouse gas emissions?</p>	<p>++</p>	<p>The theme and aims are strongly focussed on reducing and mitigating the effects of climate change as well as creating woodlands that are healthy and resilient. Specific potential actions in the strategy highlight the opportunities of woodfuel, increasing the diversity of timber species, new woodlands to offset carbon emissions and woodlands to reduce flood risk. The theme and aims promote long term significantly positive effects.</p>	<p>Evidence is growing of the benefits targeted tree planting can have in reducing flood risk in upland areas. Further work is required however. There is a need to keep in touch with the</p>

	<p>Have the potential to cause or exacerbate flooding?</p> <p>Have the potential to help alleviate flooding?</p> <p>Reduce or minimise energy use and maximise use of exploitable renewable resources?</p>			<p>science and with demonstration sites with a view to securing further enhancements to proposed actions.</p>
<p>Soil</p> <ul style="list-style-type: none"> • Protect and enhance soils 	<p>Minimise the loss of carbon rich soils?</p> <p>Minimise conflict with existing land use patterns?</p> <p>Help optimise ecosystem functions of soil to society (e.g. supporting agriculture and forestry, supporting biodiversity, creating a platform for construction)?</p>	+	<p>The theme and aims are not specifically focussed on soil issues – others in the strategy will have greater effects. This theme promotes woodland expansion and healthy, diverse woodlands – these should have overall positive effects on soil if good practice is followed and the other themes of the strategy are taken into account. The theme and aims promote long term positive effects.</p>	
<p>Biodiversity, flora and fauna</p> <ul style="list-style-type: none"> • Ensure the protection and 	<p>Protect, and enhance where there has been significant loss, priority species, habitats and sites designated for their</p>	++	<p>The themes and aims promote healthy and diverse woodlands that are resistant to the effects of climate change and disease. They promote woodlands as a means of mitigating and adapting to climate change. They promote woodland expansion. If these are further following good practice and referencing the other elements</p>	<p>The ways in which our climate will change and how our habitats will</p>

<p>enhancement of biodiversity, priority habitats and species, ecological functions, capacity and habitat connectivity</p>	<p>nature conservation value?</p> <p>Ensure the sustainable management of natural habitats and ecosystems within their limits and capacities?</p> <p>Avoid habitat fragmentation and provide opportunities for habitat creation and/or restoration?</p> <p>protect and enhance the services provided to society by the environment?</p>		<p>of the strategy, they should have positive effects on biodiversity, flora and fauna. The theme and aims promote long term significantly positive effects.</p>	<p>respond remains unclear. There is a need to keep in touch with the science so as to better plan for the future and enhance proposed actions.</p>
<p>Landscape</p> <ul style="list-style-type: none"> • Protect and enhance landscape character, land use and other protected features 	<p>Avoid or minimise adverse visual impacts or impacts on setting?</p> <p>Avoid adverse effects on protected/designated landscapes (including woodlands), townscapes or seascapes?</p> <p>Protect and enhance the services provided to</p>	<p>+</p>	<p>The theme and aims promote healthy, resilient woodlands and thus should help to maintain existing woodland features of the landscape. Overall the strategy promotes good practice woodland creation and management which benefits landscape features, so the woodland expansion promoted by this theme should not result in negative effects. The theme and aims promote long term positive effects.</p>	

	society by landscape, in particular the relevant cultural services.			
Material Assets <ul style="list-style-type: none"> Promote the wise use of resources 	Minimise the demand for raw materials? Reduce pressure other social, physical and energy infrastructure? Promote recycling of resources? Promote education and science?	++	The theme and aims promote woodlands as a means of adapting to and mitigating the effects of climate change. This include the use of woodfuel more widely. They promote woodlands as a key asset for the area and recognise its benefits. They promote woodland expansion, which has the potential to impact or diminish other material assets. However, the strategy overall promotes the consideration of overall benefit, taking account of the benefits of pre-existing or adjacent resources. The theme and aims promote long term significantly positive effects.	Appropriate commercial conifer species choice remains uncertain with regards to climate change. Research is on-going. There is a need to communicate results, when available, to woodland owners so as to enhance proposed actions.
Population <ul style="list-style-type: none"> Maintain and enhance the economic and social needs of most people in the local community 	Protect and enhance the essential services provided to society by the natural environment	++	The theme and aims promote diverse, healthy woodlands that are resilient to the effects of climate change and disease and are thus protected for the future, securing their long-term benefits. The promote forestry and woodlands as a natural means of society adapting to and mitigating the effects of climate change. The theme and aims promote long term significantly positive effects.	
Human health	Adversely affect human health?	+	The theme and aims are not directly focussed on human health benefits – other elements of the strategy deal with them more directly. However, they do promote woodland expansion with	

	<p>Promote opportunities for improved personal and community health?</p> <p>Make provision for and improve quantity and quality of open space and sporting facilities?</p> <p>Maintain links between areas and recreational sites, increasing healthy sporting activities?</p>		<p>multiple benefits and the maintenance of our existing woodland resource, both of which can have significant health benefits as a result of recreation as well as mental health and wellbeing benefits. The also promote woodlands as a means of reducing air pollution. The theme and aims promote long term positive effects.</p>	
<p>Cultural Heritage</p> <ul style="list-style-type: none"> • Protect and enhance, where appropriate, built, natural and historic assets and open space 	<p>Conserve and enhance historic buildings, archaeological sites, conservation areas, battlefields and designed landscapes?</p> <p>Impact on the landscape setting of historic features or sites?</p>	+	<p>The theme and aims are not directly focussed on cultural heritage benefits – other elements of the strategy deal with this more directly. They do promote healthy and resilient woodlands so as to maintain these important cultural features in the landscape. They also promote woodland expansion. This has the potential to impact cultural heritage features but, if done with reference to the other elements of the strategy, should protect and enhance them. The theme and aims promote long term positive effects.</p>	
<p>Interrelationships</p>			<p>All the elements of the strategy, its themes, aims and mapping, are interlinked. As a number of the assessments above emphasise, none can be seen in isolation and to realise the benefits and minimise the impacts woodland management and creation needs to take account of all the various elements. Climate change is, in many ways, cross-cutting across all themes. It is key to how the existing woodland resource in managed and how new woodlands are planned. These factors will have a significant impact on the benefits derived from woodland in the future. The strategy promotes this and overall encourages an integrated, holistic approach.</p>	

Table 7.3: Assessment of the environmental effects – Timber and Business Development

Theme 2 Timber and Business Development				
Aims:				
<ul style="list-style-type: none"> • Support expansion of Aberdeenshire’s woodland coverage in line with Scottish Government targets • Promote and support the forestry industry 				
SEA Topic/Objective	Will the theme and aims.....	Scores (+, ++, -, --, 0, ?)	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary)	Mitigation/ Enhancement
General summary of theme and aims			The theme and aims respond to Scottish Government targets to expand woodland cover in Scotland. They promote an integrated land use approach to new woodland planting which aims to deliver overall economic, social and environmental benefits. They promote protection of existing resources. They also promote greater support to the forestry industry, given the significant benefits it provides, highlighting issues such as timber transport, skills shortages, smaller/niche forestry operations and the potential for productive broadleaf woodland.	
Air <ul style="list-style-type: none"> • Regulate and maintain the quality of the air 	Limit the ability of the environment to provide clean air, climate regulation and personal wellbeing?	++/-	The theme and aims promote woodland expansion with a careful consideration of the benefits and impacts of doing so. In general, trees and woodlands can have a positive impact on air quality, particularly if they are carefully planned so as to maximise benefits – location and species choice being important. This particular theme focusses more on woodland creation in rural areas but others in the strategy are more focussed on urban issues. Some localised negative effects could result from the promotion of woodfuel as an alternative heating and electricity source. However, this is likely to be outweighed by the positive effects of increased tree planting.	

<p>Water</p> <ul style="list-style-type: none"> Protect and enhance the quality of the water environment and surface and groundwater resources 	<p>Protect and improve surface, groundwater and coastal water quality?</p> <p>Result in changes to river flows?</p> <p>Result in changes to groundwater levels?</p> <p>Contribute towards achieving or maintaining Good Ecological potential/Status?</p> <p>Maintain and enhance the ecosystem services provided by the water environment?</p>	<p>++</p>	<p>The theme and aims promote increases in woodland cover and the promotion of the forestry industry. Forestry can have negative effects on the water environment, notably; siltation, diffuse pollution, acidification and engineering works. These effects have lessened in recent times but effects do remain and waterbodies can be downgraded in quality as a result of existing forestry pressures. The strategy promotes multi-functional, multiple benefit woodland cover that delivers environmentally, socially and economically. There is the chance of localised effects on the water environment. However, overall good quality and carefully planned woodland planting should protect and enhance the water environment, stabilising substrate, reducing diffuse pollution, introducing organic matter, shading and slowing floodwaters. The theme and aims promote long term significantly positive effects.</p>	
<p>Climatic factors</p> <ul style="list-style-type: none"> Limit the causes, effects of and adaptation to climate change 	<p>Result in the implementation of appropriate adaptations to reduce vulnerability to the effects of climate change?</p> <p>Reduce or minimise greenhouse gas emissions?</p>	<p>++</p>	<p>Although other themes in the strategy focus on climate change, this aims to support them by encouraging multi-functional woodlands and forestry that benefits climate change mitigation and adaption. Woodland expansion can sequester carbon and woodfuel can provide an alternative to fossil fuel use. Also, trees have the potential to reduce flood risk of planted in the correct places as well as cool urban areas and reduce air pollution. The strategy identifies that woodland planning needs to take account of climate change in the long term and that our woodlands need to be more diverse so as to be resilient to the effects of climate change. Some minor negative emissions effects can result from</p>	

	<p>Have the potential to cause or exacerbate flooding?</p> <p>Have the potential to help alleviate flooding?</p> <p>Reduce or minimise energy use and maximise use of exploitable renewable resources?</p>		<p>increased timber transport and processing, however these are outweighed by the promotion of a carbon neutral, sustainable alternative to other materials. The theme and aims promote long term significantly positive effects.</p>	
<p>Soil</p> <ul style="list-style-type: none"> • Protect and enhance soils 	<p>Minimise the loss of carbon rich soils?</p> <p>Minimise conflict with existing land use patterns?</p> <p>Help optimise ecosystem functions of soil to society (e.g. supporting agriculture and forestry, supporting biodiversity, creating a platform for construction)?</p>	+	<p>This theme promotes woodland expansion and healthy, diverse woodlands – these should have overall positive effects on soil if good practice is followed and the other themes of the strategy are taken into account. The theme highlights the benefits of existing agricultural land use and promotes an integrated approach to woodland planting which protects productive agricultural land. The theme and aims promote long term positive effects.</p>	
<p>Biodiversity, flora and fauna</p> <ul style="list-style-type: none"> • Ensure the protection 	<p>Protect, and enhance where there has been significant loss, priority species, habitats and</p>	++	<p>The theme and aims promote increases in woodland cover and the promotion of the forestry industry. Woodland planting and forestry practice which does not take account of biodiversity has the potential for negative impacts – damaging valuable habitats for</p>	<p>Opportunities to restore sites on the ancient woodland register planted with</p>

<p>and enhancement of biodiversity, priority habitats and species, ecological functions, capacity and habitat connectivity</p>	<p>sites designated for their nature conservation value?</p> <p>Ensure the sustainable management of natural habitats and ecosystems within their limits and capacities?</p> <p>Avoid habitat fragmentation and provide opportunities for habitat creation and/or restoration?</p> <p>protect and enhance the services provided to society by the environment?</p>		<p>example. Damaging practices such as the planting of peat bogs are an example of this. Forestry practice has moved on since this and, in general, its impacts on biodiversity currently can be seen as positive. Issues remain, there are still criticisms of the mono-cultural approach of forestry and an expanding deer population. The theme promotes expansion in woodland cover in a way which takes account of the potential benefits and impacts on biodiversity, it also promotes forestry practice that is multiple benefit, with a greater diversity of tree species and management practice in forestry. The theme and aims promote long term significantly positive effects.</p>	<p>commercial conifers are suggested as an action in the Strategy. Undoubtedly this requires a particular focus on the practicalities and management options in the action planning process so as to further it.</p>
<p>Landscape</p> <ul style="list-style-type: none"> • Protect and enhance landscape character, land use and other protected features 	<p>Avoid or minimise adverse visual impacts or impacts on setting?</p> <p>Avoid adverse effects on protected/designated landscapes (including woodlands), townscapes or seascapes?</p>	<p>+</p>	<p>The theme and aims promote increases in woodland cover and the promotion of the forestry industry. Woodland planting and forestry practice which does not take account of landscape issues has the potential for negative impacts. Public perception of forestry can be mixed currently, although non-commercial woodlands tend to be widely valued. The theme promotes expansion in woodland cover in a way which takes account of the potential benefits and impacts on landscape, it also promotes forestry practice that is multiple benefit, with a greater diversity of tree species and management practice. Thus it does promote change, which can in itself be controversial but it promotes change in the context of a beneficial contribution to landscape. The theme and aims promote long term positive effects.</p>	

	Protect and enhance the services provided to society by landscape, in particular the relevant cultural services.			
Material Assets <ul style="list-style-type: none"> Promote the wise use of resources 	Minimise the demand for raw materials? Reduce pressure other social, physical and energy infrastructure? Promote recycling of resources? Promote education and science?	++	The theme and aims promote woodland expansion and a resilient forestry industry. This include the use of woodfuel more widely. They promote woodlands as a key asset for the area and recognise its benefits. It recognises the skills shortage and the lack of new entrants into the forestry industry and suggests this issue is addressed. They promote woodland expansion, which has the potential to impact or diminish other material assets. However, the strategy overall promotes the consideration of overall benefit, taking account of the benefits of pre-existing or adjacent resources. The theme and aims promote long term significantly positive effects.	
Population <ul style="list-style-type: none"> Maintain and enhance the economic and social needs of most people in the local community 	Protect and enhance the essential services provided to society by the natural environment	++	The theme and aims promote increases in woodland cover and the promotion of the forestry industry. New woodland creation and forestry practice has the potential to both benefit and impact on ecosystem services. The theme promotes multi-functional, multiple benefits forestry and woodlands, taking account of the various benefits and impacts that could arise. It promotes locating new woodlands in the areas in which deliver most significant benefits. The theme and aims promote long term significantly positive effects.	
Human health	Adversely affect human health? Promote opportunities for improved personal	+	Other themes and aims in the strategy more directly address human health, however the promotion of multiple benefits forestry practice, and the creation of new woodlands, as promoted by the theme, has the potential to benefit human health. They can provide a space for recreation and generally benefit mental health	

	<p>and community health?</p> <p>Make provision for and improve quantity and quality of open space and sporting facilities?</p> <p>Maintain links between areas and recreational sites, increasing healthy sporting activities?</p>		<p>and wellbeing. Trees can be used to cool urban areas and improve air quality. The theme and aims promote long term positive effects.</p>	
<p>Cultural Heritage</p> <ul style="list-style-type: none"> • Protect and enhance, where appropriate, built, natural and historic assets and open space 	<p>Conserve and enhance historic buildings, archaeological sites, conservation areas, battlefields and designed landscapes?</p> <p>Impact on the landscape setting of historic features or sites?</p>	+	<p>The theme and aims promote increases in woodland cover and the promotion of the forestry industry. Woodland planting and forestry practice which does not take account of cultural issues has the potential for negative impacts. Sensitive sites could be damaged and landscape settings could be impacted. The theme promotes expansion in woodland cover in a way which takes account of the potential benefits and impacts on cultural heritage, it also promotes forestry practice that is multiple benefit, with a greater diversity of tree species and management practice. The theme and aims promote long term positive effects.</p>	
<p>Interrelationships</p>			<p>All the elements of the strategy, its themes, aims and mapping, are interlinked. As a number of the assessments above emphasise, none can be seen in isolation. The forestry industry and the way in which new woodland planting is implemented are key to all the other elements of the strategy. The way they are done is the determinant of the benefits that result. Thus it is key that these practices take account of the complete range of issues that the</p>	

			strategy identifies. The strategy promotes this and overall encourages an integrated, holistic approach.	
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Table 7.4: Assessment of the environmental effects – Communities, Development, Access and Health

Theme 3 Communities, Development, Access and Health				
Aims: <ul style="list-style-type: none"> • Protect and enhance trees and woodlands in the planning and construction of built development • Promote and support woodland’s role in providing opportunities community development and recreational access 				
SEA Topic/Objective	Will the theme and aims.....	Scores (+, ++, -, --, 0, ?)	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary)	Mitigation/ Enhancement
General summary of theme and aims			This theme and aims recognise the importance of the planning of built development in securing the benefits of trees and woodlands while generally recognising the value of forestry and woodlands to our communities. Woodlands are highly valued recreation spaces within the Local Development Plan area. The access they provide is widely welcomed and encouraged by residents and visitors.	
Air • Regulate and maintain the quality of the air	Limit the ability of the environment to provide clean air, climate regulation and personal wellbeing?	++	This theme promotes the value of trees and woodlands in built development and protects trees from new development. Integrating trees into urban areas has the potential to reduce air pollution issues as trees have been shown to trap particulates and provide surfaces for sunlight and bacteria to breakdown pollutants. The theme and aims promote long term significantly positive effects.	
Water • Protect and enhance the quality of the water environment and surface and groundwater resources	Protect and improve surface, groundwater and coastal water quality? Result in changes to river flows? Result in changes to groundwater levels?	++	The theme promotes the integration of trees into urban areas and protects woodlands from built development. Built surfaces have the potential to increase surface water run-off and act as a diffuse pollution source impacting on the quality and quantity of water entering the water environment. Built development also has the potential to downgrade the ecological status of waterbodies. Trees and woodland in built development and urban areas can intercept surface water, reduce diffuse pollution and benefit ecological status with careful design. The theme and aims promote long term significantly positive effects.	

