



Dumfries and Galloway  
Local Development Plan

# Dumfries and Galloway Forestry and Woodland Strategy

## SEA Environmental Report

July 2013



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**SEA ENVIRONMENTAL REPORT**

**COVER NOTE**

**PART 1**

To:

[SEA.gateway@scotland.gsi.gov.uk](mailto:SEA.gateway@scotland.gsi.gov.uk)

**PART 2**

**An Environmental Report is attached for:**

Dumfries and Galloway Forestry and Woodland Strategy

**The Responsible Authority is:**

Dumfries and Galloway Council

**PART 3**

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**PART 4**

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## NON-TECHNICAL SUMMARY

This is a non-technical summary of the Environmental Report (ER) which documents the Strategic Environmental Assessment (SEA) of the draft Dumfries and Galloway Forestry and Woodland Strategy (DGFWS) which provides a region wide strategy in relation to the use of land for trees, woodland and forestry and associated economic, social and environmental considerations within the Dumfries and Galloway region.

The DGFWS covers the whole of the Dumfries and Galloway region and will be an important document in influencing the future development, management and conservation of woodlands and forestry in the region, providing guidance, advice and recommendations under the following themes:

- Woodlands and the Environment
- Woodlands and Sustainable Economic Growth
- Woodlands and Climate Change
- Woodlands for People
- Woodlands and Development Management

The Strategy is structured around these themes and will include action points and recommendations to allow for its implementation and monitoring.

The DGFWS will be of benefit to a range of users and interested parties including developers, local community groups, national bodies and consultees. The DGFWS, once formally approved after public consultation, will provide the Council's strategy in relation to forestry and woodland developments, be a material consideration in responding to woodland proposals in its role as a consultee and will also feed into other strategies and programmes relating to economic development and recreation within the region.

An SEA is required under the Environmental Assessment (Scotland) Act 2005 in order to determine the potential environmental effects of implementing the DGFWS. SEA aims to:

- integrate environmental factors into the preparation and decision making in relation to plans, programmes and strategies (PPS);
- improve PPS and enhance environmental protection;
- increase public participation in decision making; and
- facilitate openness and transparency in decision making

The parameters for the SEA have been established through a Scoping exercise. The comments received from the Consultation Authorities (Historic Scotland, SEPA and SNH) in respect of the Scoping Report have been considered and, where appropriate, included within the ER. The following are the main purposes of the ER:

- to provide information on the DGFWS;
- to identify, describe and evaluate the likely significant effects of the DGFWS and its reasonable alternatives; and
- to provide an early and effective opportunity for the Consultation Authorities and the public to offer views on any aspect of this report

The SEA process for the draft DGFWS followed established methods and systematic testing of the DGFWS as it developed. This involved testing the draft DGFWS objectives against the SEA objectives, predicting the environmental effects of implementing the draft DGFWS, considering mitigation measures and preparing a monitoring programme. The conclusions from each stage of SEA are summarised in sections below. The public and stakeholders have had the opportunity to comment

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upon the development of the DGFWS, ER and its impacts and where appropriate amendments have been made.

The SEA evaluation requires an understanding of the environmental characteristics of the Council area. Environmental issues at an area-wide level that have been identified in the Scoping Report are as follows:

- BIODIVERSITY, FLORA AND FAUNA:

The conservation of biodiversity is an essential part of sustainable forest management. Biologically diverse forests contribute to the diversity and sustainability of the wider landscape, provide a range of ecosystem services, such as nutrient re-cycling, and provide opportunities for people to experience nature close at hand. Although many species have benefited from the expansion of forest cover over the last 100 years the benefits have been limited due to the large scale planting of non-native tree varieties and in some cases such planting has been detrimental to biodiversity due to the removal and disruption to semi-natural habitats. Agricultural intensification has also resulted in the loss of woodland biodiversity.

Through changes in forest practices and policies since the 1970s, which have given a higher priority to the environmental benefits of forest planting and restructuring, forests and woodlands have become more diverse through the use of native tree species, managing and restoring ancient woodland, creating new areas of native woodland and improving habitat conditions for priority woodland species. Species and habitats are still at risk from unsympathetic or inappropriate management and the long-term effect of habitat fragmentation and degradation. A balance needs to be found between achieving biodiversity benefits from restructuring existing forestry and expanding native woodlands with improving some habitats by removing trees or undertaking more controlled planting and there are also issues of balancing this with economic/income generation aims.

The region has a diverse and varied range of environments creating a broad collection of habitats and is widely known for the diversity of its wildlife partly due to its wide topographical variations. The region forms the southern limit of many northern species and the northern limit to many southern species.

Forest and woodlands cover approximately 28% of the land area of Dumfries and Galloway which, along with agriculture, forms the predominant land-uses in this mainly rural landscape. However, tree cover is dominated by conifers with less than 10% being broad leaved varieties, a lower percentage of which are native species, and a lower still percentage are ancient semi-natural woodlands, which are generally regarded as the most valuable for biodiversity. Although many of these high nature conservation value sites are locally, nationally or internationally designated, they are generally small in extent and highly fragmented in distribution. Some parts of the region, notably Wigtownshire, have barely any native woodland at all.

The region is also noted for its peatlands (holding approximately 5.4% of all UK peatlands over 1m in depth). Such habitats are now recognised for their carbon storage capacity, as well as their biodiversity. However many were afforested in the 20<sup>th</sup> century and now require restoration if their carbon and biodiversity benefits are to be maintained.

- POPULATION AND HUMAN HEALTH:

Forestry provides an important role in local communities through both employment opportunities and the local economy (employing around 3000 people directly and indirectly in the region) and in relation to public health and recreational opportunities. The quality of the physical environment is important for health and

wellbeing. Forests and woodlands are seen as having an invaluable role in promoting health opportunities within green environments to increase life expectancy and reduce health inequalities through motivating people to visit and take exercise.

The region is a rural area with farming and forestry being the dominant land-uses. The settlement pattern is one of small settlements spread across a large area. Over a quarter of the population live more than 30 minutes drive from a large town and a large number of people live in small communities of 4,000 or less or in the countryside. The largest town is Dumfries with a population of about 37,000, followed by Stranraer with around 10,500 and Annan with over 8,000. The population of the area has remained relatively steady over many years, but for the projection period until 2031 the underlying demographic characteristics indicate a slight decline in the overall figure. There is a declining birth rate and an average age for the population of 42, compared to the Scottish average of 38.

Training resources in the forestry sector in the region are still in need of further development although Barony College, Parkgate is now providing courses specifically designed for the forestry and timber industry.

Tourism is also an important rural industry in the region and is the only sector that is growing annually even though the tourism economy of the region is considered to be fragile and underdeveloped.

Forestry Commission Scotland (FCS) has developed recreational facilities designed to meet both the needs of visitor and assist the local tourism economy. Such facilities could be developed further (the visitor centres in the Galloway Forest Park are currently being refurbished/extended) and improvements and additions could be made to recreational routes (walks and cycle paths) not only for visitors but to improve the health of residents as well.

- SOIL:

Soil is a complex, and variable medium comprising mineral particles, organic matter, water, air and living organisms which can provide an important habitat in their own right. Forestry practices can raise issues in relation to contamination, compaction and erosion of soils. The management of forests and woodlands can have major impacts on the soils through such activities as drainage, cultivation, use of fertilisers and chemical process, planting, harvesting, road building, etc. Impacts on soil quality, and on the function of soils in storing carbon, can occur in areas of low pH/high carbon soils. Forestry and woodlands can contribute positively to soil and slope stabilisation, particularly in relation to increased rainfall associated with climate change.

The soils reflect the glacial past and the climate rather than solid geology. Only at higher elevations and on the steeper slopes is the underlying rock type evident in soil formation.

Peaty soils make up the majority of soil types in the region.

- WATER:

Forests and their management can affect the quantity and quality of water moving through catchments. Poor forest management can lead to increased acidification, exacerbate water shortages, contribute to local flooding and increase soil and stream erosion, turbidity, sedimentation and pollution. Planting and harvesting can have an effect on all of these issues. The relationship between forest and water differs from uplands to lowlands and between forest types. Woodland and forestry have the potential to contribute to catchment wide approaches to flood management by slowing run-off response times.

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Within the region there has been an issue of acidification associated with forestry. Acidification is often considered to be due to a combination of poor air quality caused by atmospheric pollutants, an acidic (non-buffering) geology and planting of conifer forests. Conifer trees extract acid pollutants out of the air which are washed off the trees and into adjacent surface waters after rainfall. 25 water bodies within the Solway sub-basin of the Solway Tweed River Basin District are affected by acidification. These affected bodies include parts of the Bladnoch, Cree, Dee-Ken, and Fleet catchments.