	<p>Contribute towards achieving or maintaining Good Ecological potential/Status?</p> <p>Maintain and enhance the ecosystem services provided by the water environment?</p>			
<p>Climatic factors</p> <ul style="list-style-type: none"> Limit the causes, effects of and adaptation to climate change 	<p>Result in the implementation of appropriate adaptations to reduce vulnerability to the effects of climate change?</p> <p>Reduce or minimise greenhouse gas emissions?</p> <p>Have the potential to cause or exacerbate flooding?</p> <p>Have the potential to help alleviate flooding?</p> <p>Reduce or minimise energy use and</p>	<p>++</p>	<p>The theme promotes the integration of trees into urban areas and protects woodlands from built development. Integrating trees and woodlands into urban areas has the potential to provide cooling, reduce air pollution and reduce flood risk with careful planning thus providing climate adaption. Trees also store carbon and, although perhaps small scale in urban areas, can thus reduce carbon emissions. There is also the potential for urban woodlands to provide a source of woodfuel as an alternative to fossil fuel use, although this is not common currently. The theme and aims promote long term significantly positive effects.</p>	

	maximise use of exploitable renewable resources?			
Soil <ul style="list-style-type: none"> Protect and enhance soils 	<p>Minimise the loss of carbon rich soils?</p> <p>Minimise conflict with existing land use patterns?</p> <p>Help optimise ecosystem functions of soil to society (e.g. supporting agriculture and forestry, supporting biodiversity, creating a platform for construction)?</p>	++	<p>The theme promotes the retention of existing woodlands and the integration of trees and woodland into built development. As an alternative to built surfaces or more intensively managed land, trees and woodlands can be of benefit to soils. Trees also greatly aid the creation of soil, provide materials for fungi and bacteria to breakdown. The theme and aims promote long term significantly positive effects.</p>	
Biodiversity, flora and fauna <ul style="list-style-type: none"> Ensure the protection and enhancement of biodiversity, priority habitats and species, 	<p>Protect, and enhance where there has been significant loss, priority species, habitats and sites designated for their nature conservation value?</p> <p>Ensure the sustainable management of</p>	++	<p>The theme promotes the retention of existing woodlands and the integration of trees and woodland into built development. As an alternative to built surfaces or more intensively managed land, trees and woodlands can be of benefit to biodiversity. Trees and associated vegetation provide habitat and shelter for a wide range of species in urban areas and in new built development. The theme also promotes recreation within woodlands, giving people access and awareness of biodiversity via access to woodlands can result in a greater interest and thus greater protection for biodiversity. The theme and aims promote long term significantly positive effects.</p>	<p>Compensatory planting of woodland lost to development is identified as an option in the Local Development Plan and in the Strategy. As an enhancement, the exact nature of</p>

<p>ecological functions, capacity and habitat connectivity</p>	<p>natural habitats and ecosystems within their limits and capacities?</p> <p>Avoid habitat fragmentation and provide opportunities for habitat creation and/or restoration?</p> <p>protect and enhance the services provided to society by the environment?</p>			<p>any scheme which might secure this needs further work with the Local Authority, Developers and the public to better understand how it would function. It also need to be fully communicated that it is not a means to allow inappropriate development but a last resort in cases of over-riding public interest.</p>
<p>Landscape</p> <ul style="list-style-type: none"> • Protect and enhance landscape character, land use and other protected features 	<p>Avoid or minimise adverse visual impacts or impacts on setting?</p> <p>Avoid adverse effects on protected/designated landscapes (including woodlands), townscapes or seascapes?</p> <p>Protect and enhance the services provided to society by landscape, in</p>	<p>++</p>	<p>The theme promotes the retention of existing woodlands and the integration of trees and woodland into built development. The protection of existing woodland is due to its value to landscape character along with various other benefits. Integrating trees and woodlands into built development and urban areas can improve townscapes and help them integrate into the landscape. The theme and aims promote long term significantly positive effects.</p>	

	particular the relevant cultural services.			
Material Assets <ul style="list-style-type: none"> Promote the wise use of resources 	Minimise the demand for raw materials? Reduce pressure other social, physical and energy infrastructure? Promote recycling of resources? Promote education and science?	+	The theme promotes the retention of existing woodlands and the integration of trees and woodland into built development. The theme also promotes recreation within woodlands. Woodlands could be seen as an asset in these circumstances. They could also provide woodfuel and, as a number of current initiatives show, they can be space for outdoor learning. The theme and aims promote long term positive effects.	
Population <ul style="list-style-type: none"> Maintain and enhance the economic and social needs of most people in the local community 	Protect and enhance the essential services provided to society by the natural environment	++	The theme promotes recreation within woodlands. Spaces for recreation are recognised as important in maintaining and improving health. The theme also promotes the joining up of woodlands with path network so as to promote longer distance recreation and sustainable travel. The theme promotes the integration of woodlands into urban areas as a means of securing and improving public open space. The theme and aims promote long term significantly positive effects.	It is clear that woodlands are a key recreational resource in the area. It is also clear that to maximise this resource facilities such as paths, signs and carparks are required. With reduced resources in the public sector, there is a need to explore alternative funding mechanisms to deliver this as an enhancement to the proposed actions, be it through

				communities themselves or private sector investment (e.g. sponsorship).
Human health	<p>Adversely affect human health?</p> <p>Promote opportunities for improved personal and community health?</p> <p>Make provision for and improve quantity and quality of open space and sporting facilities?</p> <p>Maintain links between areas and recreational sites, increasing healthy sporting activities?</p>	++	The theme promotes recreation within woodlands. Spaces for recreation are recognised as important in maintaining and improving health. The theme also promotes the joining up of woodlands with path network so as to promote longer distance recreation and sustainable travel. The theme promotes the integration of woodlands into urban areas as a means of securing and improving public open space. The theme and aims promote long term significantly positive effects.	
Cultural Heritage	<p>Conserve and enhance historic buildings, archaeological sites, conservation areas, battlefields and designed landscapes?</p> <p>Impact on the landscape setting of</p>	+	Other themes and aims in the strategy are more strongly focused on cultural heritage. This theme does protect existing woodland from development, particular woodlands of value such as designed landscapes. The theme and aims promote long term positive effects.	

	historic features or sites?			
Interrelationships			All the elements of the strategy, its themes, aims and mapping, are interlinked. As a number of the assessments above emphasise, none can be seen in isolation. Protecting existing woodlands, integrating woodlands into urban areas and providing spaces for recreation are key in engaging people in trees and woodlands and ensuring they are valued. If people do not value woodlands, they will be neglected and not given a significant enough profile. As a result, many of the benefits this strategy aims to provide would not materialise.	

Table 7.5: Assessment of the environmental effects – Environment, Landscape and Historic Assets

Theme 4 Environment, Landscape and Historic Assets				
Aims: <ul style="list-style-type: none"> Promote woodland creation and management practice which protects and enhances environmental quality and biodiversity Promote woodland creation and management practice which protects and enhances cultural and historic assets 				
SEA Topic/Objective	Will the theme and aims.....	Scores (+, ++, -, --, 0, ?)	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary))	Mitigation/Enhancement
General summary of theme and aims			The theme and aims promote the protection and enhancement of woodland related natural, cultural and historic assets. It also promotes the protection of non-woodland assets from inappropriate woodland management and creation. The potential actions include the restoration of Plantation on Ancient Woodland sites, the value of riparian woodland, the use of lower impact forestry practices and the maintenance and enhancement of designed landscapes.	
Air <ul style="list-style-type: none"> Regulate and maintain the quality of the air 	Limit the ability of the environment to provide clean air, climate regulation and personal wellbeing?	+	This theme promotes the sustainable management of trees and woodland to protect and enhance the environment. We managed tree and woodlands have the potential to improve air quality as they trap particulates and provide surfaces for sunlight and bacteria to breakdown pollutants. The theme and aims promote long term positive effects.	
Water <ul style="list-style-type: none"> Protect and enhance the quality of the water environment and surface and 	Protect and improve surface, groundwater and coastal water quality? Result in changes to river flows?	++	The theme and aims specifically promote sustainable and multiple benefits management of trees and woodlands for environmental protection and enhancement. They identify that woodland management must contribute to the aims of the water framework directive and protect and enhance the water environment. The theme and aims promote long term significantly positive effects.	

<p>groundwater resources</p>	<p>Result in changes to groundwater levels?</p> <p>Contribute towards achieving or maintaining Good Ecological potential/Status?</p> <p>Maintain and enhance the ecosystem services provided by the water environment?</p>			
<p>Climatic factors</p> <ul style="list-style-type: none"> Limit the causes, effects of and adaptation to climate change 	<p>Result in the implementation of appropriate adaptations to reduce vulnerability to the effects of climate change?</p> <p>Reduce or minimise greenhouse gas emissions?</p> <p>Have the potential to cause or exacerbate flooding?</p> <p>Have the potential to help alleviate flooding?</p>	<p>++</p>	<p>The theme and aims specifically promote sustainable and multiple benefits management of trees and woodlands for environmental protection and enhancement. They identify the benefits of trees and woodland in flood mitigation for example. It also identifies reduced management and the planting of trees on Council owned land as a means of reducing greenhouse gas emission. The theme and aims promote long term significantly positive effects.</p>	

	Reduce or minimise energy use and maximise use of exploitable renewable resources?			
Soil <ul style="list-style-type: none"> Protect and enhance soils 	<p>Minimise the loss of carbon rich soils?</p> <p>Minimise conflict with existing land use patterns?</p> <p>Help optimise ecosystem functions of soil to society (e.g. supporting agriculture and forestry, supporting biodiversity, creating a platform for construction)?</p>	++	<p>This theme promotes the sustainable management of trees and woodland to protect and enhance the environment. As an alternative to built surfaces or more intensively managed land, trees and woodlands can be of benefit to soils. Trees also greatly aid the creation of soil, provide materials for fungi and bacteria to breakdown. The theme and aims promote long term significantly positive effects.</p>	
Biodiversity, flora and fauna <ul style="list-style-type: none"> Ensure the protection and enhancement of biodiversity, priority habitats and species, ecological functions, 	<p>Protect, and enhance where there has been significant loss, priority species, habitats and sites designated for their nature conservation value?</p> <p>Ensure the sustainable management of natural habitats and</p>	++	<p>The theme and aims specifically promote sustainable and multiple benefits management of trees and woodlands for environmental protection and enhancement. They identify the need to protect existing woodlands, to restore sites impacted by woodland planting, to protect valuable open ground habitats from woodland, to protect and enhance priority species and to promote habitat networks. The theme and aims promote long term significantly positive effects.</p>	

capacity and habitat connectivity	ecosystems within their limits and capacities? Avoid habitat fragmentation and provide opportunities for habitat creation and/or restoration? protect and enhance the services provided to society by the environment?			
Landscape • Protect and enhance landscape character, land use and other protected features	Avoid or minimise adverse visual impacts or impacts on setting? Avoid adverse effects on protected/designated landscapes (including woodlands), townscapes or seascapes? Protect and enhance the services provided to society by landscape, in particular the relevant cultural services.	++	The theme and aims specially promote sustainable and multiple benefit management of trees and woodlands for which protect and enhance landscape. The theme and aims promote long term significantly positive effects.	
Material Assets	Minimise the demand for raw materials?	++	The theme promotes trees and woodlands as environmental, cultural and historic assets. The strategy overall describes the many benefits forestry and	As an enhancement to proposed

<ul style="list-style-type: none"> Promote the wise use of resources 	<p>Reduce pressure other social, physical and energy infrastructure?</p> <p>Promote recycling of resources?</p> <p>Promote education and science?</p>		<p>woodlands have to people and society. The theme and aims promote long term significantly positive effects.</p>	<p>actions, exploration of the potential for non-traditional woodland uses such as wildlife tourism or wild foods could be beneficial so as to maximise their economic and social worth.</p>
<p>Population</p> <ul style="list-style-type: none"> Maintain and enhance the economic and social needs of most people in the local community 	<p>Protect and enhance the essential services provided to society by the natural environment</p>	<p>++</p>	<p>The theme and aims promote the benefits of woodlands to the environment, landscape and heritage – outlining how they underpin a range of services that society depends on and gain value from. The theme and aims promote long term significantly positive effects.</p>	
<p>Human health</p>	<p>Adversely affect human health?</p> <p>Promote opportunities for improved personal and community health?</p>	<p>++</p>	<p>The theme and aims promote the benefits of woodlands to the environment, landscape and heritage – outlining how they underpin a range of services that society depends on and gain value from. Other themes in the strategy are more directly focussed on human health. However, this promotes elements that are important in mental health and well-being – greenspace, a good quality environment and existence value. The theme and aims promote long term significantly positive effects.</p>	

	<p>Make provision for and improve quantity and quality of open space and sporting facilities?</p> <p>Maintain links between areas and recreational sites, increasing healthy sporting activities?</p>			
<p>Cultural Heritage</p> <ul style="list-style-type: none"> • Protect and enhance, where appropriate, built, natural and historic assets and open space 	<p>Conserve and enhance historic buildings, archaeological sites, conservation areas, battlefields and designed landscapes?</p> <p>Impact on the landscape setting of historic features or sites?</p>	++	<p>The theme and aims specially promote sustainable and multiple benefit management of trees and woodlands for which protect and enhance cultural. The theme and aims promote long term significantly positive effects.</p>	
Interrelationships			<p>In order to achieve the aims of this theme, forestry and woodland activities which target timber production, community benefits or climate mitigation/adaption need to take into account environmental, landscape and heritage factors. This emphasises the interrelationship between the themes and that multi-functional woodland management is the key to delivering the strategies aims.</p>	

Table 7.6: Assessment of the environmental effects – Mapping of Preferred Areas for New Woodland Creation

Mapping of Preferred Areas for New Woodland Creation				
Aims:				
<ul style="list-style-type: none"> • Maximise the benefits of new woodland creation. • Promote integrated land use 				
SEA Topic/Objective	Will the theme and aims.....	Scores (+, ++, -, --, 0, ?)	Comments(long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary)	Mitigation/ Enhancement
General summary of theme and aims			This element differs from the four themes identified above. This is a process of mapping of preferred areas of new woodland creation. Here the various parts of the strategy are drawn together to create a map that responds to the desire to increase woodland cover in the area and nationally. It emphasises the need for integration with existing land use and that woodlands need to deliver multiple benefits. However, it is also emphasised that this is a strategic map done for a large area. It should not over-ride, but be integrated with, site based decision making so as to ensure benefits and reduce impacts. The map will influence the Scottish Rural Development Programme Forestry Grant Scheme – adding a scoring point and a financial uplift of 10%.	
Air <ul style="list-style-type: none"> • Regulate and maintain the quality of the air 	Limit the ability of the environment to provide clean air, climate regulation and personal wellbeing?	0	The process followed in creating the map does not take account of air quality protection and enhancement specifically. Locations of poor air quality tend to be quite localised in Aberdeenshire (mainly in urban centres) and thus are at a scale that this map cannot consider. The potential effects of new woodland creation on air quality overall, as identified at various points above in the other assessments, remain. However, this map is considered to be neutral in terms of its effects on air.	
Water <ul style="list-style-type: none"> • Protect and enhance the quality of the water environment and surface and 	Protect and improve surface, groundwater and coastal water quality? Result in changes to river flows?	++	The map of preferred area for woodland creation has been created with water quality and quantity issues in mind. The site based nature of may water quality issues and impacts precludes the map from covering every issues of relevance. However, the map protects known wetlands and peatlands from inappropriate tree planting as well as incorporating where woodlands could contribute to reducing flood risk. The Strategy promotes a robust site based assessment in all cases of woodland planting and describes the map as an indicative guide. As such, water	A better understanding of the location and quality of wetlands, and indeed all natural and semi-natural habitats in the

<p>groundwater resources</p>	<p>Result in changes to groundwater levels?</p> <p>Contribute towards achieving or maintaining Good Ecological potential/Status?</p> <p>Maintain and enhance the ecosystem services provided by the water environment?</p>		<p>quality and quantity impacts and benefits should be considered. The mapping promotes long term significantly positive effects.</p>	<p>area, could enhance the data used in the mapping process.</p>
<p>Climatic factors</p> <ul style="list-style-type: none"> Limit the causes, effects of and adaptation to climate change 	<p>Result in the implementation of appropriate adaptations to reduce vulnerability to the effects of climate change?</p> <p>Reduce or minimise greenhouse gas emissions?</p> <p>Have the potential to cause or exacerbate flooding?</p> <p>Have the potential to help alleviate flooding?</p> <p>Reduce or minimise energy use and maximise use of</p>	<p>++</p>	<p>The mapping promotes woodland expansion on the basis that tree sequester CO₂, along with providing a range of other benefits including their potential as an alternative fuel source. The map also protect peat rich soils, a significant store of carbon, from tree planting that could result in the release of the greenhouse gas. The map incorporates areas where woodland planting could reduce flood risk. The mapping promotes long term significantly positive effects.</p>	<p>Protecting peat rich soils from inappropriate tree planting is a highly worthwhile action. However, many of these peat rich soils in lowland parts of the area are drying and eroding releasing carbon and clouding watercourses. Some are planted with trees and the Strategy identifies removal as desirable. However, as an enhancement, the value of</p>

	exploitable renewable resources?			restoring these habitats (whether covered in trees or not) could be highlighted.
Soil <ul style="list-style-type: none"> Protect and enhance soils 	<p>Minimise the loss of carbon rich soils?</p> <p>Minimise conflict with existing land use patterns?</p> <p>Help optimise ecosystem functions of soil to society (e.g. supporting agriculture and forestry, supporting biodiversity, creating a platform for construction)?</p>	++	The map identifies carbon rich soils as an important resource and protects them from tree planting. It also protects productive agricultural land from tree planting. It promotes integrated land use and identifies where tree could provide overall benefit while minimising impact on existing land uses. The mapping promotes long term significantly positive effects.	
Biodiversity, flora and fauna <ul style="list-style-type: none"> Ensure the protection and enhancement of biodiversity, priority habitats and species, ecological functions, capacity and habitat connectivity 	<p>Protect, and enhance where there has been significant loss, priority species, habitats and sites designated for their nature conservation value?</p> <p>Ensure the sustainable management of natural habitats and ecosystems within their limits and capacities?</p>	++	Forestry and woodlands have the potential to benefits biodiversity with careful planting and design. The map identifies important habitats such as peatlands and wetlands and protects them from tree planting. It also identifies areas protected for nature conservation and protects them from inappropriate tree planting. It promotes planting which supports habitat networks. The Strategy promotes a robust site based assessment in all cases of woodland planting and describes the map as an indicative guide. As such, biodiversity impacts and benefits should be considered in all cases. The mapping promotes long term significantly positive effects.	

	<p>Avoid habitat fragmentation and provide opportunities for habitat creation and/or restoration?</p> <p>protect and enhance the services provided to society by the environment?</p>			
<p>Landscape</p> <ul style="list-style-type: none"> Protect and enhance landscape character, land use and other protected features 	<p>Avoid or minimise adverse visual impacts or impacts on setting?</p> <p>Avoid adverse effects on protected/designated landscapes (including woodlands), townscapes or seascapes?</p> <p>Protect and enhance the services provided to society by landscape, in particular the relevant cultural services.</p>	+	<p>Tree and woodland planting have the potential to change landscape, while the mapping takes account of some landscape factors, it cannot take account of all of them. Overall the strategy promotes a robust site based assessment in all cases of new woodland creation which should include consideration of landscape issues. The mapping incorporates Gardens and Designed Landscapes and identifies them as sensitive to inappropriate woodland planting. The mapping promotes long term positive effects.</p>	
<p>Material Assets</p> <ul style="list-style-type: none"> Promote the wise use of resources 	<p>Minimise the demand for raw materials?</p> <p>Reduce pressure other social, physical and energy infrastructure?</p>	++	<p>The mapping promotes woodland expansion as a potential resource to people/society. It promote the integration of multifunctional woodland into existing land uses so as to deliver overall benefit in terms of wood fibre, environment, education and recreation. The mapping promotes long term significantly positive effects.</p>	

	Promote recycling of resources? Promote education and science?			
Population • Maintain and enhance the economic and social needs of most people in the local community	Protect and enhance the essential services provided to society by the natural environment	++	The mapping promotes woodland expansion which delivers multiple benefits and minimises impacts. This include the protection and enhancement of the services provided to society by the natural environment. Existing land uses which provide benefits, such as carbon rich soils, agricultural land, nature conservation sites, gardens and designed landscapes are identified as sensitive in the map. New woodlands which increase habitat network, benefit flooding and provide recreation are promoted. The mapping promotes long term significantly positive effects.	
Human health	Adversely affect human health? Promote opportunities for improved personal and community health? Make provision for and improve quantity and quality of open space and sporting facilities? Maintain links between areas and recreational sites, increasing healthy sporting activities?	++	The map recognises woodlands as a significant place of recreation in Aberdeenshire and promotes new woodland creation near to settlements so that they have the potential to increase the recreational resource. The Strategy promotes accessible woodlands. The mapping promotes long term significantly positive effects.	
Cultural Heritage • Protect and enhance,	Conserve and enhance historic buildings,	++	The map identified scheduled ancient monuments, battlefields and gardens & designed landscapes as potentially sensitive for new tree planting. A 20m buffer around scheduled ancient monuments in included	

<p>where appropriate, built, natural and historic assets and open space</p>	<p>archaeological sites, conservation areas, battlefields and designed landscapes?</p> <p>Impact on the landscape setting of historic features or sites?</p>		<p>in the map so as to protect these features. The Strategy recognises that not all elements of cultural heritage significant can be protected in such a high level, strategic map. Thus it promotes a robust site based assessment in each case of new woodland planting. The mapping promotes long term significantly positive effects.</p>	
<p>Interrelationships</p>			<p>In many ways, the map draws together the various elements of the strategy and shows how the various issues needs to be balanced against each other in planting new woodlands. Changing land use, such as planting new woodland, can have a wide variety of effects. Decisions to change land use are effected by a wide variety of factors, some of which the map can incorporate and some of which, including may economic and cultural factors, it can't. The map is identified as one element in the decision making process but it should not over-ride, but be integrated with, a robust site based decision making process.</p>	

Appendix 2: Other Relevant Plans and Environmental Protection Objectives

We have explained the relevance of other relevant plans, programmes, strategies and environmental objectives in Table 2.1 below.

Table 7.8 Plans, Programmes, Strategies and Environmental Protection Objectives

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
Nature Conservation <ul style="list-style-type: none"> • The Habitats Directive 92/43/EEC • The Birds Directive 2009/147/EC • EU Biodiversity Strategy 2020 • Nature Conservation - the Ramsar Convention 	INTERNATIONAL Protection of habitats and species. Protection of wild birds and their habitats. Promotes the conservation and sustainable use of biological diversity. Protection of Wetland birds	The strategy should protect identified habitats, species and wetland birds. Strategies and policies should not hinder protection, management and control of species and should support the conservation and sustainable use of biological diversity.
Water <ul style="list-style-type: none"> • Water Framework Directive 2000/60/EC • Nitrate Directive 91/43/EC 	Protect and improve the water environment Ensure that water quality and good ecological status of the Water Framework Directive are maintained Safeguards the sustainable use of water systems; Supports the status of aquatic ecosystems and environments; Addresses groundwater pollution; flooding and droughts; river basin management planning.	The strategy should consider sustainable use of water, support aims to maintain and achieve Good Ecological Status, mitigate the effects of floods and droughts and support river basin management planning.
Climate Change <ul style="list-style-type: none"> • The UN Convention on Climate Change • The Second European Climate Change Programme 	Promotes reductions in greenhouse gas emissions and mitigation & adaption to climate change.	The strategy should include measures to contribute to the reduction of greenhouse gases considering methods of adaptation, diversification and mitigation. In particular, encourage sustainable development and land use.
Landscape <ul style="list-style-type: none"> • The European Landscape Convention 2000 	Promotes the protection, management and planning of all landscapes, including natural, managed, urban and peri-urban areas, and special, everyday and also degraded landscapes	The strategy should consider all landscapes.
	NATIONAL	

<p>Overarching Planning Policy</p> <ul style="list-style-type: none"> • The Planning (Scotland) Act 2006. • National Planning Framework for Scotland 3 (NPF3) • The Scottish Planning Policy 2013 	<p>Promotes inclusive and efficient planning system to improve community involvement, support the economy, and help it to grow in a sustainable way.</p> <p>Aims to guide Scotland's development to 2030 and sets out strategic development priorities to support the Government's goal of sustainable economic growth.</p>	<p>The strategy should encourage the development of sustainable communities and be developed in a much more inclusive and efficient way, which includes greater community involvement and supports the economy.</p> <p>The strategy should promote the concepts of sustainable development, community regeneration, transportation infrastructure, and other environmental issues; & ensure land required to meet the city region's needs is delivered.</p>
<p>Cross-Sectoral</p> <ul style="list-style-type: none"> • The Governments Economic Strategy • Natural Resource Productivity (2009) • Getting the Best from our Land: A Land Use Strategy for Scotland (2011) 	<p>Identifies the six strategic priorities which will accelerate recovery, drive sustainable economic growth and develop a more resilient and adaptable economy</p> <p>Sets out to optimise the sustainable use of our natural resources to deliver the maximum economic and public benefit</p> <p>Sets out a long term Vision towards 2050 with three clear Objectives relating to economic prosperity, environmental quality and communities</p>	<p>The strategy should aim to promote sustainable development for Scotland, optimising the public benefits delivered by the natural environment and protecting natural assets for future generations.</p>
<p>Air & Climate Change</p> <ul style="list-style-type: none"> • Scottish Climate Change Delivery Plan (2009) • Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007) • SEPA's National air quality report (2008) 	<p>Sets out high level measures required to meet Scotland's statutory climate change targets, to 2020 and in the long term.</p> <p>Provides a clear, long-term vision for improving air quality in the UK in line with the Environment Act (1995) setting out associated air quality objectives and policy options.</p> <p>Sets out the Scottish Government's plans to move towards a low carbon economy in Scotland.</p>	<p>The strategy should include measures to contribute to the reduction of greenhouse gases considering methods of adaptation, diversification and mitigation. In particular, encourage sustainable development and land use.</p> <p>Implementation of the strategy should not result in a deterioration of air quality.</p> <p>The strategy must contribute to the promotion of development which helps to reduce Scotland's carbon footprint and help meet carbon saving, the</p>

<ul style="list-style-type: none"> • Towards a Low Carbon Economy for Scotland: Discussion Paper (2010) • Changing Our Ways- Scotland's Climate Change Programme (2006) • Tomorrow's Climate, Today's Challenge: UK Climate Change Programme (2006) • 2020 Routemap for Renewable Energy in Scotland • Online Renewables Advice (Replaces PAN 45) for specific renewable energy technologies. • Calculating Carbon Savings from Windfarms on Scotland's peat lands 	<p>Provides information on emission levels of key pollutants and ambient air quality monitoring data</p> <p>Provides a national interpretation of broader climate change objectives</p> <p>Provides the national strategy for the growth of the renewable energy generation in Scotland</p> <p>Provides a methodology for the calculation of the carbon impacts of wind farm developments on peat land</p>	<p>strategies should contribute to the delivery of the targets set in the Climate Change (Scotland) Act 2006.</p>
<p>Heritage Design and Regeneration</p> <ul style="list-style-type: none"> • The Scottish Historic Environment Policy (2011) • Green Infrastructure: Design and Placemaking (2011) 	<p>Strategy which sets out a framework for future work on the historic environment. Identifies priorities, issues and opportunities.</p> <p>Promotes integration and good design of green infrastructure.</p>	<p>The strategy should support the framework to conserve and restore the historic environment.</p> <p>The strategy should support the development of green infrastructure on the urban fringe.</p>
<p>Soil and Landscape</p> <ul style="list-style-type: none"> • The Scottish Soil Framework (2009) • Scottish Landscape Forum: Scotland's Living Landscape (2007) • Scotland's Living Landscapes: Places for People (2007) 	<p>The main aim of the Framework is to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland.</p> <p>A key aspect is the protection of soil as an asset – for the future of the Scottish economy, as well as a contribution to challenges set by climate change.</p>	<p>The strategy should promote the sustainable management of soils.</p>
<p>Homes, Population and Health</p> <ul style="list-style-type: none"> • Homes Fit for the 21st Century: The Scottish Government's Strategy and 	<p>Provides a strategy for house building and modern construction.</p>	<p>The strategy should consider the needs of an ageing and increasingly urbanised population into its strategic actions.</p>

<p>Action Plan for Housing in the Next Decade 2011-2020 (2011)</p> <ul style="list-style-type: none"> • All Our Futures: Planning for a Scotland with an Ageing Population (2007) • Let's Make Scotland More Active: A Strategy for Physical Activity (2003) • Equality Act 2010 • 'Making the Links: greenspace for a more successful and sustainable Scotland' (2009) • Community Empowerment and Renewal Bill • Scottish Outdoor Access Code 	<p>Provides a strategic approach which considers how best to respond to and plan for a Scotland with an ageing population.</p> <p>Aims to increase and maintain the proportion of physically active people in Scotland setting out targets to 2022.</p> <p>Sets a framework which protects individuals from unfair treatment and promotes a fair and more equal society.</p> <p>Sets out the key actions that are needed to ensure that greenspace delivers for people, communities and places across the whole of urban Scotland.</p> <p>Provides a framework to increase community empowerment and engagement. Targets regeneration and community participation.</p> <p>Defines the right of responsible access to Scotland's outdoors</p>	<p>The strategy should increase opportunities for provision of physical activities infrastructure. The plan will consider the needs of the society in the region.</p> <p>The strategy should take account of the actions required to deliver quality greenspace to shape better places and increase quality of life for those working and living in the LDP area.</p> <p>The strategy should promote community empowerment and seek to engage communities in their environment. Community regeneration opportunities should be promoted.</p>
<p>Nature Conservation & Biodiversity</p> <ul style="list-style-type: none"> • Wildlife and Countryside Act 1981 (as amended) • The Nature Conservation (Scotland) Act 2004 	<p>Gives protection to wildlife and countryside from disturbance, injury intentional destruction or sale.</p> <p>Duties are placed on public bodies to further the conservation of biodiversity and sets out measures to protect and enhance the biological and geological natural heritage of Scotland. Protects individual sites and promotes conservation on a broader scale.</p>	<p>The strategy should avoid disturbance to wildlife and the countryside.</p> <p>The strategy should restore, maintain, conserve, promote and protect biodiversity, habitats and species.</p>

<ul style="list-style-type: none"> • Scotland's Biodiversity: It's in Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland (2004) • 2020 Challenge for Scotland's Biodiversity 2013 • UK Biodiversity Action Plan 1994 <ul style="list-style-type: none"> • The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) • The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2007 	<p>Aims to halt loss and reverse decline of species and habitats.</p> <p>Includes measures for designated sites, habitats and species.</p>	
<p>Forestry and Woodlands</p> <ul style="list-style-type: none"> • UK Forestry Standard • Scottish Government's Policy on Control of Woodland Removal • Rationale for Woodland Expansion • Right Tree, Right Place • Scottish Forestry Strategy 2006 • Woodlands In and Around Towns 	<p>Provides policy direction for decisions on woodland removal in Scotland.</p> <p>Explains the rationale for the expansion of woodland coverage in Scotland</p> <p>A planning document for the planting of trees and woodland in Scotland including the development of forest and woodland strategies</p> <p>Protect and expand Scotland's forests and woodlands and increase their value to society and the environment.</p> <p>A scheme to increase accessible woodlands in and close to towns and cities</p>	<p>The strategy should aim to assist with the target of increasing forest cover and prevention of removal of woodland.</p> <p>The strategy should complement and aim to inform the suite of forestry sector plans that together aim to increase woodland coverage and deliver a range of benefits through sustainable planting and land management.</p> <p>The strategy should aim to assist in the delivery of multiple benefits for society, environment and economy from forests and woodlands.</p>

<ul style="list-style-type: none"> • Woodlands and the Historic Environment • Woodland Expansion Advisory Group • Woodlands For Water: Woodland measures for meeting Water Framework Directive objectives 	<p>Explains where woodland planting for natural flood management and diffuse pollution is and is not appropriate.</p>	
<p>Food and Agriculture</p> <ul style="list-style-type: none"> • Scottish Rural Development Programme • Scotland's National Food and Drink Policy • Whole Farm Review Scheme • Farming for a Better Climate 	<p>A programme of economic, environmental and social measures designed to develop rural Scotland</p> <p>Aims to promote Scotland's sustainable economic growth by ensuring that the Scottish Government's focus in relation to food and drink addresses quality, health and wellbeing, and environmental sustainability, recognising the need for access and affordability at the same time.</p> <p>Designed to help farmers and crofters to develop environmentally and financially sustainable businesses</p> <p>Offers practical advice to help farmers choose the most relevant measures to improve both farm performance and resilience to future climate change effects</p>	<p>The strategy should support and encourage sustainable food production and a resilient agricultural industry.</p> <p>The strategy should seek opportunities to integrate social, environmental and objectives with agricultural production, delivering multiple benefits.</p> <p>The strategy should highlight potential future environmental and climatic issues for agricultural production to aid future planning.</p>
<p>Water</p> <ul style="list-style-type: none"> • Water Environment (Controlled Activities) (Scotland) Regulations 2011 • Water Environment and Water Services (Scotland) Act (WEWS) 2003 	<p>Protects the water environment that integrates the control of pollution, abstractions, dams and engineering activities in the water environment.</p> <p>Ensures that all human activity that can have a harmful impact on water is controlled.</p>	<p>The strategy should consider sustainable use of water, support aims to maintain and achieve Good Ecological Status, mitigate the effects of floods and droughts and support river basin management planning.</p>

<ul style="list-style-type: none"> • The Flood Risk Management (Scotland) Act 2009 • River Basin Management Plan for Scotland (2009) • Scottish Water Strategic Asset & Capacity Development Plan (2009) • SEPA Groundwater Protection Policy for Scotland v3: Environmental Policy 19 (2009) • SEPA Indicative Flood Map 	<p>Creates a framework in which organisations involved in flood risk management can coordinate actions to deliver sustainable and modern approaches to flood risk management.</p> <p>Details the strategy for River Basin Management Planning in Scotland.</p> <p>Provides a description of Scottish Waters processes and systems for calculating capacity available, at the 1981 waste water treatment works (WWTW) and 294 water treatment works (WTW) serving Scotland.</p> <p>Aims to provide a sustainable future for Scotland's groundwater resources by protecting legitimate uses of groundwater.</p> <p>Provides maps indicating potential flood extents</p>	<p>The strategy should not promote land use change that would have adverse impacts on the water environment or risk failure of water bodies not achieving at least good ecological status by 2015.</p> <p>The strategy should not create flood risks and should actively promote sustainable flood risk management without conflicting with river basin management plans.</p>
	REGIONAL	
<p>Over arching Planning Policy</p> <ul style="list-style-type: none"> • Aberdeen City and Shire Structure Plan 2009 • Aberdeen City and Shire Strategic Development Plan 	<p>Guides the development of the Aberdeen City and Aberdeenshire region for the next 25 years. Sets the strategic context for Aberdeen and Aberdeenshire Councils Local Development Plans which in turn set the framework for land use development.</p> <p>Sets out a 5 year life plan identifying actions to be undertaken towards the longer term economic ambitions for Aberdeen City and Shire.</p>	<p>The strategy should aim to take account of existing structure and development plans and aim to support the development of future plans.</p> <p>The strategy should support sustainable economic growth.</p>
<p>Nature Conservation & Biodiversity</p> <ul style="list-style-type: none"> • North East Scotland Local Biodiversity Action Plan (2000) 	<p>Ensures the protection and enhancement of the biodiversity in the north east through the</p>	<p>The strategy should aim to protect and enhance biodiversity.</p>