The long term restructuring process being undertaken by FCS should minimise the likelihood of the freshwaters within the Ae district being affected. Within the Galloway District the problem of acidification does seem to be reducing over time and there has been a recovery in fish levels in previously fishless lochs, however this recovery has been slower in headwater streams.

There have also been instances where intensive forestry plantations up to the edge of rivers has caused increases in erosion and sedimentation, loss of habitats and removed links to wetlands and buffers against diffuse pollution.

The Flood Risk Management (Scotland) Act 2009 puts a requirement on all involved in the management of flood risk to consider natural flood management. Forestry therefore has a role to play in reducing flood risk. The publication of the Forest and Water Guidelines (4<sup>th</sup> edition, 2003) sets out some basic principles (although it is understood that this document is due for review, hopefully taking due cognisance of the new Act).

Dumfries and Galloway suffers from flooding in various locations. In planning future planting, this risk might be partly reduced by the utilisation of various forest management systems. Planting high in the catchment is likely to have some impact, but planting in the downstream floodplain could have a greater benefit. At no time should forest works be allowed to increase flood risk – but the status quo must be seen to be the absolute minimum and a reduction in flood risk must be seen as being the aim.

There is therefore the opportunity for those involved in forest management to consider the effects of their works on flood risk. As a method somewhat in its infancy, the involvement of interested parties, probably through the National and Local Advisory Groups (to be established by SEPA to assist in production of Flood Risk Management Plans (FRMP) and Local FRMPs) is to be recommended. FCS have representations at National Advisory Group level.

- AIR:  
Forestry tends to have a positive effect on air quality.  
Air quality within the region is generally of a high quality in terms of national air quality objectives.

- MATERIAL ASSETS:

The delivery of more sustainable timber transport policies which avoid local level impacts as far as possible has been a focus nationally.

Timber processing can have local level impacts through, perhaps, the provision of new or upgraded processing facilities, which are of a sufficient scale or are potentially within locations where there could be negative environmental effects.

Timber processing generally produces co-products or bio products which, are all sold for use elsewhere in the wood fibre markets. E.g. 100% of a round log enters

a site, such as Howies sawmill in Dalbeattie, and it leaves as bark mulch, sawn timber, sawdust, chips, etc. and anything remaining on site is used as bio fuel. As a result timber processing produces little, if any, waste that is unsustainably disposed of.

The South of Scotland (which is larger than the D&G region) contains 38% of the sawmills in Scotland, the majority of which are located within the region. The majority of timber produced in the region is used in the construction industry and quality paper manufacture. This is a thriving sector of the region's employment market and should be maintained, improved and supported. Recent improvements have been made to timber haulage routes, the B709 being one such example, providing a timber extraction route which now bypasses Eskdalemuir and other improvements have been made between Eskdalemuir and the large timber processing plant at Steven's Croft, Lockerbie

- CLIMATIC FACTORS:

The agricultural and forestry systems on which humans depend have developed in a climate that has undergone fluctuations but remained relatively stable since the last ice age. However, the global temperature is now rising and there is evidence that rainfall patterns are changing, sea levels are rising, glaciers are retreating, arctic sea-ice is decreasing and the incidence of extreme weather is increasing.

Forests play a very important role in the carbon cycle. Globally, they account for 80% of the annual exchange of carbon between the land and the atmosphere. Provided that forests are managed in a sustainable way they perform a vital role as carbon stocks, representing an important way of removing CO<sub>2</sub> from the atmosphere. Together, global forests provide an annual carbon sink equivalent to 25% of annual fossil fuel CO<sub>2</sub> emissions. Worldwide, forests re-planted and established over the past 50 years are estimated to take up or sequester approximately 10% of this figure, or 800 million tonnes of CO<sub>2</sub> per year.

The SFS has aimed to promote the use of forestry as a means of adapting to and mitigating climate change by contributing to biomass-based renewable energy, sustainable wood products and achieving carbon sequestration. Growing concerns about climate change suggest that these mitigation responses may become increasingly important.

The region is well placed to contribute towards meeting existing and future renewable energy targets. There are a number of existing operational and proposed renewable energy schemes including wind, biomass and hydro electric. There is scope to develop an appropriately-scaled woodfuel market in the region, both in terms of production of renewable energy and the reduction in the timber transport requirement. Further consideration should be given to potential short rotation energy crops and the expansion of conventional coppice production to help serve the wood fuel market.

Recent climate change guidance suggests that the climate of the region will remain wet and mild, although there is an expectation of increased frequency of extreme weather events. These will have an impact on species choice and may result in threats to wildlife habitats. There may be a higher risk of wind damage which would need to be managed through forest design and silviculture appropriate to succeeding rotations. More intense precipitation can lead to an increase in flooding events which may be addressed through flood and catchment management planning. Riparian woodland enhancement and expansion could have a role in improving sustainable flood and catchment management.

There is also potential for the planting of new woodlands for carbon sequestration. Habitat restoration of priority habitats such as bogs and native woodlands that permanently accumulate carbon can also improve carbon sequestration performance.

- CULTURAL HERITAGE:

Our whole environment has a historic dimension that contributes to its quality and character. It has been shaped by human and natural processes over thousands of years. The context in which specific historic features sit and the patterns of past use are part of our historic environment. The historical, artistic, literary, linguistic, and scenic associations of places and landscapes are some of the less tangible elements of the historic environment. These elements make a fundamental contribution to our sense of place and cultural identity.

It is recognised that all Scotland's woodlands contain a diverse and rich collection of features of archaeological interests. Some of this cultural heritage is evidence of past woodland use and management. The woods and trees themselves may also be considered as essential elements of an historic and designed landscape. The vast majority of archaeological sites that are found within new woodlands pre-date their establishment and have their origins in the prehistoric and historic landscapes within which people once lived. During the last century when woodland cover was rapidly expanding, such tree planting was considered to be a serious threat to archaeological heritage, particularly in the uplands. Deep ploughing can disrupt ancient field systems and boundaries, destroy buried archaeological deposits and damage the vulnerable earthworks of prehistoric sites. Closely planted fast growing conifers altered the landscape context within which ancient funerary and ritual sites were originally intended to be set. As the trees matured and root systems developed, they could disturb buried archaeological features, deposits and artefacts.

The historic value of the features found in woodlands and the landscapes they create is recognised. Improvements have been made in the way that the historic environment is protected in Scottish woodlands, but there has been less progress in active management to secure and enhance its condition for future generations. Good interpretation, coupled with creating an appropriate setting for features, can also enhance the recreational interest of woodland and help develop a better understanding of the historic dimension and character of the present landscape.

As woodlands and forestry are important to the economy, and historic environments of Dumfries and Galloway, DGC has actively engaged with the FCS, the national Forest Estate, and private woodland owners and managers for the last 20 years to promote good practice in relation to managing, conserving and interpreting the historic environment.

Numerous areas of interest have been identified through survey work in advance of planting proposals and significant areas recommended for non planting. There have also been opportunities to rectify problems that arose from the zealous planting of trees in the past in and over areas of interest. Interpretation and consolidation schemes have been carried out, mainly on the forest estate, in order to add value to the woodland environments for people, e.g. Polmaddy village, Kirroughtree lade walk.

There is an ongoing need to identify areas of historic environment at a strategic level to guide large scale new planting and specifically prior to all new planting, felling and restocking.

- LANDSCAPE:

Landscape constantly changes due to the influences of natural and/or human forces. Sometimes these changes are subtle and imperceptible, reflecting gradual shifts in land management or climate whilst at other times the changes can be more dramatic or intense, such as when mineral sites are worked and restored or new development takes place. Time is a vital consideration in landscape planning, design and management, particularly when dealing with the extended lifecycle of trees and woodlands.

Trees, woods and forests are strong, dynamic elements in the landscape and have great potential to enhance and enrich the environment. They can also be a significant force for landscape change. Woodlands can create new habitats, enhance views, absorb activity and bring people closer to nature in both town and country. Very often they are the defining element of the landscape, shaping and enclosing space, framing views and providing colour, texture and scale.