<ul style="list-style-type: none"> • Forest and Woodland Strategy for Aberdeenshire and Aberdeen (2005) • River Dee Catchment Management Plan 	<p>development of effective, local, working partnerships; Ensure that national targets for species and habitats, as specified in the UK Action Plan, are translated into effective local action.</p> <p>Provides a framework for woodland development and management.</p> <p>An action plan for the management of the River Dee catchment</p>	<p>The strategy should not result in conflict with forest and woodland priorities.</p> <p>The strategy should aim to protect and enhance the River Dee catchment</p>
	LOCAL	
<p>Air and Climate</p> <ul style="list-style-type: none"> • Aberdeenshire Council Climate Change Action Plan 2011 – 2015 • Aberdeenshire Air Quality Reports 2011 	<p>Outlines projects to achieve carbon reduction targets.</p> <p>Ensure air quality is below EU and Scottish objectives</p>	<p>The strategy should work towards the Councils aim to become carbon neutral.</p> <p>The strategy should avoid air pollution</p>
<p>Access, Open Space and Landscape</p> <ul style="list-style-type: none"> • Aberdeenshire Core Paths Plan 2013 • Aberdeenshire Council Parks and Public Open Spaces Strategy 2010 • Aberdeenshire Landscape Character Assessment 	<p>Provides the basic framework of paths to meet communities' needs while minimizing any potential conflict with land management.</p> <p>The strategy sets standards for open space, and hierarchies for open space. The document is based on an audit of existing open space</p> <p>Provides an assessment of the different landscape character types in Aberdeenshire</p>	<p>The strategy should support core paths, and ensure development does not adversely affect core paths.</p> <p>The strategy should take account of the need to create public open space.</p>
<p>Community Planning</p> <ul style="list-style-type: none"> • Community Plans (by Area) 	<p>Identifies actions and priorities for the local area.</p>	<p>The strategy should take account of community plans.</p>
<p>Historic Environment</p> <ul style="list-style-type: none"> • Aberdeenshire Council Historic Environment Strategy 	<p>Strategy which sets out a framework for future work on the historic environment. Identifies priorities, issues and opportunities.</p>	<p>The strategy should take account of the framework to conserve and restore the historic environment.</p>
<p>Housing</p>	<p>Provides the strategic direction to tackle housing need and demand and to inform the future</p>	<p>The strategy should take account of housing demand in the region.</p>

<ul style="list-style-type: none"> Aberdeenshire Local Housing Strategy 2012-2017 	investment in housing and related services across the local authority area	
Land Use <ul style="list-style-type: none"> The Aberdeenshire Land Use Strategy Pilot 	Explored integrated rural land use in Aberdeenshire using an integrated rural land use and ecosystems approach.	The strategy should promote integrated rural land use and protect and enhance the services the environment provides to society.

Appendix 3: Baseline

Appendix 3.1: SEA Topic: Climatic Factors

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Natural Resources Consumption (footprint)	<p>Aberdeenshire's annual global footprint - in global hectares per person (gha/p)</p> <p>Total: 5.60gha/p</p> <p>Energy Consumption: 1.09gha/p (19%)</p> <p>Food and drink: 1.11gha/p (20%)</p> <p>Land Travel: 0.74ha/p (13%)</p> <p>Other (Government, capital investment, holiday activities, consumables, services and sports), 2.7gha/p (48%)</p>	<p>Aberdeen City's annual global footprint:</p> <p>Total: 5.73gha/per</p> <p>Energy and Consumption: 1.14gha (20%)</p> <p>Food and Drink 1.07gha/p(19%)</p> <p>Land Travel: 0.81ha/p (14%)</p> <p>Other: 2.7gha/p (48%)</p> <p>Scotland's annual global footprint: Total: 5.37gha/per</p>	<p>Both Aberdeenshire and Aberdeen City's global footprint is higher than the Scottish average.</p> <p>The main contributors to the NE's global footprint are energy consumption, food and drink and land travel.</p>	<p>Energy is the largest contributor to Aberdeenshire's Global Footprint and indicates high energy consumption associated with domestic fuels like gas, oil, electricity and other fuels.</p> <p>Sustainable transport is a key issue in Aberdeenshire, as transport contributes 13% to Aberdeenshire's total global footprint.</p> <p>The North East's Global Footprint Project identified transport, the Built Environment and Energy as areas in which global</p>	<p>North East Global Footprint Project http://www.scotlandsfootprint.org/the-project/north-east.php</p> <p>Aberdeen City Council and Aberdeenshire Council (2006) Scotland's Global Footprint Project – Reduction Report for North East Scotland Global Footprint Project, Joint Global Footprint Co-ordinator, Aberdeen City Council</p>

				footprint reductions could be achieved.	
Total CO₂ emissions (kt)	Aberdeenshire 2007 - 2,391.21 2008 - 2,518.62 2009 - 2,335.33 2010 - 2,344.17	Aberdeen City 2007 - 1,772.72 2008 - 1,761.38 2009 - 1,583.95 2010 - 1,660.35	Rising falling and rising in both the City and the Shire	Increased travel, inefficient old housing stock and more housing account for this	DECC Data dated 23/08/2012
Per Capita CO₂ emissions (kt)	Aberdeenshire 2007 - 10.0 2008 - 10.4 2009 - 9.6 2010 - 9.5	Aberdeen City 2007 - 8.5 2008 - 8.4 2009 - 7.4 2010 - 7.6	Rising by 2008 and falling since 2008 in the Shire.	Increased travel, inefficient old housing stock and more housing account for this	DECC Data dated 23/08/2012
Industry and Commercial CO₂ emissions (kt)	Aberdeenshire 2007 - 841.39 2008 - 840.24 2009 - 745.63 2010 - 791.33	Aberdeen City 2007 - 868.99 2008 - 846.45 2009 - 692.34 2010 - 666.04	No consistent fall in the City and the Shire		DECC Data dated 23/08/2012
Domestic CO₂ emissions (kt)	Aberdeenshire 2007 - 762.63 2008 - 765.92 2009 - 711.89 2010 - 770.13	Aberdeen City 2007 - 580.98 2008 - 582.17 2009 - 519.86 2010 - 552.38	There is a roller-coaster movement in domestic CO ₂ emissions in the City and the Shire	inefficient old housing stock and domestic energy demand account for this	DECC Data dated 23/08/2012

Road Transport CO₂ emissions (kt)	Aberdeenshire 2007 - 674.39 2008 - 647.82 2009 - 622.64 2010 - 622.62	Aberdeen City 2007 - 327.85 2008 - 317.79 2009 - 298.78 2010 - 298.88	There appears to be a slight improvement in Road Transport emissions	Increased travel by accounts for this	DECC Data dated 23/08/2012
LULUCF* CO₂ emissions (kt)	Aberdeenshire 2007 - 85.19 2008 - 258.44 2009 - 308.47 2010 - 285.38	Aberdeen City 2007 - 22.49 2008 - 21.18 2009 - 19.67 2010 - 17.76	There is a roller-coaster movement in LULUCF CO ₂ emissions in the Shire compared with the City where there is a slight improvement	This depends on the way we use our land and Forest resources	DECC Data dated 23/08/2012 *LULUCF - Land Use, Land Use Change and Forestry
Properties at risk within inland and coastal areas	Aberdeenshire 2,219 inland floodplain 1,743 coastal (below 5m OD)	Aberdeen City: 309 inland floodplain 571 coastal (below 5m OD) Scotland: 77,191 inland floodplain 93,830 coastal (below 5m OD) Compared with the rest of Scotland, far fewer properties in Aberdeen and Aberdeenshire are at significant risk from flooding.	The impact of climate change and flooding in the North East is unpredictable. However there may be increased duration and frequency of storms and rising sea levels. Weather throughout the year is predicted to change resulting in longer wetter winters and shorter drier summers with	There may be an increasing need to implement flood defence systems.	Office of Science and Technology (2005) Foresight report: <i>Future Flooding Scotland</i> http://www.foresight.gov.uk/Scotland/Final_Scotland.pdf

			implications for flooding.		
<p>Potential Vulnerable Area (PVA) to flooding</p> <p>No of Area</p>	<p>Aberdeenshire</p> <p>18 Areas/Catchments including Banff Coastal around Banff, River Deveron around Huntly, and Turriff, Buchan Coastal around Ellon, Peterhead, Fraserburgh and Newmachar; River Ythan around Ellon, and Methlick; River Don around Strathdon, Port Elphinstone/Kintore/Inverurie; River Dee around Ballater, Westhill and Aboyne; Kinkandine and Angus Coastal around Stonehaven</p>	<p>Aberdeen City:</p> <p>9 areas/catchments including Buchan Coastal (Bridge of Don), Aberdeen North Coastal (Seaton), River Don (Danestone), River Don (Dyce), Aberdeen South Central (Kincorth), Aberdeen South Central (Rosemount), River Dee (Cults), River Dee (Peterculter)</p>	No trend	This areas and issues have to be taken into account and allocating land for development and imposing constraints	<p>SEPA (2011) <i>Flood Risk Management (Scotland) Act 2009: Flooding in Scotland – A Consultation on Potentially Vulnerable Areas and Local Plan Districts- Appendix 6: Aberdeenshire and Aberdeen City.</i> Edinburgh: SEPA</p> <p>See Appendix 3:12 for details</p>
<p>Estimated Weighted Annual Average damages within PVA</p>	<p>Aberdeenshire</p> <ul style="list-style-type: none"> 2011 - £17,080,000.00 	<p>Aberdeen City</p> <ul style="list-style-type: none"> 2011- £22,390,000.00 	No trend	Cost implication for developing areas at risk from flooding must be taken into account and allocating land for development and imposing constraints	<p>SEPA (2011) <i>Flood Risk Management (Scotland) Act 2009: Flooding in Scotland – A Consultation on Potentially Vulnerable Areas and Local Plan Districts- Appendix 6: Aberdeenshire and Aberdeen City.</i> Edinburgh: SEPA</p>

Total Area (Km 2) in PVA	Aberdeenshire • 2011- 529	Aberdeen City • 2011 - 344	No trend	It has implications for land allocation and development	SEPA (2011) <i>Flood Risk Management (Scotland) Act 2009: Flooding in Scotland – A Consultation on Potentially Vulnerable Areas and Local Plan Districts- Appendix 6: Aberdeenshire and Aberdeen City.</i> Edinburgh: SEPA
Residential Properties in PVA	Aberdeenshire • 2011- 1820	Aberdeen City • 2011- 1943	No trend	It has implications for land allocation and development	SEPA (2011) <i>Flood Risk Management (Scotland) Act 2009: Flooding in Scotland – A Consultation on Potentially Vulnerable Areas and Local Plan Districts- Appendix 6: Aberdeenshire and Aberdeen City.</i> Edinburgh: SEPA
Non-Residential Properties in PVA	Aberdeenshire • 2011- 272	Aberdeen City • 2011- 375	No trend	It has implications for land allocation and development	SEPA (2011) <i>Flood Risk Management (Scotland) Act 2009: Flooding in Scotland – A Consultation on Potentially Vulnerable Areas and Local Plan Districts- Appendix 6: Aberdeenshire and Aberdeen City.</i> Edinburgh: SEPA
Working from home (ALDP 01 Bus 3)	Applications Received • 06/12-10/12 - 0 • 10/12- 06/13 - 4 No of Approvals • 06/12-10/12 - 0 • 10/12- 06/13 - 4 No of Refusals • 06/12-10/12 - 0 • 10/12- 06/13 - 0	No data	No discernible trend	This is likely to have positive effect on climatic factors	Aberdeenshire Council Monitoring Statement
Wind Farms and Medium to large wind turbines ALDP 03 rd2	Applications Received • 06/12-10/12 - 14 • 10/12- 06/13 - 135 No of Approvals • 06/12-10/12 - 8 • 10/12- 06/13 - 77	No data	Number of applications have increased	More wind farms are likely to have positive effects for climatic factors although there are potential	Aberdeenshire Council Monitoring Statement

	No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 6 • 10/12- 06/13 - 58 			negative effects for landscape and soil	
Carbon neutrality in new development ALDP 08 lsd11	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 -7 • 10/12- 06/13 -104 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 6 • 10/12- 06/13 - 87 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 1 • 10/12- 06/13 - 17 	No data	Number of applications have increased	This is likely to have positive effects for climatic factors through efficiency savings	Aberdeenshire Council Monitoring Statement

Appendix 3.2: SEA Topic - Air

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Air Quality related Complaints and Enquiries (Number)	<p>Aberdeenshire</p> <p>Smoke</p> <ul style="list-style-type: none"> • 2006 – 69 • 2010 - 53 • 2011 – 41 <p>Grit/Dust</p> <ul style="list-style-type: none"> • 2006 – 16 • 2010 -10 • 2011 – 20 <p>Odour/Fumes</p> <ul style="list-style-type: none"> • 2006 – 126 • 2010 - 79 • 2011 – 52 <p>Vehicle emissions</p> <ul style="list-style-type: none"> • 2006 - 0 • 2010 – 0 • 2010 - 1 	<p>Aberdeen City</p> <p>None</p>	Complaints on smoke, odour and Fume related are falling while complaints on Grit/Dust are rising in Aberdeenshire.	No data	<p>Aberdeenshire Council Air Quality Progress Reports 2007-2012</p> <p>Aberdeenshire Council Air Quality Updating Report 2012</p>
Air quality (NO2) in $\mu\text{g}/\text{m}^3$	<p>Inverurie 1-4</p> <ul style="list-style-type: none"> • 2007 – 12.0 – 35.1 • 2008 – 09.5 – 32.9 • 2009 – 11.4 – 37.5 • 2010 – 10.4 – 33.6 • 2011 – 09.1 – 34.8 <p>Mintlaw</p> <ul style="list-style-type: none"> • 2006 – 17.5 • 2007 – 21.0 • 2008 - 16.1 • 2009 – 18.9 • 2010 – No data • 2011 - No data <p>Peterhead 1-4</p> <ul style="list-style-type: none"> • 2007 – 24.1 – 28.4 	<p>Market Street1</p> <ul style="list-style-type: none"> • 2007 – 62.0 • 2008 – 73.0 • 2009 – 38.0 • 2010 – 44.0 • 2011 – 40.0 <p>5/3/2013 - 43.1-110</p> <p>Union Street</p> <ul style="list-style-type: none"> • 2007 – 53.0 • 2008 – 54.0 • 2009 – 56.0 • 2010 – 59.0 • 2011 – 44.0 <p>5/3/2013 - 41.2-52</p> <p>Anderson Drive</p>	NO2 concentrations measured by Aberdeenshire Council during the period are below the NAQS annual mean objective for NO2 at all monitoring locations. But there is little change in Aberdeen City between	NO2 concentrations monitored by Aberdeen City Council at Union Street and Market Street continuous monitoring sites exceed national objectives.	<p>2010 Air Quality Progress Report For Aberdeenshire Council</p> <p>Aberdeenshire Council Air Quality Updating and Screening Assessment (2012)</p> <p>Real-Time Air Quality Monitoring in Aberdeen on 5/3/2013</p> <p>Aberdeen City Council Air Quality Progress Report 2009</p>

	<ul style="list-style-type: none"> • 2008 – 20.0 – 25.4 • 2009 – 23.7 – 25.0 • 2010 – 21.7 – 27.0 • 2011 – 23.3 – 28.7 <p>Stonehaven1</p> <ul style="list-style-type: none"> • 2007 – 28.1 • 2008 – 24.9 • 2009 – 23.7 • 2010 – 26.1 • 2011 – 22.4 <p>Westhill 1-2</p> <ul style="list-style-type: none"> • 2007 – 21.5 • 2008 – 16.6 • 2009 – 18.4 • 2010 – 20.3 • 2011 – 20.9 	<ul style="list-style-type: none"> • 2007 – 28.0 • 2008 – 25.0 • 2009 – 24.0 • 2010 – 27.0 • 2011 – 23.0 • 5/3/2013: 36.3-41 <p>Wellington Road</p> <ul style="list-style-type: none"> • 2007 – No data • 2008 – 40.0 • 2009 – 43.0 • 2010 – 52.0 • 2011 – 51.0 • 5/3/2013: 61.3-91-9 <p>Errol Place</p> <ul style="list-style-type: none"> • 2007 – 23.0 • 2008 – 25.0 • 2009 – 26.0 • 2010 – 21.0 • 2011 – 23.0 • 5/3/2013: 8.4-24.7 <p>king's Street</p> <ul style="list-style-type: none"> • 2007 – No data • 2008 – No data • 2009 – 32.0 • 2010 – 29.0 • 2011 – 32.0 • 5/3/2013: 32.7-47.6 <p>EU annual mean limit value (40 µg/m³)</p>	2006 and 2009 but a fall between 2009 and 2011		2012 Air Quality Updating and Screening Assessment for Aberdeen City Council
Air quality (Properties exposed to PM10 concentrations above the	No issues in Aberdeenshire	Wellington Road AQMA <ul style="list-style-type: none"> • 2010 - < 10 • 2012 - 0 Anderson Drive AQMA <ul style="list-style-type: none"> • 2010 - 10-100 • 2012-2016 -<10 	The NO2 concentrations measured by Aberdeenshire Council during the period are	No monitoring of NO2 in Aberdeenshire but NO2 concentrations are	Aberdeenshire Council Air Quality Updating and Screening Assessment (2009) Council Aberdeen City Council Air Quality Progress Report 2010