In the early years of the Forestry Commission the creation of a strategic timber reserve took precedence over environmental considerations, including the landscape and visual effects of the new planting. As a result, many new woodlands were characterised by large scale plantations of non-native conifers laid out in geometric shapes with limited species or age diversity. Many of these earlier plantations were criticised as unnatural and alien features in the landscape. In recent years forest planting patterns have begun to change to emulate more 'natural' patterns, form and contrast. Although practices are changing there are still concerns in relation to the landscape and visual appearance of commercial forests mainly due to the timescales involved in forestry planning.

The region has a wide range of landscape types, identified in the Dumfries & Galloway Landscape Assessment, and this diversity is considered to be one of the region's major assets. The region is sparsely populated and considered to be relatively wild as a result. The nature of the landscape character needs to be taken into account in any new planting or restructuring scheme.

SEA objectives have been developed for each of the identified environmental issues after careful review of relevant policies, plans and programmes and the collection of baseline data.

As part of the process alternative approaches were considered for the delivery of the strategy for forestry and woodland. Formulating the DGFWS was considered to be the best environmental option. This would allow updating the current existing Indicative Forestry Strategy however these focus purely on appropriate locations for woodland expansion whereas the DGFWS provides a wider basis that also considers such aspects as environmental, social and economic factors as well.

The assessment method is a relatively simple matrix to assess whether there would be positive or negative impacts on the environment. Overall it is considered that the implementation of the DGFWS would not result in significant negative impacts on the environment.

Indicators are suggested within the Environment Report which are proposed to be used as part of monitoring the environmental outcomes of implementing the DGFWS.

# Dumfries and Galloway Forestry and Woodland Strategy

## Abbreviations

BAP	Biodiversity Action Plan
D&G	Dumfries and Galloway
DGC	Dumfries and Galloway Council
ER	Environmental Report
FCS	Forestry Commission Scotland
IPP	Interim Planning Policy
LBAP	Local Biodiversity Action Plan
LDP	Local Development Plan
PPS	Plans, Programmes and Strategies
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SG	Scottish Government
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SPP	Scottish Planning Policy
SSSI	Sites of Special Scientific Interest
TPOs	Tree Preservation Orders

## Introduction

### Purpose of the Environmental Report and Key Facts

1.1 The purpose of the Environmental Report (ER) is to identify, describe and evaluate the likely significant effects on the environment of implementing the proposed Dumfries and Galloway Forestry and Woodland Strategy (DGFWS) and any reasonable alternatives that have been assessed. The ER has provided an early and effective opportunity for the Consultation Authorities and the public to offer their views on any aspect of the proposed guidance and its environmental implications.

1.2 The ER describes the assessment of the DGFWS's proposed objectives and recommended measures to prevent, reduce and mitigate any potentially significant negative environmental effects, whilst providing measures to improve or enhance the positive environmental effects of implementing the DGFWS identified through the SEA process. The ER sets out a proposed framework for monitoring the potential significant effects of implementing the DGFWS.

1.3 The process is intended to ensure the integration of environmental factors into policy formulation, to improve the policy whilst enhancing environmental protection, and to ensure an appropriate level of consultation (and transparency in setting out how the SEA process has influenced the planning process and decision making).

1.4 The key facts relating to the DGFWS are stated in Table 1 below.

Table 1. Key Facts

<p><b>Responsible Authority</b> Dumfries and Galloway Council</p>
<p><b>Title of Strategy</b> Dumfries and Galloway Forestry and Woodland Strategy</p>
<p><b>What Prompted the Strategy?</b> The current Indicative Forestry Strategy was approved in 1999 and it is now considered appropriate to review and update it following the publication of Government Advice: The Right Tree in the Right Place (May 2010) which replaced Circular 9/1999 and the Scottish Forestry Strategy (2006). This new advice was prepared to inform the preparation of development plans. The Dumfries and Galloway Local Development Plan (LDP) is now in preparation and it is proposed that the strategy will be prepared in tandem with the LDP.</p>
<p><b>Plan Subject</b> The plan relates to the use of land for trees, woodland and forestry and associated economic, social and environmental considerations within the Dumfries and Galloway region.</p>
<p><b>Period Covered by Plan</b> The period covered by the plan is 2012-2022</p>

<p><b>Frequency of Plan Updates</b> A review will be considered in 2019 following the adoption of the Local Development Plan</p>
<p><b>Area covered by DGFWS</b> The DGFWS will cover the whole of the Dumfries and Galloway region: c.6,400sq.kms (this includes the area of the region down to the low water mark)</p>
<p><b>Purpose and Objectives of DGFWS</b> In relation to Dumfries and Galloway there is recognition that there is further potential for developing the area's strengths in forestry, particularly in developing the processing capacity which can add value to timber production, as well as enhancing the environmental and social benefits from forests and woodlands.</p> <p>The DGFWS will be an important document in influencing the future development, management and conservation of woodlands and forestry in the region, providing guidance, advice and recommendations under the following themes:</p> <ul style="list-style-type: none"><li>• Woodlands and the Environment</li><li>• Woodlands and Sustainable Economic Growth</li><li>• Woodlands and Climate Change</li><li>• Woodlands for People</li><li>• Woodlands and Development Management</li></ul> <p>The Strategy is structured around these themes and will include action points and recommendations to allow for its implementation and monitoring.</p>
<p><b>Contact Point</b> Andrew Maxwell Service Manager Development Planning and Environment Dumfries and Galloway Council Militia House English Street Dumfries DG1 2HR</p> <p>Tel: 01387 260155</p> <p>Email: <a href="mailto:andrew.maxwell@dumgal.gov.uk">andrew.maxwell@dumgal.gov.uk</a></p>

## SEA activities to date

1.5 In respect of the SEA process the Council has completed a Scoping Report which was submitted to the Consultation Authorities via the SEA Gateway on the 19<sup>th</sup> October 2010. The responses from the Consultation Authorities confirmed that there were potentially significant environmental effects to be considered and assessed when formulating the strategy.

1.6 The key issues raised by the Consultation Authorities in respect of the Scoping Report were as follows:

**Historic Scotland –**

- Impacts on the historic environment should be considered in terms of direct effects (such as loss of and/or damage to a feature in the historic environment and indirect effects (such as effects on the setting of a listed building or scheduled ancient monument)
- Important to identify issues where the impacts are uncertain at the strategic level
- Suggests some amendments to the list of PPS
- Key environmental protection objective of the legislation is ‘to protect and, where appropriate, enhance the historic environment’
- Welcome table of baseline data and provides additional information in certain respects
- Content with SEA objectives for the historic environment but may wish to expand on the indicator in suggested ways.
- In terms of the proposed evaluation framework the use of colour would help make referencing and analysis for significant effects easier to follow. May find there are too many levels of effects which makes identifying the significant environmental effects harder when the assessment is undertaken.
- Would be helpful if the ER clearly describes and changes made to the strategy as a result of the environmental assessment and identifies who would be responsible for ensuring that any mitigation measures are taken forward as the strategy is implemented.

**SEPA –**

- Suggest additional PPS to be included with relevance to the Climate Change section
- Suggest additional data sources that may be of assistance
- Recommends that in relation to baseline data that where possible maps and diagrams are used to present information as this is often more readily understood and provides a better spatial context
- The ER should provide a summary of the likely changes to the environment if the strategy is not implemented
- The inclusion of a commentary section within the assessment matrices is considered helpful and should be used to illustrate why the issue is significant (or otherwise) in terms of this strategy
- The Strategy may benefit from an overview on how mitigation should be approached. Recommend that the mitigation hierarchy be followed. The ER should therefore identify any changes to the current draft of the strategy as a result of the environmental assessment
- Would welcome early consideration of monitoring requirements to be included in ER

**SNH –**

- The Act requires SEA to be undertaken of any PPS which have been determined to require an assessment
- Suggest inclusion of additional PPS within Soil section
- Suggests changes to various elements of the baseline data
- Suggests issues to be noted in relation to ‘problems’ under the Soil, Air and Landscape sections

## Dumfries and Galloway Forestry and Woodland Strategy

- Further clarity required relating to designated areas noted within indicators under both the Biodiversity, Flora and Fauna section, Climatic Factors and Cultural Heritage sections
- Suggest additional or amended indicators relating to Population and Human Health, Water, Soil, Cultural Heritage and Landscape sections
- The proposed assessment framework introduces terms (Theme and Plan Objective) which are not referred to elsewhere in the document and thus it is unclear what they relate to. For ease the text should be in a horizontal and not vertical direction

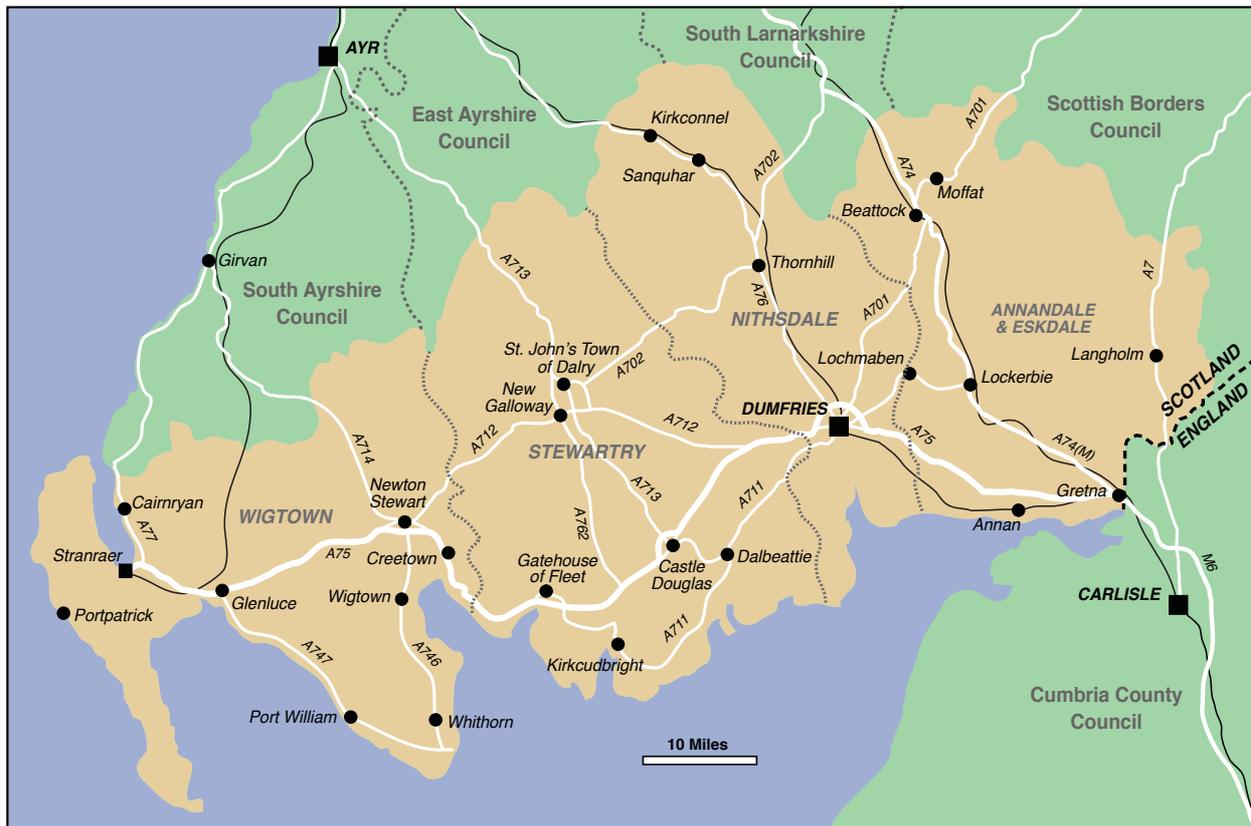
1.7 The public consultation period in respect of both the DGFWS and the ER takes place for a 6 week period from 16<sup>th</sup> August 2013.

## 2. Context

### Background and Objectives of the DGFWS

2.1 Dumfries and Galloway Council (DGC), in partnership with relevant bodies and agencies, is undertaking the preparation of a Forestry and Woodland Strategy for the whole of its area (Map 1.)

Map 1. The Dumfries and Galloway Area

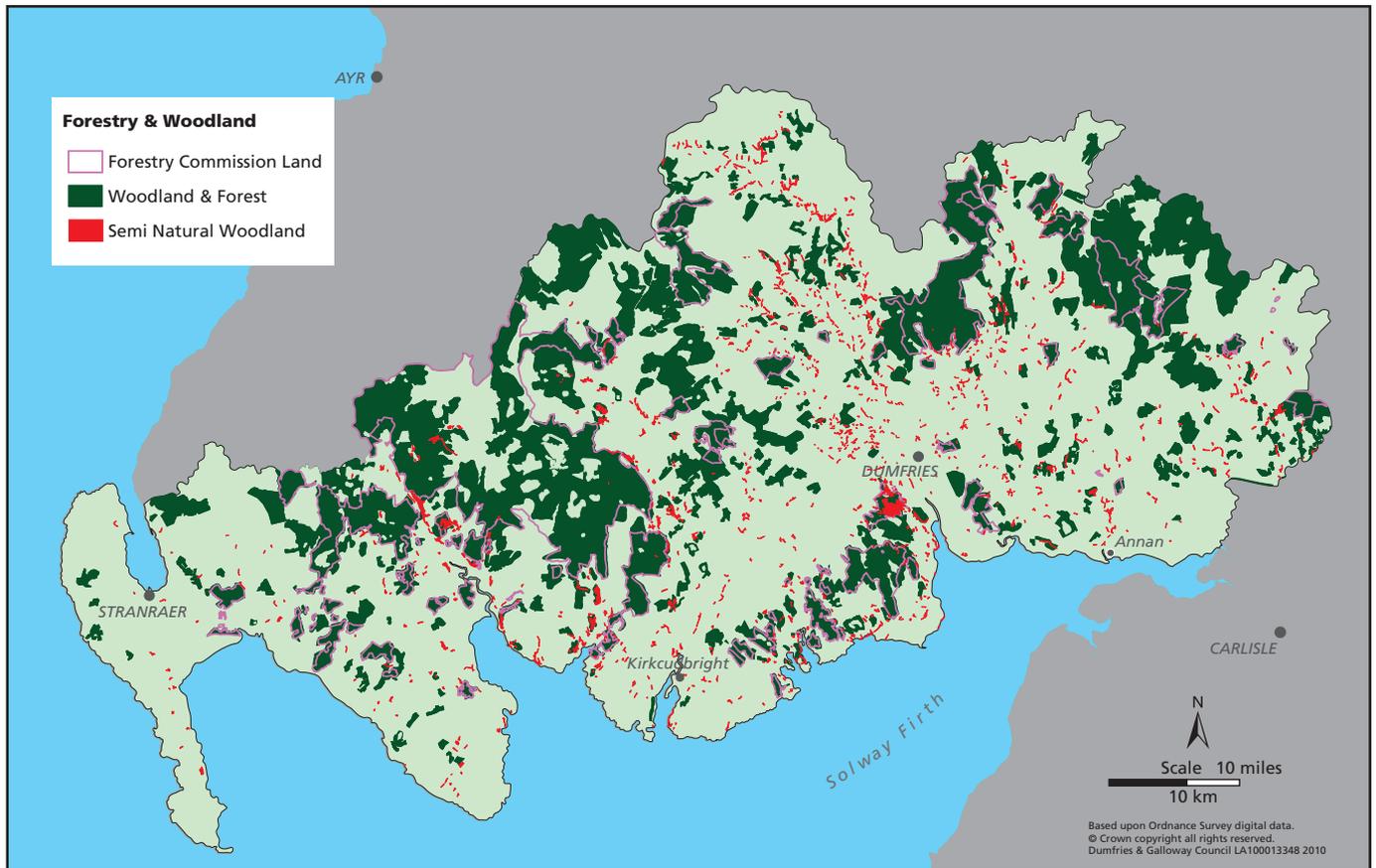


2.2 Dumfries and Galloway is the third largest region in Scotland. Its land area covers approximately 6,400 square kilometres of which approximately 28% of land coverage is forestry and woodland (Map 2).

2.3 The DGFWS will relate to all types of trees, forests and woodlands across the region, including urban trees, farm woods, native broadleaved woods and extensive conifer forests. It will provide guidance not only on the preferred location of new planting, but the most suitable design of forests and woods in particular locations, the management of existing forests and woods, and the best use of products from forests and woods.

2.4 The DGFWS will also be a guide for developing industries and the local economy related to timber production whilst also providing guidance on improving the recreational and educational opportunities provided by the woodland resource.

Map 2. Forestry Coverage in Dumfries and Galloway.