<p>2010 Scottish objective) (projected)</p>		<p>City Centre AQMA</p> <ul style="list-style-type: none"> • 2010 - 100-1000 • 2012 - 100-1000 • 2016 - 10-100 <p>EU annual mean limit value (40 µg/m3)</p>	<p>below the NAQS annual mean objective for NO2 at all monitoring locations. Little change in Aberdeen City between 2006 and 2013.</p>	<p>monitored by Aberdeen City Council at Union Street and Market Street. It continuous monitoring sites exceed national objectives.</p>	
<p>Air quality (PM10) in µg/m³</p>	<p>No issues in Aberdeenshire</p>	<p>Market Street</p> <ul style="list-style-type: none"> • 2006-2009:50 – 85 • 2009-2011:22-28 <p>Union Street</p> <ul style="list-style-type: none"> • 2006-2009:18 – 25 • 2009-2011:18-22 <p>Anderson Drive</p> <ul style="list-style-type: none"> • 2006-2009:15 – 18 • 2009-2011:24-27 <p>Wellington Road:</p> <ul style="list-style-type: none"> • 2008-2009:23- 25 • 2009-2011:22-24 <p>Errol Place</p> <ul style="list-style-type: none"> • 2006-2009:15 – 22 • 2009-2011:13-15 <p>King Street</p> <ul style="list-style-type: none"> • 2009:17 • 2009-2011:17-19 <p>2004 annual mean objective for EU 40 µg/m3 2010 annual mean Scottish Objective - 18 µg/m3</p>	<p>Little change in Aberdeen City between 2006 and 2013.</p>	<p>PM10 is not an issues in Aberdeenshire</p> <p>PM10 concentration measured by Aberdeen City Council at Market Street, Union Street and Wellington Road Exceed 2010 Scottish annual mean objective.</p>	<p>Aberdeen City Council Air Quality Progress Report 2010</p> <p>Aberdeenshire Council Air Quality Updating and Screening Assessment (2009)</p>

<p>Air quality (Properties exposed to PM10 concentrations above the 2010 Scottish objective)</p>	<p>No issues in Aberdeenshire</p>	<p>Wellington Road AQMA</p> <ul style="list-style-type: none"> • 2010 - 100-1000 • 2012 -10 -100 <p>Anderson Drive AQMA</p> <ul style="list-style-type: none"> • 2010 - 100-1000 • 2012-2016 - 10-100 <p>City Centre AQMA</p> <ul style="list-style-type: none"> • 2010 - >1000 • 2012 - >1000 • 2016 - 100-1000 <p>2004 annual mean objective for EU - 40 µg/m³ 2010 annual mean Scottish Objective - 18 µg/m³</p>	<p>Little change in Aberdeen City between 2006 and 2009.</p>	<p>PM10 concentration measured by Aberdeen City Council at Market Street, Union Street and Wellington Road Exceed 2010 Scottish annual mean objective.</p>	<p>Aberdeen City Council Air Quality Progress Report 2010 Aberdeenshire Council Air Quality Updating and Screening Assessment (2009)</p>
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Appendix 3.3: SEA Topic - Water

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Ground water and river levels	<p>Scottish Water are currently permitted to abstract up to 145 megalitres per day (MLD) from the River Dee, however, the average amount taken is around 90MLD. It is not anticipated that this license will reduce the permitted abstraction level prior to 2014.</p> <p>Data on ground water in Scotland was not available.</p>	<p>By the 2080s, summer precipitation decreases of 10-20% under the low emissions (Global Sustainability), and 20-30% under the high-emissions World Markets scenario are predicted in the north of Scotland.</p>	<ul style="list-style-type: none"> • Rainfall levels are predicted to decline during the summer months, which may affect a rivers yield rate, but this will be less severe further north. • Rainfall in winter months is predicted to increase. • Increase in water consumption from industrial consumers and from increased residential development. • Increase in leakages from pipe infrastructure as it 'ages' however Scottish Water continue to make progress on leakage reduction. 	<p>There is a need to start reducing water abstraction by incorporating water efficient technologies into new development (industrial and domestic) in light of the predicted decrease in summer rainfall.</p>	<p>Aberdeen City (2007) State of the Environment Report http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=15960&slD=883</p> <p>Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i></p>
Quality of water bodies (Ground water)	<p>high status</p> <ul style="list-style-type: none"> • 2010 - 0 • 2013 - 0 <p>good status</p> <ul style="list-style-type: none"> • 2010: 42 • 2013: 39 <p>moderate status</p> <ul style="list-style-type: none"> • 2010 - 0 • 2013: 0 <p>poor status</p> <ul style="list-style-type: none"> • 2010: 8 	<p>high status</p> <ul style="list-style-type: none"> • 2010 - No data • 2013 - 0 <p>good status</p> <ul style="list-style-type: none"> • 2010: No data • 2013: 7 <p>moderate status</p> <ul style="list-style-type: none"> • 2010 - No data • 2013 - 0 <p>poor status</p> <ul style="list-style-type: none"> • 2010 - No data 	<p>The Water Framework Directive states that all water bodies are of good ecological status, or similar objective, by 2015.</p>	<p>It is important that development does not prevent water bodies in the LDP area achieving at least 'good' ecological</p>	<p>SEPA (09 February 2010) Data from River Basin Management Plan for the Scotland River Basin District 2009</p> <p>Downloaded from http://gis.sepa.org.uk/rbmp/Data_Download.aspx (Accessed 11 March 2013)</p>

	<ul style="list-style-type: none"> • 2013: 1 bad status • 2010: 0 • 2013: 0 	<ul style="list-style-type: none"> • 2013 – 0 bad status • 2010 – No data • 2013 – 0 		status in order for the area to reach the targets.	
Quality of water bodies (Coastal)	<ul style="list-style-type: none"> high status • 2010 - 6 • 2013 - 6 good status • 2010 - 8 • 2013 - 7 moderate status • 2010 - 1 • 2013 - 1 poor status • 2010 - 0 • 2013 - 0 bad status • 2010 - 0 • 2013 - 0 	<ul style="list-style-type: none"> high status • 2010 – no data • 2013 - 1 good status • 2010 – no data • 2013 - 2 	Same as above	Same as above	Same as above
Quality of water bodies (Transitional)	<ul style="list-style-type: none"> high status • 2010 - 4 • 2013 - 3 good status • 2010 - 1 • 2013 - 0 moderate status • 2010 - 1 • 2013 - 1 poor status – 0 • 2010 - 0 • 2013 - 0 bad status – 0 	<ul style="list-style-type: none"> high status • 2010 – no data • 2013 - 1 good status • 2010 – no data • 2013 - 1 	Same as above	Same as above	Same as above

	<ul style="list-style-type: none"> • 2010 - 0 • 2013 - 0 				
Quality of water bodies (Loch)	high status – 0 <ul style="list-style-type: none"> • 2010 - 0 • 2013 - 0 good status <ul style="list-style-type: none"> • 2010 - 1 • 2013 - 1 moderate status – 0 <ul style="list-style-type: none"> • 2010 - 0 • 2013 - 0 poor status – 2 <ul style="list-style-type: none"> • 2010 - 2 • 2013 - 2 bad status – 1 <ul style="list-style-type: none"> • 2010 - 1 • 2013 - 1 	No data	Same as above	Same as above	Same as above
Quality of water bodies (River)	high status <ul style="list-style-type: none"> • 2010 - 5 • 2013 - 5 good status <ul style="list-style-type: none"> • 2010 - 54 • 2013 - 52 moderate status <ul style="list-style-type: none"> • 2010 - 87 • 2013 - 87 poor status <ul style="list-style-type: none"> • 2010 - 31 • 2013 - 28 	high status <ul style="list-style-type: none"> • 2010 – no data • 2013 - 0 good status <ul style="list-style-type: none"> • 2010 - no data • 2013 - 0 moderate status <ul style="list-style-type: none"> • 2010 – no data • 2013 - 12 poor status <ul style="list-style-type: none"> • 2010: - no data • 2013: - 12 	Same as above	Same as above	Same as above

	bad status • 2010 - 12 • 2013 - 24	bad status • 2010 - 0 • 2013 - 0			
River Dee SAC - Present condition of qualifying interests dependant on water quality/quantity	Atlantic Salmon - Favourable Maintained Freshwater Pearl Mussel - Unfavourable No Change Otter - Favourable Maintained	Atlantic Salmon - Favourable Maintained Freshwater Pearl Mussel - Unfavourable No Change Otter - Favourable Maintained	No Trend	New development has the potential to put pressure on the River Dee SAC through water pollution/abst raction	SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) Source: <u>SNH 2009</u>

Appendix 3.4: SEA Topic - Soil

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Land contamination	4 statutorily identified contaminated sites	no statutorily identified contaminated sites in Aberdeen 900 potentially contaminated sites	Legal regime is in place to deal with contaminated sites therefore this position should improve in the future.	Contaminated land places financial and technological constraints on development.	Aberdeen City Council (2001) <i>Contaminated Land Inspection Strategy</i> http://www.aberdeencity.gov.uk/web/files/Pollution/ContaminatedLandInspectionStrategy.pdf Aberdeenshire Council (2009) <i>Public Register of Contaminated Land</i> http://www.aberdeenshire.gov.uk/environmental/strategy/PublicRegisterofContaminatedLandAug2009.pdf SEPA (2009) <i>Dealing with Land Contamination in Scotland: A review of progress 2000-2008</i> http://www.sepa.org.uk/land/land_publications.aspx
Prime agricultural land (Grades 1 to 3.1)	Aberdeenshires prime agricultural land is concentrated in central and southern Aberdeenshire. Grade 2 near Laurencekirk (approx 950ha) Aberdeen contains very little prime	Net loss of Scottish agriculture land from roads, housing and industry has doubled from 588ha in 1989 to 1,402ha in 2003.	Climate change could increase the level of prime agricultural land in Scotland, however this may cause conflicts with sites of high biodiversity value, sensitive or designated sites.	Potential impacts of climate may constrain prime agricultural land available in the future. Prime agricultural land may require further protection from	Scottish Executive Statistics (2005): <i>Economic Report on Scottish Agriculture</i> http://www.scotland.gov.uk/Publications/2005/06/2290402/05121 Scottish Government (2009): <i>The Scottish Soil Framework</i> http://www.scotland.gov.uk/Publications/2009/05/20145602/6

	agricultural land (300ha).			development as demand for development rises and as land for food production rises.	
Biodegradable Municipal waste landfilled (tonnes): LA Collected Bio-degradable MW	Aberdeenshire: 2007/08 – 70,286 2008/09 – 68,355 2009/10 – 65,864 2010/11 – 68, 832	Aberdeen City: 2007/08 – 67,322 2008/09 – 63,333 2009/10 – 55,654 2010/11 - 49,277	Exceeds , 2008/09; 2010/2011 allowance		SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9
Municipal waste landfilled (tonnes):	Aberdeenshire: 2007/08 – 105,750 2008/09 – 101,746 2009/10 – 98,262 2010/11 - 103,771	Aberdeen City: 2007/08 – 107,658 2008/09 – 101,136 2009/10 – 90,800 2010/11 - 80,578 Scotland's Zero Waste Plan (2010) aims for a recycling and composting rate of 70% by 2020.	There was not a substantial fall in municipal waste sent to landfill in Aberdeen City compared with Aberdeenshire for a number of years until 2009/10 when Aberdeen experienced a significant fall.	There has been no substantial drop in municipal waste sent to landfill which will have cost implications for the City in terms of Landfill Tax.	Scotland's Zero Waste Plan (2010) SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9

Municipal waste recycled (tonnes):	Aberdeenshire: 2007/08 – 38,432 2008/09 – 38,941 2009/10 – 40,614 2010/11 - 40, 578	Aberdeen City: 2007/08 – 19,527 2008/09 – 19,519 2009/10 – 19,728 2010/11 - 22, 278	The trend shows that much has to be done to substantially increase recycling rates. There is an increase in the City compared to a fall in the Shire	Human attitudes is very hard to change but education has to increase	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9
Municipal waste composted (tonnes):	Aberdeenshire: 2007/08 – 9,549 2008/09 – 9,684 2009/10 – 9,622 2010/11 – 9, 355	Aberdeen City: 2007/08 – 11,274 2008/09 – 11,423 2009/10 – 13,439 2010/11 - 15, 192	Composting rates has increase in the City compared to a fall recorded in the Shire over 2010/2011 figures	Same as above	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9
Total municipal waste arising (tonnes):	Aberdeenshire: 2007/08 – 153,731 2008/09 – 150,372 2009/10 – 151,010 2010/11 - 154,167	Aberdeen City: 2007/08 – 138,459 2008/09 – 132,078 2009/10 – 123,966 2010/11 - 118,049	Things are improving in the City but worsening in the Shire	Same as above	SEPA (2009) Waste Data Digest 12
% of Total waste arising recycled	2008/09 – 25.9 2009/10 – 26.9 2010/11 - 26.3	2008/09 – 14.8 2009/10 – 15.9 2010/11 - 18.9	Things are improving in the City but worsening in the Shire	Same as above	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9
% of Total waste arising composted	2008/09 – 6.4 2009/10 – 6.4 2010/11 - 6.1	2008/09 – 8.6 2009/10 – 10.8 2010/11 - 12.9	Things are improving in the City but worsening in the Shire	Same as above	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11 SEPA (2009) Waste Data Digest 10 SEPA (2009) Waste Data Digest 9

Industrial waste arisings (tonnes):	Aberdeenshire: 2009/10 – 136, 239 2010/11 - 141, 029	Aberdeen City: 2009/10 – 90, 087 2010/11 – 96, 040	Things are worsening in the City and the Shire	Same above	as	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11
Commercial waste arisings (tonnes):	Aberdeenshire: 2009/10 – 185,054 2010/11 - 183, 859	Aberdeen City: 2009/10 – 295, 207 2010/11 – 294, 458	Things are improving slightly in the City and the Shire	Same above	as	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11
Construction and demolition waste arisings (tonnes):	Aberdeenshire: 2009/10 – 365, 722 2010/11 - 316, 729	Aberdeen City: 2009/10 – 82, 880 2010/11 – 51, 952	Things are worsening in the City and the Shire	Same above	as	SEPA (2009) Waste Data Digest 12 SEPA (2009) Waste Data Digest 11
Waste capacity Annual capacity (Tonnes)	North east 2007 - 3,845,306 2008 - 3,741,977 2009 - 3,500,370* 2010 - 3,516,494* * Aberdeen City and Shire total	Scotland 2007 - 39,987,613 2008 - 37,843,490 2009 - 38,022,367 2010 - 38,009,045	No substantial change			www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -
Quantity of waste accepted (tonnes)	Northeast 2007 - 3,899,260 2008 - 1,748,964 2009 - 1,464,247* 2010 - 1,409,272* * Aberdeen City and Shire total	Scotland 2007 - 16,392,335 2008 - 17,684,064 2009 - 14,023,400 2010 - 15,966,129	No substantial change			www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -
Landfill capacity	Northeast 2007 - 164,824 2008 - 77,067 2009 - 41,867*	Scotland 2007 - 518,899 2008 - 453,990 2009 - 295,895	No substantial change			www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -

	2010 - 26,077*	2010 - 318,350			
Inert waste Landfilled	Northeast 2007 - 2,226,950 2008 - 2,597,185 2009 - 2,556,637* 2010 - 2,524,156	Scotland 2007 - 9,570,931 2008 - 10,867,340 2009 - 7,181,875 2010 - 13,609,135	No substantial change		www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -
Inert landfill capacity	Northeast 2007 - 606,999 2008 - 552,750 2009 - 451,001** 2010 - 383,899**	Scotland 2007 - 4,894,935 2008 - 4,541,536 2009 - 4,110,480 2010 - 4,043,451	No substantial change		www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -
Non hazardous landfilled Non hazardous landfill capacity	Northeast 2007 - 7,383,167 2008 - 6,782,674 2009 - 2,743,062 ** 2010 - 6,651,349 ** * Aberdeenshire data **Aberdeen City and Shire total	Scotland 2007 - 62,302,806 2008 - 70,192,059 2009 - 65,619,910 2010 - 63,977,097	No substantial change		www.sepa.org.uk/waste/waste_data/site_capacity_infrastructure/national_capacity_report_s.aspx and landfill capacity reports -
Peat soils	4 types of peaty soils <ul style="list-style-type: none"> Blanket peat Peaty podsols Peaty gleys 	With respect of the rest of Scotland Aberdeen City and Shire seem to be at the fringes of peat soils	Blanket peat is moderately distributed to the southwest of Aberdeen City and Shire and with a few dots in the northeast of the region Peaty podzol is densely distributed to the southwest of Aberdeen City and Shire and with a few dots in the northeast of the region	Because of the relationship between peat and climate change development must be directed away from peat soils	www.macaulay.ac.uk