## Relationship with other plans, programmes and strategies (PPS) and environmental objectives

2.5 SEA plays an essential complementary role by ensuring that implementation of the strategy will mitigate negative, and develop positive, effects on the environment. The relationship between the DGFWS and other PPS of International, National and Local significance are required to be analysed as part of the SEA process. A review of other relevant PPS is an essential component of SEA. The aim of the review is to:

- identify matters that are significant and could influence the development of the DGFWS;
- establish links between other PPSs and the emerging DGFWS;
- identify key national and regional priorities that need to be taken into consideration; and
- identify any objectives and indicators relevant to the DGFWS in other PPS that could be used to inform the SEA process.

It should be noted that a separate Appropriate Assessment will be carried out prior to adoption under the requirements of Articles 6 and 7 of Directive 92/43/EEC (the Habitats Directive)

2.6 Table 2 lists the PPS and key considerations that have been analysed for their relationship with the DGFWS. Any PPS above the Scottish level has generally been excluded from the list, primarily because it is assumed that all relevant international, European and UK environmental legislation has been incorporated into national, regional and local strategy and guidance. Their content, where appropriate, has been used to inform the environmental objectives for the SEA of the DGFWS.

2.7 The DGFWS will be affected by, and will equally affect, a wide range of other relevant PPS both within and outside the Council's jurisdiction. It is therefore important to determine whether the DGFWS will give rise to conflicts with other PPS. Inconsistencies are bound to arise at times between other PPS or environmental objectives. The DGFWS may not be able to accommodate all the requirements of the other PPS; or it may wish not to take on board the requirements (e.g. because they are not sustainable).

Table 2 Relationship to Other PPS

Topic	Name of Plan/Programme	Key Considerations
General		
	Environmental Assessment (Scotland) Act 2005	Sets out the requirement for SEA for relevant plans, programmes and strategies
	The UK Forestry Standard (FC) 2004	<p>The two main aims of the strategy are the sustainable management of our existing forests and woodlands and the steady expansion of tree cover to increase the many diverse benefits that forests provide.</p> <p>The Standard has the following key objectives:</p> <ul style="list-style-type: none"> <li>• maintaining or improving the stability of soil condition</li> <li>• protect or improve water quality</li> <li>• protect and enhance value of forests as carbon sinks/stores</li> <li>• maintain contribution of timber production to the economy</li> <li>• conserve and enhance biodiversity in and around woodlands</li> <li>• safe and efficient workforce activities</li> <li>• opportunities are enhanced for rural development; access and recreation; quality of life; awareness and participation; community involvement; and skills training</li> <li>• protect and enhance cultural heritage and landscape quality</li> </ul>
	The UK Forestry Standard Consultation Draft (FC) 2009	As Above
	The Scottish Forestry Strategy (Scottish Executive) 2006	<p>The SFS sets out the framework and vision for taking the forestry sector forward into the future through the following three outcomes:</p> <ul style="list-style-type: none"> <li>• improved health and well-being of people and their communities</li> <li>• competitive and innovative businesses contributing to the growth of the Scottish economy</li> <li>• high quality, robust and adaptable environments</li> </ul>

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	The Right Tree in the Right Place – Planning for forestry and woodlands (FCS) 2010	The guidance provides advice to inform the preparation of forestry and woodland strategies and development plans. It highlights the benefits of developing new forestry and woodland strategies to inform future woodland expansion and provides advice on their preparation and content.
	FCS Corporate Plan 2008-11 (FCS) 2008	The Plan sets out specific actions under each of the seven themes contained in the Scottish Forestry Strategy and sets targets against which the three outcomes of the SFS can be measured.
	The Scottish Government’s Rationale for Woodland Expansion (FCS) 2009	This Strategy sets out how the ambition stated in the SFS to increase woodland cover can best be delivered. It considers specific issues to be taken into consideration for woodland expansion and possible delivery mechanisms.
	The Scottish Government’s Policy on Control of Woodland Removal (FCS) 2009	The purpose of this policy is to provide policy direction for decisions. The policy includes guiding principles and criteria for determining the acceptability of woodland removal.
	Scottish Planning Policy (SG) 2010	SPP sets out the purpose of the planning system and core principles for its operation. Provides planning guidance on specific issues and topics.
	National Planning Framework for Scotland 2 (SG) 2009	NPF2 provides guidance on nationally important land use planning issues. In relation to D&G it looks to the strengthen key ports and strategic transport corridors; consideration of potential business opportunities through proximity to Ireland and Cumbria, particularly in terms of leisure and tourism; consideration of potential for developing the region’s strengths in forestry, quality produce and as a place to live and work
	Single Outcome Agreement 2008-11 (DGC)	Identifies the region’s key characteristics and sets out areas for improvement in delivering key services
	Dumfries and Galloway Structure Plan (DGC) 1999	Provides the strategic planning policy framework for decisions within the region
	Area Local Plans (Annandale & Eskdale, Nithsdale, Stewartry and Wigtown) (DGC) 2006	Provides the detailed planning policy framework for decisions within the region
	Ae Forest District Strategic Plan 2007-17 (Draft) (FCS) 2010	Provides guidance as to how the District will deliver its part of the Scottish Forestry Strategy
	Galloway Forest District	Provides guidance as to how the District will deliver its

	Strategic Plan 2007-17 (Draft) (FCS) 2007-17	part of the Scottish Forestry Strategy
<b>Biodiversity Fauna and Flora</b>		
	Nature Conservation (Scotland) Act 2004	The Act provides a duty for public bodies to further conservation of biodiversity and have regard to the Scottish Biodiversity Strategy
	Scottish Biodiversity Strategy (SE) 2004	The Strategy aims to conserve biodiversity for the health, enjoyment and well being of the people of Scotland now and in the future. It has the following objectives: <ul style="list-style-type: none"> <li>• Halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats</li> <li>• Increase awareness, understanding and enjoyment of biodiversity and engage many more people in conservation and enhancement</li> <li>• Restore and enhance biodiversity in all our urban, rural and marine environments through better planning, design and practice</li> <li>• To develop an effective management framework that ensures biodiversity is taken into account in all decision making</li> <li>• Ensure that the best new and existing knowledge is available to all policy makers and practitioners</li> </ul>
	Woods For Nature – Our Biodiversity Programme 2008-11 (FCS) 2008	This Programme sets out activities to achieve the FC aim to help deliver the objectives for biodiversity in the SFS and Scottish Biodiversity Strategy through: <ul style="list-style-type: none"> <li>• helping to halt the loss of biodiversity and reverse previous losses through targeted action for species and habitats</li> <li>• broader action for biodiversity at a landscape or ecosystem scale</li> <li>• increasing awareness and public enjoyment of woodland biodiversity</li> <li>• improve knowledge of biodiversity and ensure it is integrated into decision-making</li> </ul>
	Forests and Biodiversity Guidelines – Consultation Draft (FC) 2009	Forestry Guidelines address specific elements of forest management identified within the SFS in more detail and set out good forestry practice requirements and legal requirements. Key issues are laid out under the following factors: <ul style="list-style-type: none"> <li>• Priority habitats and species</li> <li>• Functional landscapes</li> <li>• The role of natural processes</li> <li>• Tree and shrub species compositions</li> <li>• Structure</li> <li>• Veteran trees and deadwood</li> <li>• Open, scrub and edge habitats</li> </ul>

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		<ul style="list-style-type: none"> <li>• Riparian Zone</li> <li>• Habitat creation and restoration</li> <li>• Genetic Conservation</li> <li>• Problem species</li> <li>• Grazing and browsing</li> </ul>
	Dumfries and Galloway Local Biodiversity Action Plan (D&G Biodiversity Partnership) 2009	<p>The LBAP aims to:</p> <ul style="list-style-type: none"> <li>• conserve, enhance and re-create biodiversity at the landscape scale</li> <li>• conserve genetic diversity</li> <li>• incorporate biodiversity into all relevant decision making</li> <li>• raise biodiversity awareness, understanding and engagement</li> <li>• allow natural processes to operate wherever practicable</li> <li>• enhance local distinctiveness</li> </ul>
<b>Population and Human Health</b>		
	Woods For Health (FCS) 2009	The Strategy focuses on how to promote opportunities in our green environment, particularly trees, woods and forests, to improve health and life expectancy and reduce health inequalities in Scotland by supporting the health sector to make greater use of outdoor environments for health improvement activities.
	Forests for People – Access, Recreation and Tourism (FCS)2008	<p>The Strategy sets out a framework of national priorities for the management of access, recreation and tourism infrastructure. The main focus of the strategy is on the following aspects:</p> <ul style="list-style-type: none"> <li>• accessible woodland close to communities</li> <li>• low-key, well designed, high quality, welcoming facilities</li> <li>• opportunities to learn</li> <li>• robust locations</li> <li>• iconic places</li> <li>• access through woodlands</li> </ul>
	D&G Core Paths Plan – Draft (DGC) 2009	The Land Reform Act requires the Council to formulate a basic framework of paths that will serve the needs of residents and visitors throughout the region.
	Woods For Learning (FCS) 2009	<p>The Strategy aims to provide places in the green environment, particularly trees, woods and forests, for learning and teaching outdoors in order to:</p> <ul style="list-style-type: none"> <li>• help improve the life chances of young people</li> <li>• show forestry as an exemplar of sustainable development</li> </ul>