	<ul style="list-style-type: none"> Organic soils rich in peat 		<p>Peaty gleys is sparsely distributed to the southwest of Aberdeen City and Shire and with a few dots in the northeast of the region</p> <p>Organic soils rich in peat is moderately distributed to the southwest of Aberdeen City and Shire and with a few dots in the northeast of the region</p>		
Soil Erosion	<p>From Berwick to Aberdeen, the coastline is eroding, but is stable where there are rocky coasts or coastal defences.</p> <p>From Aberdeen to Inverness the coastline is largely eroding, but parts are being replenished with sand and gravel from larger rivers.</p>	<p>The north of Scotland is mostly stable with little erosion, but south of Mallaig, towards Carlisle, the coastline is predominantly eroding but stable where there are rocky coasts or coastal defences.</p> <p>Precipitation will be greater in the west due to the west-east precipitation gradient.</p>	<p>The coastline is predominantly eroding along the east. Autumn/Winter rainfall is predicted to increase, giving rise to winter storms and affecting runoff and (wind and water) erosion.</p> <p>Upland schemes such as wind farm access roads and recreation tracks (e.g. mountain biking) on steep land can increase surface water runoff and lead to significant soil loss (e.g. gullies).</p>	<p>Increase in soil erosion from wind and water, bad land use practices, such as locating tracks/access roads on steep/ upland areas as well as using motorised vehicles on sand dunes.</p>	<p>Aberdeen City (2007) State of the Environment Report http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=15960&slD=883</p> <p>SEPA (2006) State of Scotland's Environment Report 2006 http://www.sepa.org.uk/science_and_research/data_and_reports/state_of_the_environment.aspx</p>

Appendix 3.5: SEA Topic - Biodiversity, Flora and Fauna

SEA Indicator	Quantified information	Comparators and Trends	Issues/ constraints	Data source(s)
International natural heritage designations (Ramsar)	<u>Aberdeenshire</u> – sites – 3 Hectares - 1051	<u>Aberdeen City</u> site – 0 hectare - 0	No trend	New development has the potential to put pressure on site SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) <i>Source: SNH 2009</i>
International natural heritage designations (Special Areas of Conservation (SAC))	<u>Aberdeenshire</u> – sites – 8 Hectares – 5545	<u>Aberdeen City</u> site – 1 hectare - 155	No trend	New development has the potential to put pressure on site SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) <i>Source: SNH 2009</i>
International natural heritage designations (Special Protection Areas (SPA))	<u>Aberdeenshire</u> – sites – 7 Hectares - 2227	<u>Aberdeen City</u> site – 0 hectare - 0	No trend	New development has the potential to put pressure on site SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) <i>Source: SNH 2009</i>
National natural heritage designations - Sites of Special Scientific Interest (SSSI)	<u>Aberdeenshire</u> – sites – 69 Hectares - 15,655	<u>Aberdeen City</u> site – 5 hectare - 47	No trend	New development has the potential to put pressure on site SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) <i>Source: SNH 2009</i>

National natural heritage designations National Nature Reserve (NNR)	<u>Aberdeenshire</u> – sites – 2 Hectares - 1072	<u>Aberdeen City</u> site – 0 hectare - 0	No trend	New development has the potential to put pressure on site	SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) Source: <u>SNH 2009</u>
Local Nature Conservation Sites (LNCS)	<u>Aberdeenshire</u> – sites – 79	<u>Aberdeen City</u> site – 16	No trend	New development has the potential to put pressure on site	Aberdeenshire Council internal data
Local natural heritage designations - Scottish Wildlife Trust Reserves	<u>Aberdeenshire</u> – sites – 4 Hectares – N/A	<u>Aberdeen City</u> site – 0 hectare – N/A	No trend	New development has the potential to put pressure on site	Aberdeenshire Council internal data
Local natural heritage designations - RSPB Reserves	<u>Aberdeenshire</u> – sites – 3 Hectares – N/A	<u>Aberdeen City</u> site – 0 hectare – N/A	No trend	New development has the potential to put pressure on site	Aberdeenshire Council internal data
Local natural heritage designations - Ancient Woodland	<u>Aberdeenshire</u> – sites – 2,584 Hectares - 45,000	<u>Aberdeen City</u> site – 140 hectare – N/A	No trend	New development has the potential to put pressure on site	SNH, SNHi http://gateway.snh.gov.uk/sitelink/index.jsp (Accessed 12 March 2013) Source: <u>SNH 2009</u>
Quality and availability of public open space in urban and rural areas	Data for Aberdeenshire Councils Open Space Audit was not available.	The Aberdeen City audit identified 3471 hectares of open space (not including private gardens or sites under 0.2 hectares). The quality of open space varies across the city with public parks and gardens	The poorest quality parks and open spaces tend to be found within the regeneration priority areas. It is more difficult to provide open space within densely populated areas.	Development pressure to build on urban open spaces. Revised standards for open space could encourage the development of more useful, publicly desirable and efficient types of open space,	Aberdeen City Council (2010) Open Space Audit

		rating the highest and allotments and business amenity open space scoring the lowest rating.		such as natural areas, green corridors, play spaces and allotments. This detail is likely to be taken forward through the local development plan and supplementary guidance.	
How "Protection of nature conservation sites" Policy is applied to Planning Applications	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 – 0 • 10/12- 06/13- 20 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 – 0 • 10/12- 06/13- 16 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 – 0 • 10/12- 06/13- 4 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent with safeguards are being approved	Aberdeenshire Council Monitoring Statement
How "Protection of the wider biodiversity and geodiversity" Policy is applied to Planning Applications	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 – 13 • 10/12- 06/13- 241 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 – 9 • 10/12- 06/13- 209 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 – 4 • 10/12- 06/13- 33 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent with safeguards are being approved	Aberdeenshire Council Monitoring Statement
How "Protection and conservation	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 – 1 • 10/12- 06/13- 30 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent	Aberdeenshire Council Monitoring Statement

of agricultural land" Policy is applied to Planning Applications	No of Approvals • 06/12-10/12 – 1 • 10/12- 06/13- 26 No of Refusals • 06/12-10/12 – 0 • 10/12- 06/13- 4			with safeguards are being approved	
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Appendix 3.6: SEA topic - Human Health

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/ constraints	Data source(s)
Quality and availability of public open space in urban and rural areas	Data for Aberdeenshire Councils Open Space Audit was not available.	The Aberdeen City audit identified 3471 hectares of open space (not including private gardens or sites under 0.2 hectares). The quality of open space varies across the city with public parks and gardens rating the highest and allotments and business amenity open space scoring the lowest rating.	The poorest quality parks and open spaces tend to be found within the regeneration priority areas. It is more difficult to provide open space within densely populated areas.	Development pressure to build on urban open spaces. Revised standards for open space could encourage the development of more useful, publicly desirable and efficient types of open space, such as natural areas, green corridors, play spaces and allotments.	Aberdeen City Council (2010) Open Space Audit
Life expectancy at birth (years)	<p>Aberdeenshire:</p> <p>Male</p> <ul style="list-style-type: none"> • 1998-2000 - 75.2 • 2003-2005 - 76.7 • 2008-2010 -78.2 <p>Female</p> <ul style="list-style-type: none"> • 1998-2000 - 80.2 • 2003-2005 – 81.0 • 2008-2010 – 81.7 	<p>Aberdeen</p> <p>Male</p> <ul style="list-style-type: none"> • 1998-2000 – 73.8 • 2003-2005 – 74.9 • 2008-2010 -76.3 <p>Female</p> <ul style="list-style-type: none"> • 1998-2000 – 79.1 • 2003-2005 – 79.9 • 2008-2010 – 80.9 <p>Scottish</p> <p>Men</p> <ul style="list-style-type: none"> • 1998-2000 – 72.9 • 2003-2005 – 74.2 	Life expectancy is improving year on year in the City and the Shire compared with Scottish figures. The Shire is faring much better than the City. In both the City and the Shire female life expectancy is much higher	Increasing life expectancy has longer-term cost implications for local authorities for service provisions for ageing population.	General Register Office for Scotland (2011). <i>Life Expectancy for areas in Scotland, 2008-2010</i> [Online] Available at http://www.gro-scotland.gov.uk/files2/stats/life-expectancy-areas-in-scotland/2008-2010/le-areas-scotland-2008-2010.pdf (Accessed 12 March 2013)

		<ul style="list-style-type: none"> • 2008-2010 - 75.5 Female <ul style="list-style-type: none"> • 1998-2000 - 78.4 • 2003-2005 - 79.2 • 2008-2010 - 80.4 			
Healthy life expectancy at birth (& 65) years	Aberdeenshire male <ul style="list-style-type: none"> • 1999-2000 -58.2 (9.7) • 2003-2005 - No data • 2008-2010 - No data female <ul style="list-style-type: none"> • 1999-2000 -60.7 (9.9) • 2003-2005 - No data • 2008-2010 - No data 	Aberdeen male <ul style="list-style-type: none"> • 1999-2000 -55.6 (7.4) • 2003-2005 - No data • 2008-2010 - No data female <ul style="list-style-type: none"> • 1999-2000 -57.3 (8.5) • 2003-2005 - No data • 2008-2010 - No data 	No trend	Healthy Life Expectancy represents the number of years that an individual can expect to live in good health.	Clark, D., McKeon, A., Sutton, M. and Wood, R. (2004) Healthy Life Expectancy in Scotland. <i>HLE Measurement in Scotland Steering Group</i> [online] Available from http://www.isdscotlandarchive.scot.nhs.uk/isd/files//HLE_report_2004.pdf (Accessed 12 March 2013)
Sport and recreation facilities in areas of identified need	Aberdeen and Aberdeenshire both require sporting facilities ranging from badminton courts and golf courses to swimming pools	No trend	Positive steps have been made to ensure everyone has access to sport, leisure and recreation facilities, however limited progress has been made to provide.	Local facilities will be addressed through the Local Development Plans although if regional sporting facilities are identified these	Aberdeen City Council (2002) Active Aberdeen 2002-2007: A sport, recreation and physical activity strategy for Aberdeen City Aberdeenshire Council (2005) Sports Facility Study Updated Report

				may come through the LDP.	
Care home place for Adults	Aberdeenshire 2012- 2,061	Aberdeen 2012 -2,036	No trend	Ageing population and disability will put pressure on resources	Aberdeen City Council (2013) Behind the Granite: Aberdeen Key Facts 2013 Available from http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=48078&slD=332 (Accessed 14 March 2013)
Children looked after by LA	Aberdeenshire 2009 - 458 2010 -496 2011- 498	Aberdeen 2009 - 701 2010 -690 2011- 642	Things are improving in the City compared with the Shire	Pressure on Government and LA resources	Same as above
Children on child protection register	Aberdeenshire 2009 - 81 2010 -51 2011- 68	Aberdeen 2009 - 180 2010 - 119 2011- 96	Things are improving in the City compared with the Shire where the situation improved in 2010 but rose again in 2011	Pressure on Government and LA resources	Same as above
All crimes recorded by police	Aberdeenshire 2009/10 - 8088 2010/11 -8064 2011/12- 7513	Aberdeen 2009/10 - 18729 2010/11 -18749 2011/12- 17877	Things are improving	Crime and fear of crime can affects people's quality of life	Same as above
Fuel poor households private tenure	Aberdeenshire 2009-11 -38%	Aberdeen 2009-11- 21%	Things are worsening	Worsening economy, longer winters, higher fuel prices and falling value of the pounds worsens the situation	Same as above
Fuel poor households public tenure	Aberdeenshire 2009-11 -26%	Aberdeen 2009-11- 29%	Things are worsening	Worsening economy, longer winters, higher fuel prices and falling value of the pounds worsens the situation	Same as above

Fuel poor	Aberdeenshire 2009-11 -35%	Aberdeen 2009-11- 23%	Things are worsening	Worsening economy, longer winters, higher fuel prices and falling value of the pounds worsens the situation	Same as above
Income support	Aberdeenshire Feb 2012 -2980	Aberdeen Feb 2012 -4420	No trend collected	Pressure on Government and LA resources	Same as above
Drug-related deaths	Aberdeenshire 2008 - 11 2009 -18 2010 - 10 2011 - 19	Aberdeen 2008 - 27 2009 - 27 2010 - 31 2011 - 39	No substantial improvement	Pressure on NHS, Government and LA resources	Same as above
Alcohol-related deaths	Aberdeenshire 2008 - 33 2009 -29 2010 - 20 2011 - 22	Aberdeen 2008 - 37 2009 - 52 2010 - 48 2011 - 33	No substantial improvement	Pressure on NHS, Government and LA resources	Same as above
Population with Disability	Aberdeenshire 2001 – 34755 (15.3%) 2013 – No data	Aberdeen 2001 – 37173 (17.0%) 2013 – No data	No trend collected	Pressure on Government and LA resources	Same as above
Unemployment	Aberdeenshire 20012 – 5 (2%) 2013 – No data	Aberdeen 2012– 22 (8%) 2013 – No data	Low unemployment in the City and Shire compared to the rest of the country	Pressure on Government and LA resources	Same as above
Most deprived data zones - SIMD	Aberdeenshire 20012 – 1858 (1.2%) 2013 – No data	Aberdeen 2012– 3180 (2.1%) 2013 – No data	No trend collected	Pressure on Government and LA resources	Same as above
Incapacity benefit	Aberdeenshire 20012 – 3810 2013 – No data	Aberdeen 2012– 4840 2013 – No data	No trend collected	Pressure on Government and LA resources	Same as above

Appendix 3.7: SEA Topic - Population

SEA Indicator	Quantified information	Comparators targets	and Trends	Issues/constraints	Data source(s)
Population Projection 2010-based	Aberdeenshire <ul style="list-style-type: none"> • 2010 – 245780 • 2011 - 248383 • 2012 - 251055 • 2013 - 253695 	Aberdeen <ul style="list-style-type: none"> • 2010 - 217120 • 2011 - 219539 • 2012 - 222231 • 2013 - 224898 	The projections show increasing population in the City and the Shire	It has implication for increased provision of housing, industry and services to meet the needs of growing population and therefore the potential pressure on resources	General Register Office for Scotland (2012). Population Projections for Scottish Areas (2010-based) http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html
Household projections	Aberdeenshire <ul style="list-style-type: none"> • 2010 – 103770 • 2015 - 110600 • 2020 - 117640 	Aberdeen <ul style="list-style-type: none"> • 2010 - 103680 • 2015 - 111440 • 2020 - 119280 	The projections show increasing households in the City and the Shire	Same as above	General Register Office for Scotland (2012). Household Projections for Scottish Areas (2010-based) http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html
Household size	Aberdeenshire <ul style="list-style-type: none"> • 2010 – 2.35 • 2015 – 2.32 • 2020 – 2.27 	Aberdeen <ul style="list-style-type: none"> • 2010 – 2.01 • 2015 – 1.99 • 2020 – 1.95 	The projections show falling household size in the City and the Shire	Same as above	General Register Office for Scotland (2012). Household Projections for Scottish Areas (2010-based) http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html
Population Change	Aberdeenshire <ul style="list-style-type: none"> • 2001 - 226940 • 2010 – 245780 • 2011 – 247600 • 10yrs' change – 4% • 1 yr's change - 0.7% 	Aberdeen <ul style="list-style-type: none"> • 2001 - 211910 • 2010 – 217120 • 2011 – 220420 • 10yrs' change -9.1% • 1 yr's change -1.5% 	Both areas are doing better than the Scottish average change of 0.6%. Over 10 years the City has added 8,520 persons to its population compared to the Shire's 20,660 addition	Components of population change by administrative area, mid-2010 to mid-2011 (30 June 2010 and 30 June 2011)	General Register Office for Scotland (2012) Components of population change by administrative area, mid-2010 to mid-2011. http://www.gro-scotland.gov.uk/statistics/publication

					s-and-data/population-estimates/index.html Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
Population Structure	Aberdeenshire <ul style="list-style-type: none"> • Under 16 -19% • Working Age -58% • Pensionable age - 20% • Median age -42 	Aberdeen <ul style="list-style-type: none"> • Under 16 -16% • Working Age -67% • Pensionable age - 17% • Median age -37 	A trend exists if data is collected on the basis of male/female. But no trend exists for data collected on the basis of total persons before 2011.	A large proportion of working age population means large future pensionable and ageing population.	General Register Office for Scotland (2012) Components of population change by administrative area, mid-2010 to mid-2011. http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
Population density	Aberdeenshire <ul style="list-style-type: none"> • Area – 6313km² • Density - 39 	Aberdeen <ul style="list-style-type: none"> • Area – 186 Km² • Density - 1187 	The density is higher in the city than the shire	There will be more pressure on resources provided in the City in one sense but less pressure on burning of fossil fuel on distance travelled in the City	General Register Office for Scotland (2012) Components of population change by administrative area, mid-2010 to mid-2011. http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>

Appendix 3.8: SEA Topic - Cultural Heritage

SEA Indicator	Quantified information	Comparators and Trends targets		Issues/constraints	Data source(s)
Listed buildings	Aberdeenshire <ul style="list-style-type: none"> • 2013– 3,715 	Aberdeen City Listed buildings <ul style="list-style-type: none"> • 2013– 1,212 Aberdeen City and Shire Listed buildings <ul style="list-style-type: none"> • 2013– 4,927 	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	Aberdeen City and Shire LDPA (2009) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
Listed buildings at risk	Aberdeenshire <ul style="list-style-type: none"> • 2013– 228 	Aberdeen City <ul style="list-style-type: none"> • 2013 – 26 Aberdeen City and Shire <ul style="list-style-type: none"> • 2013 – 254 	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	
Conservation Areas	Aberdeenshire <ul style="list-style-type: none"> • 2013 – 49 	Aberdeen City <ul style="list-style-type: none"> • 2013 – 11 Aberdeen City and Shire <ul style="list-style-type: none"> • 2013 – 60 	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	

Scheduled Ancient Monuments	Aberdeenshire • 2013- 581	Aberdeen City • 2013 - 44 Aberdeen City and Shire • 2013 - 625	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	
Archaeological Sites and Monuments Record	Aberdeenshire • 2013 - 17,631	Aberdeen City • 2013- 699 Aberdeen City and Shire • 2013 - 18,330	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	
Gardens and designed landscapes	Aberdeenshire • 2013- 27	Aberdeen City • 2013 - 1 Aberdeen City and Shire • 2013 - 28	No change	New development has the potential to put pressure on, or be constrained by, built and cultural sites. New development also has potential to maintain or enhance cultural sites	
Battlefields	Aberdeenshire Alford 1645 Barra 1308 Fyvie 1644 Harlaw 1411	Aberdeen City None	No change		http://data.historic-scotland.gov.uk/pls/htmldb/f?p=2500:10:0

Appendix 3.9: SEA Topic- Landscape

SEA Indicator	Quantified information	Comparators and Trends	Issues/constraints	Data source(s)	
Landscape character	<p>There are 42 landscape character areas in Aberdeenshire, including 9 within the CNP.</p> <p>In Aberdeen there are 27 landscape character areas.</p>	<p>The four Landscape Character Assessments that cover the North East provides a brief overview of past land use practices and discusses potential land uses for existing landscapes.</p>	<p>No trend</p>	<p>The inappropriate scale and insensitive siting of future new development may adversely affect landscape characteristics (e.g. changing its landscape character type, not respecting local topography/contours).</p> <p>New development not fitting in with the landscape's capacity to absorb further developments (e.g. design, layout and sense of place) – need to promote suitable development capacity.</p>	<p>Scottish Natural Heritage (1997) <i>National programme of landscape character assessment: Banff and Buchan</i>, Review No 37.</p> <p>Scottish Natural Heritage (1996) <i>Cairngorms landscape assessment</i>, Review No 75.</p> <p>Scottish Natural Heritage (1996) <i>Landscape character assessment of Aberdeen</i>, Review No 80</p> <p>Scottish Natural Heritage (1998) <i>South and Central Aberdeenshire: landscape character assessment</i>, Review No 102.</p>
<p>Landscape Devt in Energetica Framework Area (ALDP 01 Bus 5)</p>	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 2 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 2 <p>No of Refusals</p>	No data	No significant increase	No known constraint	Aberdeenshire Council Monitoring Statement

	<ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 				
Landscape Layout, siting, and design of new developments ALDP 08 Isd2	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 - 53 • 10/12- 06/13 - 1296 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 40 • 10/12- 06/13 - 1169 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 -13 • 10/12- 06/13 - 127 	No data	Significant application of policy	There could be mixed effect for landscape	Aberdeenshire Council Monitoring Statement
How “Landscape character” Policy is applied to planning applications	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 – 21 • 10/12- 06/13- 187 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 13 • 10/12- 06/13- 130 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 7 • 10/12- 06/13- 57 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent with safeguards are being approved	Aberdeenshire Council Monitoring Statement
How “Valued views” Policy is applied to Planning Applications	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 – 2 • 10/12- 06/13- 19 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 2 • 10/12- 06/13- 16 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 0 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent with safeguards are being approved	Aberdeenshire Council Monitoring Statement

	<ul style="list-style-type: none"> • 10/12- 06/13- 3 				
How "Public open space" Policy is applied to Planning Applications	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 – 9 • 10/12- 06/13- 31 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 8 • 10/12- 06/13- 21 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 – 1 • 10/12- 06/13- 10 	No data	Number of applications have increased	Applications with LSE are being refused while applications consistent with safeguards are being approved	Aberdeenshire Council Monitoring Statement
Land Uses (2009)	Aberdeenshire (6313 sq km) 631300 ha	Aberdeen City (186 sq km) 18600 ha		Ongoing conflict between how maintenance and quality is open space is perceived – Maintenance, grass cutting vs. allowing some open space to develop into semi-natural vegetation so as to enhance biodiversity.	Aberdeenshire Council Open Space Audit Aberdeen City Open Space Audit
• Roads and tracks	3.90	884.57	No Trend	Same as above	Same as above
• Roadside (manmade)	0.00	307.99	No Trend	Same as above	Same as above
• Parking/loading	0.42	650.30	No Trend	Same as above	Same as above
• Roadside (unknown)	0.31	68.54	No Trend	Same as above	Same as above
• Tidal water	0.00	172.66	No Trend	Same as above	Same as above
• Foreshore/rocks	72.88	511.77	No Trend	Same as above	Same as above
• Railway	0.00	81.25	No Trend	Same as above	Same as above
• Path	4.86	92.83	No Trend	Same as above	Same as above
• Residential	6.50	688.84	No Trend	Same as above	Same as above

• Commercial/Institutional	2.53	228.28	No Trend	Same as above	Same as above
• Glasshouses	0.00	2.32	No Trend	Same as above	Same as above
• other structures	2.22	16.62	No Trend	Same as above	Same as above
• Airports	0.00	183.97	No Trend	Same as above	Same as above
• Public Park and Garden	114.34	265.01	No Trend	Same as above	Same as above
• Private Garden	41.20	1698.45	No Trend	Same as above	Same as above
• School Grounds	74.24	124.01	No Trend	Same as above	Same as above
• Institutional Grounds	14.43	77.28	No Trend	Same as above	Same as above
• Amenity Residential	125.93	483.85	No Trend	Same as above	Same as above
• Amenity Business	69.06	207.16	No Trend	Same as above	Same as above
• Amenity Transport	51.49	249.07	No Trend	Same as above	Same as above
• Play space	28.75	4.56	No Trend	Same as above	Same as above
• Playing Fields	93.63	117.69	No Trend	Same as above	Same as above
• Golf Courses	225.35	676.56	No Trend	Same as above	Same as above
• Tennis Courts	3.85	3.84	No Trend	Same as above	Same as above
• Bowling Greens	2.91	3.58	No Trend	Same as above	Same as above
• Other Sports	7.85	7.73	No Trend	Same as above	Same as above
• Green Corridors/Riparian Routes	0.14	0	No Trend	Same as above	Same as above
• Green Access Routes	4.15	24.19	No Trend	Same as above	Same as above
• Riparian Routes	35.54	28.12	No Trend	Same as above	Same as above
• Woodlands	188.85	761.69	No Trend	Same as above	Same as above
• Open Semi-natural	162.68	818.69	No Trend	Same as above	Same as above
• Open Water	0.15	281.48	No Trend	Same as above	Same as above
• Allotment	5.55	20.50	No Trend	Same as above	Same as above
• Church Yard	7.10	4.77	No Trend	Same as above	Same as above
• Cemetery	14.26	35.67	No Trend	Same as above	Same as above
• Other Functional Grounds	15.32	12.46	No Trend	Same as above	Same as above

• Civic space	10.95	0.72	No Trend	Same as above	Same as above
• Farmland	12.06	4363.81	No Trend	Same as above	Same as above
• Moorland	0.03	0.34	No Trend	Same as above	Same as above
• other e.g landfill, quarry	14.05	98.42	No Trend	Same as above	Same as above
• Area undergoing change	31.05	26.55	No Trend	Same as above	Same as above
• Total Greenspace area surveyed (ha)	1,448.51	14, 286.13	No Trend	Same as above	Same as above
• Un-surveyed Greenspace area (ha)	626,851.49	4,313.87	No Trend		Same as above

Appendix 3.10: SEA Topic - Material Assets

SEA Indicator	Quantified information	Comparators and Trends	Issues/constraints	Data source(s)	
Existing flood defences	There are 3 flood prevention schemes in Aberdeenshire and 2 in Aberdeen City.		Flood defence schemes will progressively be affected by soil/sand erosion from increasing rainfall and storm events, which will affect their stability and effectiveness. As a result, there will be a need to increase the maintenance these defences, and possibly relocate them.	<p>Predicted rise in sea level may result in existing flood defences being inadequate.</p> <p>The predicted rise in storm events and winter precipitation is likely to increase soil/sand erosion from the wind and rain/water, which may prevent flood defence schemes functioning properly and result in their failure (e.g. collapse).</p> <p>Office of Science and Technology (2005) Foresight report: <i>Future Flooding Scotland</i> http://www.foresight.gov.uk/Scotland/Final_Scotland.pdf</p> <p>SEPA (2006) Indicative River & Coastal Flood Map (Scotland)</p> <p>Aberdeenshire Council (2007) <i>Flooding in Aberdeenshire: Sixth Biennial Report</i> http://www.aberdeenshire.gov.uk/flooding/report/6th_biennial_report.pdf</p>	
Council tax Band D	Aberdeenshire 2010/11 - £1141 2011/12 - £1141	Aberdeen 2010/11 - £1230 2011/12 - £1230	No change	Government policy on keeping household costs down affects how much councils can charge	Aberdeen City Council (2013) Behind the Granite: Aberdeen Key Facts 2013 Available from http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=48078&SID=332 (Accessed 14 March 2013)
Household tenure - owner occupied	Aberdeenshire 2009/10 - 74%	Aberdeen 2009/10 - 60%	Substantial owner housing in City and Shire although it is higher in the Shire	House prices for first time buyers may be a constraint as so is the general economic climate	Same as above
Household tenure - social rent	Aberdeenshire 2009/10 - 17%	Aberdeen 2009/10 - 24%	Low compared those living in their own homes	Ability of social landlords to build more homes	Same as above

Household tenure - private rent	Aberdeenshire 2009/10 - 8%	Aberdeen 2009/10 - 14%	Lowest tenure	Probably open market rental values will constrain choice in this sector	Same as above
Public-sector housing stock	Aberdeenshire March 2012 - 12,877	Aberdeen March 2012 - 22,740	No trend collected	Issue is energy efficiency in this sector	Same as above
New Dwellings - Housing Completion	Aberdeenshire 2007/08 - 1,528 2008/09 - 1,509 2009/10 - 1,687 2010/11 - 1,471	Aberdeen 2007/08 - 928 2008/09 - 258 2009/10 - 280 2010/11 - 607	Fall in the latest data for the Shire but a rise in the latest data for the City	The economic climate can constrain how many new houses could be completed	
Economic Activity Rates,	Aberdeenshire 2012 - 82.6%	Aberdeen 2012 - 83.0%	Quite high for the City and the Shire	The oil industry seems to be boosting performance in the North East	Same as above
Average Gross Weekly earnings	Aberdeenshire 2011/12 - £456.7	Aberdeen 2011/12 - £574.9	Quite high for the City and the Shire compared with national average	The oil industry seems to be boosting performance in the North East	Same as above
Supply/delivery of Affordable Housing	Aberdeen City and Shire: 2004/05 - 246 2005/06 - 213 2006/07 - 130 2007/08 - 168 2008/09 - 312 5 year average - 214 (average of 10% of annual completions)		The supply of affordable homes in the North East is not meeting the demand but the latest data shows an increase of supply.	There is a need to review the proportion of affordable housing in new build.	Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>

<p>Employment Land supply (see tables below)</p>	<p>The supply of immediately available employment land in Aberdeen is dispersed over six sites and is currently around 30% of the marketable supply. The marketable supply of employment land in Aberdeen City currently stands at 91ha. However, only 31ha of this is immediately available.</p> <p>The marketable supply of employment land in the Aberdeenshire SGAs currently stands at 146ha. Of this total, only 20ha is immediately available.</p>		<p>Aberdeen City has shown a trend of diminishing established supply of land for business use as allocations are built out. However, the marketable supply has recovered following the inclusion of the significant site at Murcar in the adopted Aberdeen Local Plan 2008.</p> <p>For Aberdeenshire, (within the strategic growth areas), there has been a trend of diminishing established supply of land for business use. The marketable supply has remained around a consistent level.</p>	<p>Uneven supply of employment land has impacts on ability to work and live within a close proximity thus increasing the likelihood of people travelling to work by private means. Economic growth will be constrained without a reasonable supply of land which is immediately available.</p>	<p>Aberdeen City and Shire LDPA (2013) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i></p> <p>Aberdeen City and Shire LDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i></p>
<p>Quality of Life</p>	<p>In 2007 Aberdeenshire was top overall for the best quality of life of 32 local authorities in Scotland.</p> <p>In May 2008 Aberdeenshire had the best quality of life amongst rural areas in Scotland.</p>	<p>On several indicators, Aberdeenshire ranks above the Scottish average, including employment rate (82.6% compared to the national average of 76.6%) and school qualifications (84% achieve five or more SCQF level 4 awards</p>			<p>Bank of Scotland's Rural Quality of Life Survey 2009</p>

	<p>November 2008 Aberdeenshire came second in the list of areas enjoying the best overall quality of life.</p> <p>In March 2009 Aberdeenshire came out top amongst ten other rural local authorities.</p>	<p>compared to the Scotland average of 79%).</p> <p>Residents also enjoy a relatively good climate; there is, on average, less rainfall per year (999mm against the Scotland average of 1,295mm) and slightly more weekly sunshine hours (25.5 hours against the Scotland average of 24.9).</p>			
<p>MA Housing Allocations 2007-2016 ALDP 05 hsg 1</p>	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 -13 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 9 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 4 	No data	No significant increase	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement
<p>MA Housing Allocations 2017-2023 early draw down ALDP 05 hsg 2</p>	<p>Applications Received</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 -1 <p>No of Approvals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 1 <p>No of Refusals</p> <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 	No data	No significant increase	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement

MA Affordable Housing ALDP 06 ahsg 1	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 4 • 10/12- 06/13 -18 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 2 • 10/12- 06/13 - 13 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 -2 • 10/12- 06/13 - 5 	No data	Number of applications have increased	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement
MA Gypsies and Travellers ALDP 07snh3	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 	No data	No application		Aberdeenshire Council Monitoring Statement
MA Town centres and retailing (ALDP 02 rtl1)	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 4 • 10/12- 06/13 - 37 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 4 • 10/12- 06/13 - 37 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 	No data	Number of applications have increased	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement
MA Retail development in the	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 1 No of Approvals	No data	No discernible increase	No known constraint	Aberdeenshire Council Monitoring Statement

countryside ALDP 02 rt12	<ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 1 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 0 				
MA Housing and business devt in the countryside ALDP 03 rd1	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 12 • 10/12- 06/13 - 403 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 7 • 10/12- 06/13 - 349 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 5 • 10/12- 06/13 - 54 	No data	Number of applications have increased	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement
MA Enabling development ALDP 10 ed 1	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 5 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 1 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 4 	No data	No discernible increase	No known constraint	Aberdeenshire Council Monitoring Statement
MA Tourist facilities and accommoda tion (ALDP 01 Bus 4)	Applications Received <ul style="list-style-type: none"> • 06/12-10/12 - 8 • 10/12- 06/13 - 24 No of Approvals <ul style="list-style-type: none"> • 06/12-10/12 - 8 • 10/12- 06/13 - 21 No of Refusals <ul style="list-style-type: none"> • 06/12-10/12 - 0 • 10/12- 06/13 - 3 	No data	Number of applications have increased	This is likely to have positive effects for the creation of assets	Aberdeenshire Council Monitoring Statement

Appendix 3.11: Employment Land Supply additional information

Aberdeenshire SGAs

	Established	Constrained	Marketable	Immediately Available	Under Construction
2006	272	118	155	39	10
2007	271	112	157	30	8
2008	266	104	162	24	3
2009	246	99	146	20	2
2011	257	-	161	60	-

Aberdeen City SGA

	Established	Constrained	Marketable	Immediately Available	Under Construction
2006	239	181	40	34	1
2007	235	171	53	27	7
2008	225	171	42	24	10
2009	217	103	91	31	2
2011	210	-	87	60	-

N.B Data only covers those areas within Strategic Growth Areas within Aberdeen City and Aberdeenshire.