		<ul style="list-style-type: none"> <li>• show how woods and forests can contribute to combating climate change</li> </ul>
	The Timber development Programme 2007-10 (FCS) 2007	<p>The aim of the Programme is to contribute to the sustainable development of Scotland's economy by enabling the timber growing and processing sectors to find the highest value and most appropriate end market for Scotland's timber. The Programme lists proposed activities under each of the following key objectives:</p> <ul style="list-style-type: none"> <li>• promote a predictable and stable timber supply</li> <li>• encourage more use of timber and timber products</li> <li>• enable improvements to timber supply chain efficiency</li> <li>• encourage and enable improvements to the quality of the growing stock</li> </ul>
	The Scottish Government's Policy on Non-Timber Forest products (FCS) 2009	<p>The purpose of this policy is to provide direction for encouraging and supporting the sustainable development of the non-timber forest products sector in Scotland. Non-timber forest products are products of biological origin other than wood derived from forests, other wooded land and trees outside forests.</p>
	Supporting Business development (FCS) 2009	<p>The purpose of this Strategy is to provide a strategic framework for supporting business development, primarily on the FCS estate, and for stimulating wider economic development in the Scottish forest industries. The main priorities for providing support are as follows:</p> <ul style="list-style-type: none"> <li>• timber and processing sector development</li> <li>• new woodland creation and management of the existing resource</li> <li>• tourism sector developments</li> <li>• improve skills levels</li> <li>• carbon offsetting</li> <li>• development of the forest estate development</li> <li>• renewable energy</li> <li>• social and environmental aspects of forestry</li> </ul>
	Regional Economic Strategy 2008-13 (DGC) 2008	<p>The strategy discusses issues faced by the region's economy and agrees a series of focused actions to address these and deliver beneficial change to economic well-being.</p>
<b>Soil</b>		
	Forests and Soils Guidelines – Consultation Draft (FC) 2009	<p>Forestry Guidelines address specific elements of forest management identified within the SFS in more detail and set out good forestry practice requirements and legal requirements. Key issues are laid out under the following factors:</p>

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		<ul style="list-style-type: none"> <li>• acidification</li> <li>• compaction</li> <li>• contamination</li> <li>• disturbance</li> <li>• erosion</li> <li>• fertility</li> <li>• organic matter</li> </ul>
<b>Water</b>		
	Flood Risk Management (Scotland) Bill 2009	<p>The bill makes provisions for the following:</p> <ul style="list-style-type: none"> <li>• assessment and management of flood risks (implementing Directive 2007/60/EC)</li> <li>• local authorities' and SEPA's functions in flood risk management</li> </ul>
	Forests and Water Guidelines (FC)2003	<p>Forestry Guidelines address specific elements of forest management identified within the SFS in more detail and set out good forestry practice requirements and legal requirements. Key issues are laid out under the following effects:</p> <ul style="list-style-type: none"> <li>• siltation and turbidity</li> <li>• acidification</li> <li>• nutrient enrichment</li> <li>• colour, iron and manganese</li> <li>• pesticides</li> <li>• chemicals</li> <li>• fuel oils and lubricants</li> <li>• water yield</li> <li>• base flows</li> <li>• peak flows</li> <li>• shade and shelter</li> </ul>
	Solway Tweed River Basin Management Plan (SEPA) 2009	<p>The Plan sets out objectives for the sustainable management of the river basin district's waterways and water bodies and provides a vision for the water environment until 2027 laying out the actions required to produce environmental improvements during the next few years and into the future.</p>
<b>Air</b>		
	Air Quality Strategy for England, Scotland, Wales and Northern Ireland (DEFRA) 2007	<p>This strategy seeks to increase the use of renewable energy in the UK, as part of the overall strategy for tackling climate change and to meet the UK share of the EU target to generate 20% of the EU's energy from renewable sources by 2020.</p>
<b>Climatic Factors</b>		
	Climate Change	<p>The Bill sets targets for the reduction of greenhouse gas</p>

	(Scotland) Bill 2008	emissions and makes provision on mitigation and adaptation to climate change, energy efficiency and reduction and recycling waste.
	Climate Change Action Plan 2009-11 (FCS) 2009	The Plan considers actions and priorities in respect of climate change in relation to forests through the following topics: <ul style="list-style-type: none"> <li>• protecting and managing existing forests</li> <li>• woodland creation</li> <li>• adapting to climate change</li> <li>• sustainably produced wood for energy &amp; construction</li> <li>• reducing the forestry sector's carbon footprint</li> </ul>
	Forests and Climate Change Guidelines – Consultation Draft (FC) 2009	Forestry Guidelines address specific elements of forest management identified within the SFS in more detail and set out good forestry practice requirements and legal requirements. Key issues are laid out under the following mitigation factors: <ul style="list-style-type: none"> <li>• carbon in forest products</li> <li>• carbon in soil</li> <li>• forest ecosystem carbon balance</li> <li>• operational carbon footprint</li> </ul> and adaptation factors: <ul style="list-style-type: none"> <li>• forest design and planning</li> <li>• adaptive forest management</li> <li>• species selection</li> <li>• adaptation and landscape ecology</li> <li>• environmental protection</li> </ul>
<b>Material Asset</b>		
	National Waste Plan (SG) 2003	Confirms targets for reducing waste
	Ayrshire and Dumfries and Galloway Area Waste Plan (SEPA) 2003	The Plan provides a framework for waste management services in D&G
	Regional Transport Strategy (SWESTRANS) 2008	The Strategy sets out the transport vision for the region including the connectivity required to sustain and enhance the economy and communities, whilst minimising the environmental impacts of transport. The strategy also promotes the maintenance and improvement of transport infrastructure and services throughout the area.
<b>Cultural Heritage</b>		
	Scottish Historic	The policy provides the following functions:

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	Environment Policy (Historic Scotland) 2009	<ul style="list-style-type: none"> <li>• sets out policies for the historic environment</li> <li>• provides greater policy direction for Historic Scotland</li> <li>• provides a framework to inform work of organisations with a role and interest in managing the historic environment</li> </ul>
	Scotland's Woodlands and the Historic Environment (FCS) 2008	<p>The purposes of the policy statement are as follows:</p> <ul style="list-style-type: none"> <li>• to communicate the forestry sector's shared understanding of how forests and woodlands contribute towards the historic environment</li> <li>• to promote the appreciation of the history of the forests and woodlands, and their contribution towards are cultural heritage</li> <li>• to confirm how the forestry sector will endeavour to deliver the required outcomes of the Scottish Ministers' strategic policies for the historic environment</li> <li>• to outline what practical measures the forestry sector can take to ensure that all our activities enhance the stewardship of the historic environment</li> </ul>
	Woodlands in designed Landscapes, Forestry Practice Advice Note 3, (FC 1995)	Provides information and Advice to aid and guide woodland management in designed landscapes
<b>Landscape</b>		
	Forest and Landscape Guidelines – Consultation Draft (FC) 2009	<p>Forestry Guidelines address specific elements of forest management identified within the SFS in more detail and set out good forestry practice requirements and legal requirements. Key issues are laid out under the following factors:</p> <ul style="list-style-type: none"> <li>• landscape character</li> <li>• visual sensitivity and local distinctiveness</li> <li>• historic landscapes</li> <li>• designed landscapes</li> <li>• shape</li> <li>• landform</li> <li>• pattern of enclosure</li> <li>• scale</li> <li>• diversity</li> <li>• unity</li> <li>• spirit of place</li> </ul>
	D&G Landscape Assessment (SNH) 1998	This document provides a detailed assessment of the landscape character of the region and considers the likely pressures and opportunities for change in the landscape. The Assessment also assess the sensitivity of the

		landscape to change and includes guidelines indicating how landscape character may be conserved, enhanced or restructured as appropriate.
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### Current State of the Environment

2.8 A clear understanding of the current state of the environment is necessary to assist the identification of environmental problems, support the process of assessing the environmental effects and provide a baseline against which future monitoring data can be compared. The prime information sources for this are set out in Table 3 and baseline environmental information appears in Appendix 1.

Table 3 Environmental Baseline Data

SEA Issue	Relevant Data
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> <li>• SACs</li> <li>• SPAs</li> <li>• Ramsar Sites</li> <li>• SSSIs</li> <li>• National Nature Reserves</li> <li>• Local Nature Reserves</li> <li>• Local Wildlife Sites</li> <li>• UK BAP &amp; LBAP priority habitats and species</li> <li>• TPOs</li> <li>• Ancient and long established woodlands</li> </ul>
Population and Human Health	Population figures Health and Wellbeing Profiles (life expectancy and mortality by cause) Principle recreation sites in forests Access to open space Scottish Index of multiple deprivation Core paths
Soil	Exceedence of Critical Loads for Soils Land Capability for Forestry Land Cover Map Contaminated land Land Classification Areas of peat
Water	Water quality monitoring data Indicative river and coastal flood maps
Air	Air quality monitoring data
Climatic Factors	Carbon dioxide emissions by sector/per capita Levels of greenhouse gas emissions Local precipitation levels Local temperature levels

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Material Assets	Agreed Timber Transport Routes Location of sawmills, wood processing facilities and forestry related businesses
Cultural Heritage	Scheduled Ancient Monuments Listed Buildings Conservation Areas Archaeological Sensitive Areas Gardens and Designed Landscapes
Landscape	National Scenic Areas Regional Scenic Areas D&G Landscape Character Assessment Inventory and non-inventory Gardens and Designed landscapes Wild Land Search Area Forestry District Strategic Plans and digital mapping

### Environmental Issues

2.9 Existing environmental problems are required to be considered in relation to the DGFWS and the likelihood of their effects to aggravate, reduce or otherwise affect current environmental problems also need to be taken into account. The existing primary environmental concerns, issues and problems that have been identified relating to the matters addressed by the DGFWS are shown in Table 4 below.

Table 4 Existing Environmental Problems

Topic	Problems Identified
<b>Biodiversity, Flora &amp; Fauna</b>	<p>Historical loss of native woodland cover</p> <p>Fragmentation of remaining native woodlands</p> <p>Damage to native woodlands, especially ancient woodlands, through coniferisation in the 20<sup>th</sup> century</p> <p>Loss of extensive habitats such as heather moorland and acid grassland to afforestation in the 20<sup>th</sup> century, along with their associated species such as moorland birds, plants and invertebrates</p> <p>Damage to peatlands, especially raised bogs, through inappropriate afforestation in the 20<sup>th</sup> century</p> <p>Loss of trees through lack of management in non-woodland environments such as wood pastures and parklands, farmland and towns. These habitats contain the majority of D&amp;Gs veteran trees</p>
<b>Population and Human Health</b>	<p>Continuing issue of declining Ageing population and increase in life expectancy</p> <p>General reduction in levels of health and increasing obesity</p> <p>Skills shortages within forestry sector</p>

<b>Soil</b>	N/A
<b>Water</b>	Exacerbation of acidification issues through scavenging effect of trees. Impact on upland lochs and watercourses and their associated fish and invertebrate species, especially in Galloway where there is little buffering effect from underlying geology  Potential flood risk in various locations
<b>Air</b>	N/A
<b>Material Assets</b>	Need to maintain and improve timber quality to serve current markets  Need to develop new markets  Need to ensure continued supply of timber  Majority of timber is delivered by road
<b>Climatic Factors</b>	Increasing targets for generation of electricity from renewable sources  Mitigation of climate change
<b>Cultural Heritage</b>	Extensive historic and environment sources  Further identification of the location and nature of these resources
<b>Landscape</b>	High quality and diverse landscape

2.10 It is considered that through the SEA process, these existing environmental concerns shall be taken into account and, where necessary, mitigation measures will ensure that the existing concerns highlighted will not be aggravated, and in some instances they may be reduced.

#### **Likely evolution of the environment without the DGFWS?**

2.11 The principle purpose of carrying out an SEA is to anticipate and understand the impact the DGFWS is likely to have on the environment of the region. However it is also important to understand the implication of not implementing the DGFWS and the likely future changes that would occur as a result. Without the DGFWS the current Indicative Forestry Strategy would remain in place leading to the following:

- would result in out of date policies and possibly would not provide sufficient consideration and a strategy in relation to the opportunities that forests and woodlands can provide in terms of the economy, health and the environment.
- The current IFS does not fully taken account of biodiversity issues particularly in terms of variety of species types which could negatively impact on biodiversity, etc issues.

#### **Development of Assessment Criteria**

2.12 The Scoping Report (submitted to the SEA Gateway on 19 October 2010) set out the proposed method by which to examine the DGFWS and assess its impacts on a range of environmental issues

2.13 Based on the Scoping Report, and the comments received from the Consultation Authorities, the key objectives/tests for SEA purposes are shown below in Table 5.

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Table 5 SEA Objectives

SEA Topic	SEA Objective	Indicators
<p><b>Biodiversity, Flora and Fauna</b></p>	<p>To help implement the objectives of the Scottish Biodiversity Strategy</p> <p>To halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats</p> <p>To increase awareness, understanding and enjoyment of biodiversity and engage many more people in conservation and enhancement</p> <p>To restore and enhance biodiversity in all our urban and rural environments through better planning, design and practice</p> <p>To develop an effective management framework that ensures that biodiversity is taken into account in all decision making</p> <p>To ensure that the best new and existing knowledge on biodiversity is available to all policy makers and practitioners</p>	<p>Condition of designated sites</p> <p>Loss of designated sites</p> <p>Additional designated sites</p> <p>LBAP species/habitats stable or increasing</p> <p>Invasive Species control/expansion</p>
<p><b>Population and Human Health</b></p>	<p>To increase the opportunities for access to and enjoyment of forests and woodlands by all sectors of society</p> <p>To ensure that sustainable tourism and recreation are promoted through the forestry sector</p> <p>To maximise the role of woodland and forestry in contributing to quality of life</p> <p>To maximise the role of woodland and forestry in contributing to health and wellbeing</p> <p>To encourage sustainable timber transport</p>	<p>Number of improved access routes</p> <p>Number of cycle paths</p> <p>Open space audit quantity and quality</p> <p>Woodlands in and Around Towns (WIAT) – number of applications</p> <p>Damage to environmental resources/ facilities/ information and interpretation</p> <p>Number of woodland recreation facilities and improvements to</p> <p>Number of Timber Transport Routes Agreed</p>

	To maximise the contribution of the forestry sector to the viability of rural communities	Levels of employment in forestry and related schemes  Levels of productivity from forestry and related sectors  Training in forestry and related sectors
<b>Soil</b>	To contribute to sustainable soil management through forestry and woodland planning management	Changes in areas where soils are unsuited to productive woodland expansion
<b>Water</b>	To promote forestry and woodland management which contributes positively to the sustainable management of the water environment and achievement of River Basin Management Plans	Ecological status of waterbodies
<b>Air</b>	To minimise the air quality impacts of timber transport and processing  To maximise the role of woodlands and forestry in contributing to air quality	Air quality trends  Timber transport trends  Location and quantity of new planting
<b>Climatic Factors</b>	To increase the potential of the forestry sector in contributing to Scotland's renewable energy sources  To further increase the role of woodland and forestry in achieving carbon sequestration  To ensure that woodland and forestry planning and management take account of the need to adapt to climate change	Number of domestic and commercial renewable energy applications and installations  Scale and nature of new planting/restructured woodlands  Levels of locally produced timber products
<b>Material Assets</b>	To minimise the use of resources including fuel and chemicals, and to minimise the creation of waste products  To promote the integration and co-ordination of forestry and woodland with other land uses.	Number of domestic and commercial renewable energy applications and installations  New planting (location and nature)

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<p><b>Cultural Heritage</b></p>	<p>Need to ensure that current standards and good practice that have developed over last 20 years are maintained and exemplary best practice extended.</p> <p>Need to identify areas that are particularly sensitive to change</p> <p>To further promote the protection and enhancement of the historic environment</p> <p>To further increase awareness and understanding of cultural heritage related to woodlands</p>	<p>Number and condition of designated and non designated sites</p>
<p><b>Landscape</b></p>	<p>To increase the contribution of forests and trees to scenic values, including distinctiveness and diversity of landscape.</p>	<p>Number of EIA for new forest planting</p>

### 3. Assessment of Environmental Effects and Measures for Mitigation

#### Alternatives considered

3.1 The Environmental Assessment (Scotland) Act 2005 requires consideration of reasonable alternatives to the DGFWS to be identified, described and evaluated. The consideration of alternatives relates to the means by which the objectives of the plan can be met by different approaches.