Appendix 3.12: Climate Change and Potentially Vulnerable Areas

	No of PVAs	Annual Average Damage	River Flooding	Coastal Flooding	Surface Water Flooding	Total Area (Km 2)	Property in PVA (Resid.)	Property in PVA (Non-Resid.)	Land Cover in PVA (Urban)	Land Cover in PVA (Agric)	Land Cover in PVA (Forestry)
Aberdeen City	9										
Buchan Coastal (Bridge of Don)		£390,000	3%	0%	97%	5	27 (1.1%)	8 (4.6%)	70%	30%	0%
Aberdeen North Coastal (Seaton)		£920,000	30%	11%	59%	31	137 (1.2%)	7 (1.3%)	100%	0%	0%
River Don (Danestone)		£3,600,000	63%	4%	33%	47	407 (2.7%)	29 (5.9%)	85%	15%	0%
River Don (Dyce)		£1,070,000	43%	0%	57%	11	75 (1.9%)	23 (4.3%)	25%	58%	17%
Aberdeen South Central (Kincorth)		£1,000,000	52%	19%	29%	166	64 (1.3%)	24 (6.1%)	95%	0%	4%
Aberdeen South Central (Rosemount)		£13,020,000	48%	22%	30%	63	918 (2.2%)	260 (7%)	76%	21%	2%
River Dee (Cults)		£1,020,000	35%	9%	56%	4	96 (0.9%)	22 (4.9%)	22%	62%	16%
River Dee (Peterculter)		£1,370,000	67%	0%	33%	17	219 (13.8%)	2 (2.9%)	20%	67%	13%
		£22,390,000				344					
Aberdeenshire	18										
Banff Coastal (Banff)		£2,900,000	15%	25%	60%	39km2	286 (6.2%)	52 (14%)	9%	85%	5%
River Devron (Huntly)		£1,330,000	66%	0%	34%	20km2	163 (6.8%)	17 (6.9%)	11%	86%	3%
River Devron (Turff)		£390,000	48%	0%	52%	32km2	25 (1.3%)	12 (6.3%)	19%	78%	3%

Buchan Coastal (Ellon)		£460,000	64%	3%	33%	75km2	32 (1.9%)	12 (5.3%)	15%	85%	0%
Buchan Coastal (Peterhead)		£870,000	11%	50%	39%	32km2	58 (.6%)	19(2.6%)	24%	73%	0%
Buchan Coastal (Fraserburgh)		£540,000.	8%	49%	43%	40km2	37 (0.6%)	12 (2.3%)	10%	83%	7%
Buchan Coastal (Newmachar)		£290,000.00	19%	0%	81%	10km2	42 (2.5%)	1 (1.9%)	32%	55%	9%
River Ythan (Ellon)		£700,000.00	67%	0%	33%	53km2	99(3.6%)	3 (3.1%)	17%	83%	0%
River Ythan (Methlick)		£610,000.00	44%	0%	56%	8km2	41 (12.3%)	15 ((38.5%)	0%	92%	8%
River Don (Strathdon)		£300,000.00	55%	0%	45%	28km2	12 (15%)	8 (34.8%)	0%	32%	68%
River Don (Port Elphinstone/Kintore/Inverurie)		£1,930,000.00	60%	0%	40%	4km2	239 (3.6%)	20 (3.4%)	7%	86%	7%
River Dee (Ballater)		£1,310,000.00	77%	0%	23%	54km2	181 (18.6%)	13 (8.9%)	14%	23%	63%
River Dee (Westhill)		£350,000.00	16%	0%	84%	36km2	42 (1.4%)	4 (1.7%)	11%	80%	9%
River Dee (Aboyne)		£1,020,000.00	33%	0%	67%	77km2	107 (7.8%)	19 (10.3%)	1%	49%	49%
Kinkandine and Angus Coastal (Stonehaven)		£4,080,000.00	0.36	0.55	0.09	21km2	456 (8.6%)	65 (15.2%)	4%	77%	16%

Appendix 3.13 – maps of relevant information

Map 1: Existing woodland

Map 2: Protected sites

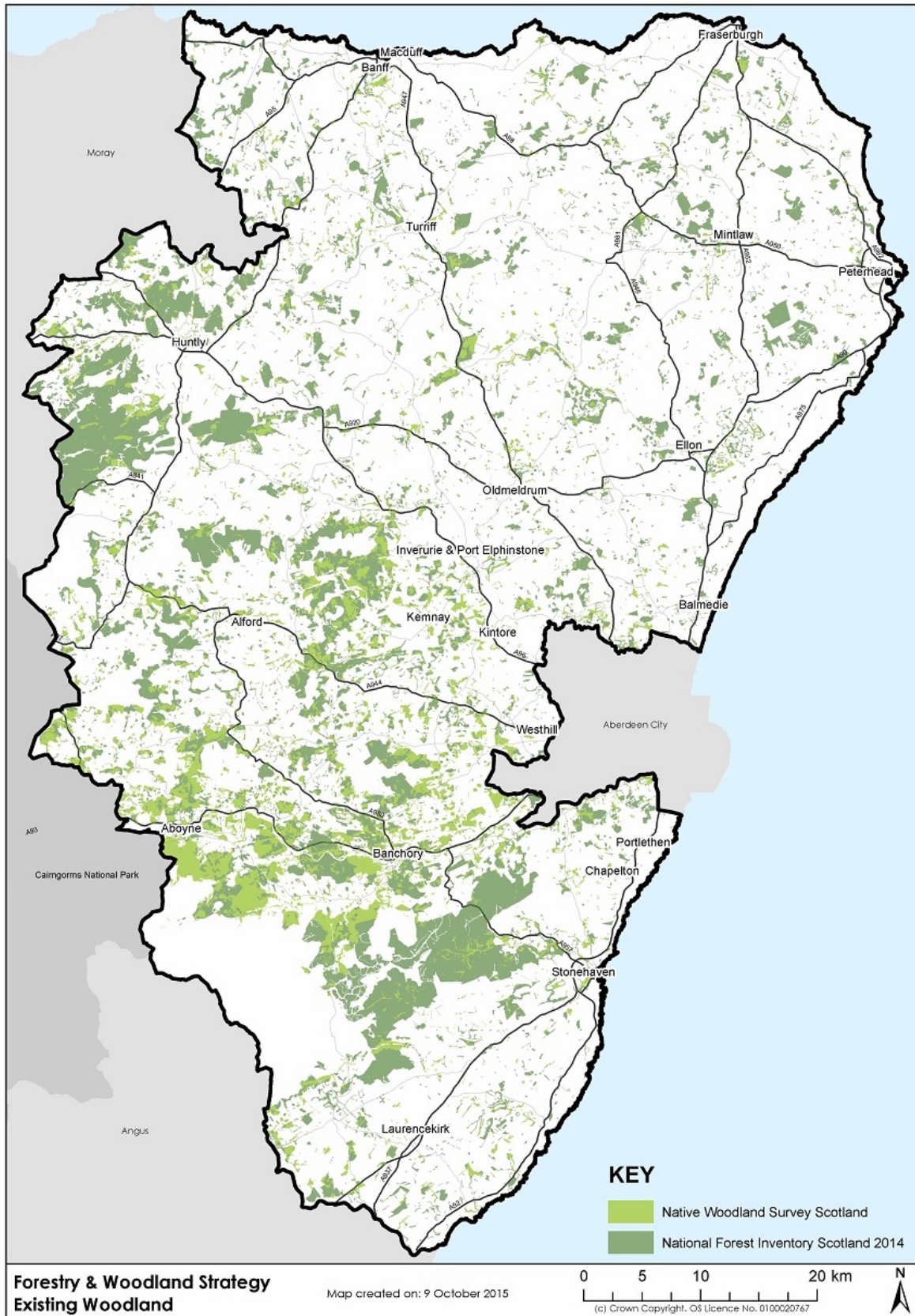
Map 3: Existing settlements and development allocations

Map 4: Prime Agricultural Land

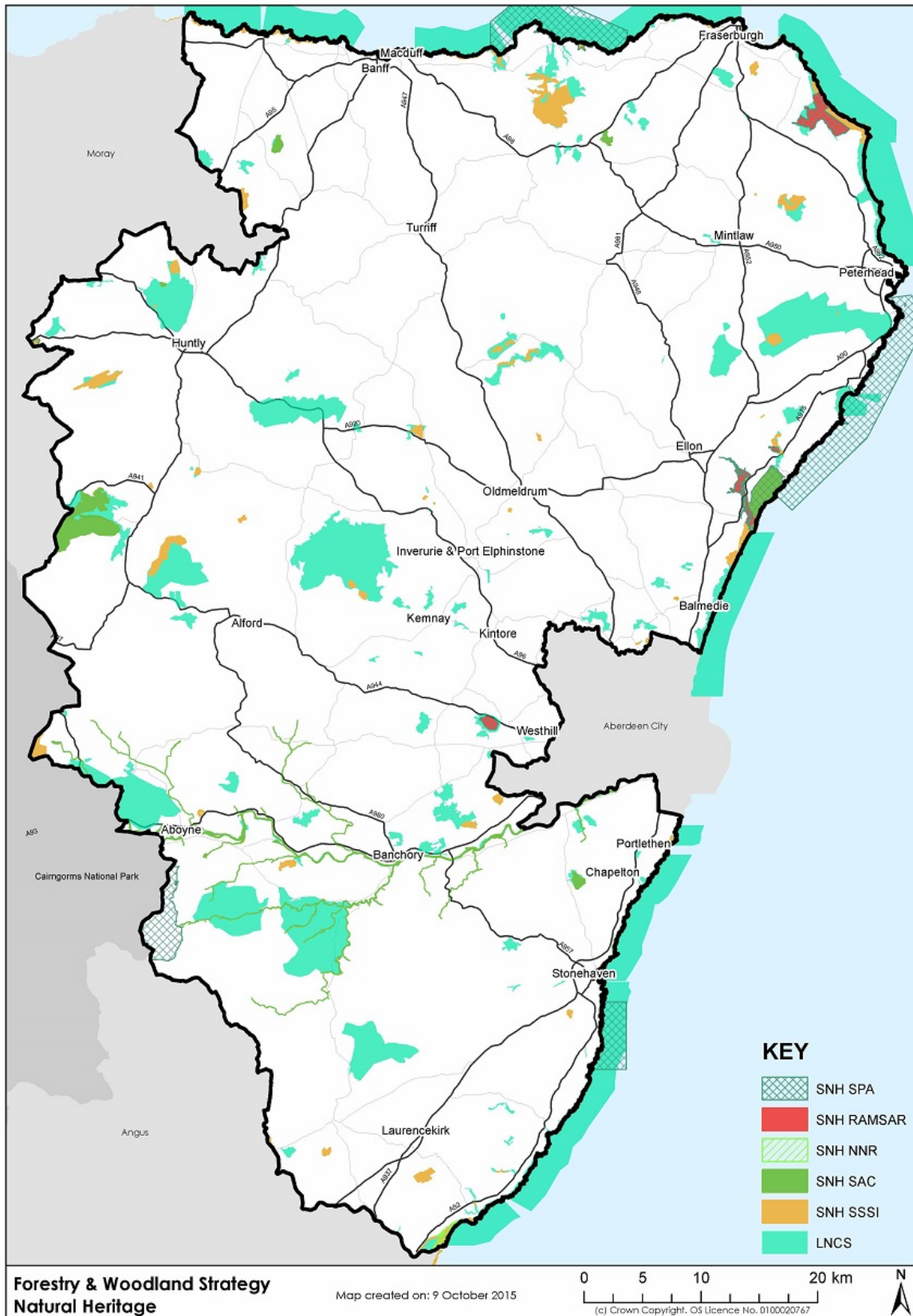
Map 5: Cultural Heritage

Map 6: Carbon Rich Soils

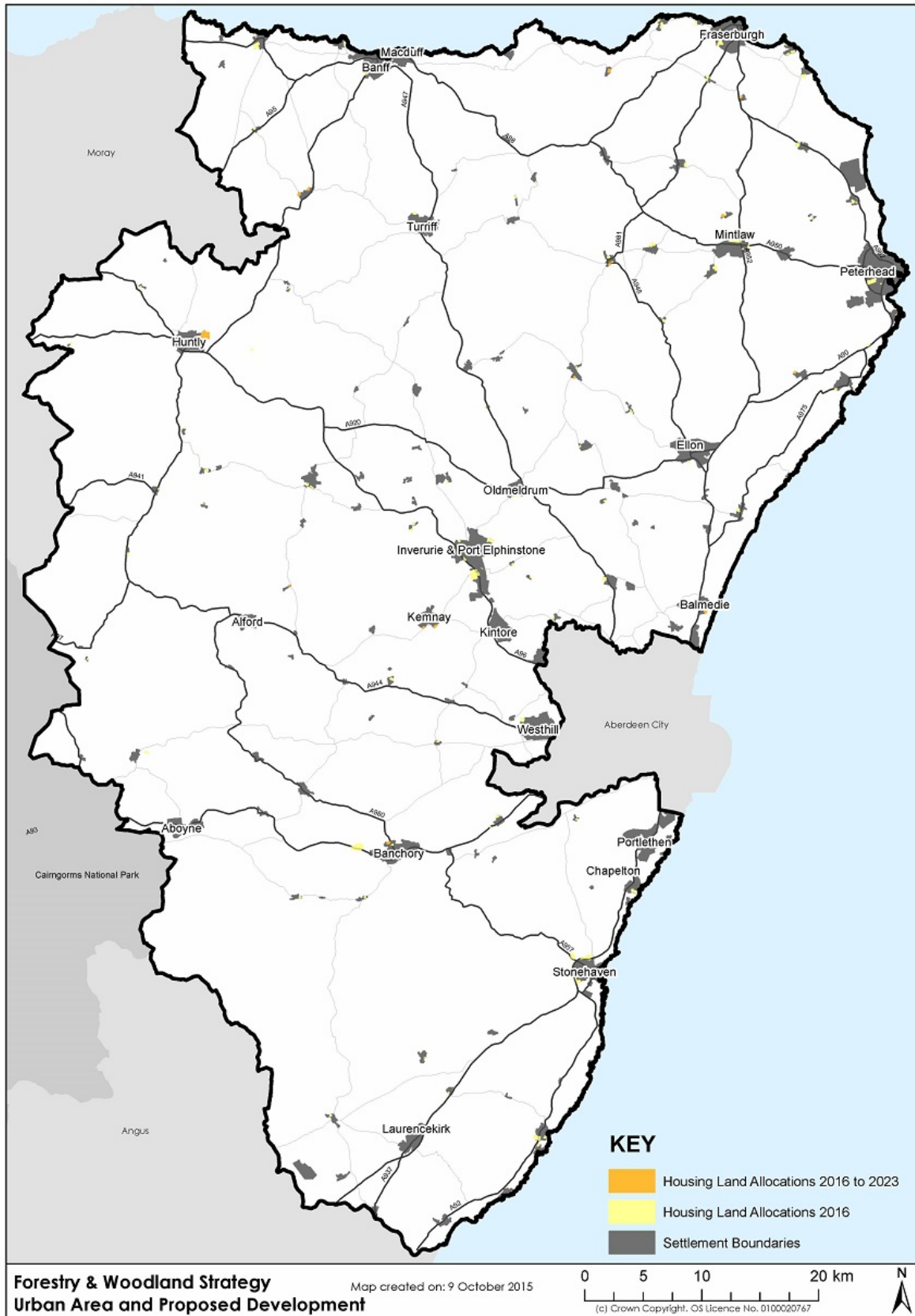
Map 1: Existing Woodland



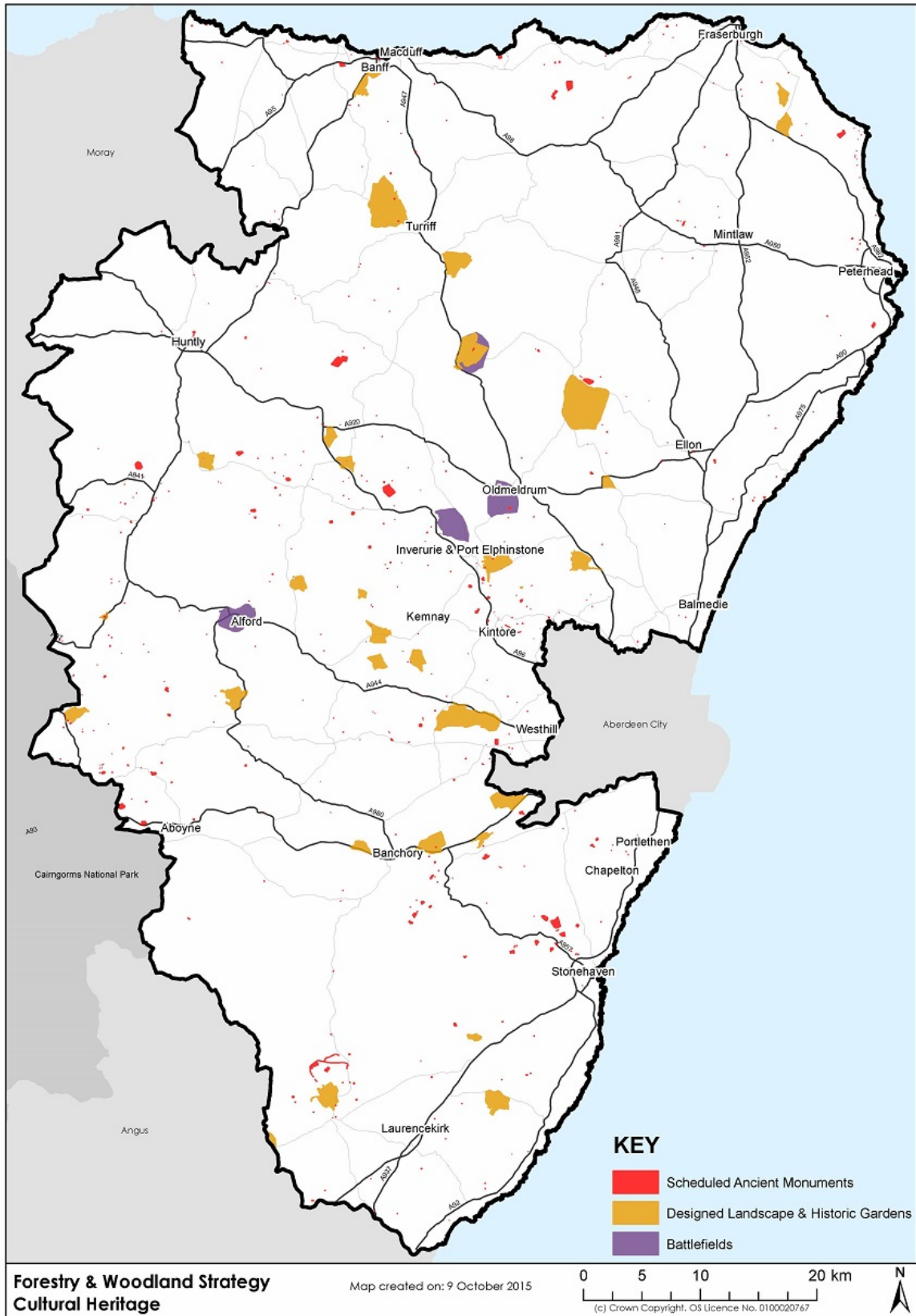
Map 2: Protected sites (note a number of designations overlay each other at various sites)



Map 3: Existing Local Development Plan settlements and development allocations



Map 5: Cultural Heritage



Map 6: Carbon Rich Soils