3.2 Potential reasonable alternatives have been identified as follows:

- **Option 1 – Maintain status quo:** Although there is strong Government support for the provision of up to date forestry and woodland strategies and their production is considered to be good practice it is not a legal requirement to produce one.
- **Option 2 – Produce a strategy which only considers possible woodland expansion:** The existing Indicative Forestry Strategy focuses purely on appropriate locations for woodland expansion and planting and this approach could be taken forward and only this element included in the DGFWS.
- **Option3 – Produce a strategy in line with recent Government advice contained in ‘The Right Tree in the Right Place’:** A forestry and woodland strategy could be produced in line with current Government guidance and in the light of recent ‘good examples’..

3.3 Each of the three options were considered against the SEA objectives shown in Table 5 above and were assessed in terms of the evaluation framework shown below. These results are shown in Table 6 below.

Impact	Significant positive impact	Positive impact	Neutral impact	Unknown impact	Both Positive and Negative impacts	Negative impact	Significant negative impact
Score Symbol	++	+	0	?	+/-	x	xx

3.4 Table 6 indicates that Option 3 provides the best option when assessed against all the SEA objectives, whilst maintaining a positive position for the forestry and woodland sector. As a result this will be the only option taken forward for assessment in the SEA.

Table 6 Assessment of Alternative Approaches

Option	SEA objectives									Comments	
	Biodiv., flora and fauna	Popn. and Human Health	Soil	Water	Air	Climatic Factors	Material assets	Cultural heritage	Landscape		
<b>Option 1</b>	X	0	0	0	0	0	0	0	0	0	This would result in out of date policies and possibly would not provide sufficient consideration and a strategy in relation to the opportunities that forests and woodlands can provide in terms of the economy, health and the environment. The current IFS does not fully taken account of biodiversity issues particularly in terms of variety of species types which could negatively impact on biodiversity, etc issues.
<b>Option 2</b>	+	0	0	+	0	0	0	0	+	0	Although this approach would be able to take into account new planting and management regimes in terms of diversity of species and wider considerations of form and scale of plantations and also impact on water regimes it would not provide the wider benefits or take into account wider issues identified in Table 4 in relation to environmental, social and economic considerations.
<b>Option 3</b>	+	+	+	+	0	+	+	+	+	+	This approach is likely to be more robust and have greater weight in decision making and provide for the wider considerations of an environmental, social and economic nature whilst also providing a framework for developing opportunities to provide benefits in relation to these broader aspects.

### Assessment methods

3.5 The DGFWS is separated into five themes (as stated in Table 1) each with their own objectives and a section relating to Woodland Expansion/Restructuring which again has its own objectives. All of these objectives have been assessed for their environmental effects and likely significance upon the environmental baseline. The objectives were assessed against a range of environmental issues set out in Schedule 3 of the SEA Act, using the SEA objectives which formed the assessment criteria shown in Table 5 above. The assessment was informed by the following steps:

- Predicting potential environmental effects
- Determining the magnitude of the effects and the sensitivity of the receptors
- Evaluating the significance of the effects of implementation
- Predicting the cumulative effects of the DGFWS
- Developing mitigation measures to prevent, reduce or offset effects
- Revising assessment taking into account agreed mitigation measures

3.6 The summary assessment results for the Strategy are outlined in Table 7 below whilst the objectives for the various individual elements are considered in Tables 8a-8f (these objectives are abbreviated for ease, the full wording for each of these objectives is shown in Appendix 2). The evaluation framework shown in paragraph 2.3 above was also used to assess the environmental performance of the DGFWS in relation to the potential significance of the impacts. It is anticipated that on the whole the impacts will be long term.

3.7 One of the main purposes of the DGFWS is to ensure that environmental resources are not damaged, or are at the very least minimised, as a result of forestry and woodland schemes. It is accepted that commercial forestry planting in particular often results in large scale changes to the landscape and the environment, however the DGFWS aims to ensure that such impacts do not result in significant harm or detriment. Such developments will not necessarily result in positive environmental changes however if the DGFWS assists in the management of these changes in a way that ensures the environmental resource is not significantly damaged then this will be considered as a neutral effect.

### Summary

3.8 Overall the assessment showed significant positive, positive or no impacts, no significant negative impacts have been identified.

3.9 The DGFWS attempts to bring together a number of different elements to ensure that environmental, social and economic aspects are taken into account in all aspects of forestry and woodlands from planting to harvesting and processing and their use in between. Potentially negative effects on particular aspects may occur in trying to achieve other ends therefore all the aspects need to be balanced. The strategy aims to ensure that awareness is raised of the need to take into account a number of different interrelated issues which should result in negative impacts being identified and therefore minimised. As many of these aspects are interrelated and interlinked their relationships can be complicated and therefore no attempt has been made to analyse cumulative and synergistic effects.

3.10 One of the purposes of the strategy is to ensure that woodland expansion and new planting schemes are of the 'right' type and mixture in the 'right' location thereby minimising the perceived negative impacts of previously planted mono-species plantations. Any new scheme will be expected to take into account the guidance in the document whilst larger schemes will also need to meet current FCS guidelines to assist in minimising impacts.

Table 7 SEA Assessment Results – Summary of Overall Assessment of DGFWS

SEA Topic	SEA Objective	DGFWS Themes						
		A	B	C	D	E	Woodland Expansion	
<b>Biodiversity, Flora and Fauna</b>	To help implement the objectives of the Scottish Biodiversity Strategy	+	0	0	0	0	0	+
	To halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats	+	0	0	0	+	0	0
	To increase awareness, understanding and enjoyment of biodiversity and engage many more people in conservation and enhancement	0	+	0	+	+	0	0
	To restore and enhance biodiversity in all our urban and rural environments through better planning, design and practice	0	0	0	0	++	+	+
	To develop an effective management framework that ensures that biodiversity is taken into account in all decision making	+	0	0	0	+	+	+
	To ensure that the best new and existing knowledge on biodiversity is available to all policy makers and practitioners	0	0	0	0	0	0	0
<b>Population and Human Health</b>	To increase the opportunities for access to and enjoyment of forests and woodlands by all sectors of society	+	+	0	++	+	0	0
	To ensure that sustainable tourism and recreation are promoted through the forestry sector	0	++	0	+	0	0	0
	To maximise the role of woodland and forestry in contributing to quality of life	+	+	0	++	+	0	0
	To maximise the role of woodland and forestry in contributing to health and wellbeing	+	+	0	++	+	0	0

	To encourage sustainable timber transport	0	++	+	0	0	0	0	+
	To maximise the contribution of the forestry sector to the viability of rural communities	0	++	0	0	0	0	0	0
<b>Soil</b>	To contribute to sustainable soil management through forestry and woodland planning management	++	0	0	0	0	0	0	0
<b>Water</b>	To promote forestry and woodland management which contributes positively to the sustainable management of the water environment and achievement of River Basin Management Plans	++	0	0	0	0	0	0	+
<b>Air</b>	To minimise the air quality impacts of timber transport and processing	0	+	0	0	0	0	0	0
	To maximise the role of woodlands and forestry in contributing to air quality	++	0	0	0	0	0	+	0
<b>Climatic Factors</b>	To increase the potential of the forestry sector in contributing to Scotland's renewable energy sources	0	0	+	0	0	0	0	0
	To further increase the role of woodland and forestry in achieving carbon sequestration	+	0	+	0	0	0	+	0
	To ensure that woodland and forestry planning and management take account of the need to adapt to climate change	+	0	+	0	0	0	0	0
<b>Material Assets</b>	To minimise the use of resources including fuel and chemicals, and to minimise the creation of waste products	0	0	0	0	0	0	0	0
	To promote the integration and co-ordination of forestry and woodland with other land uses.	+	0	+	0	0	0	+	+
<b>Cultural Heritage</b>	Need to ensure that current standards and good practice that have developed over last 20 years are maintained and exemplary best practice extended.	+	0	0	0	0	0	0	0

	Need to identify areas that are particularly sensitive to change	++	0	0	0	0	0	0	+
	To further promote the protection and enhancement of the historic environment	++	0	0	0	0	0	0	0
	To further increase awareness and understanding of cultural heritage related to woodlands	+	0	0	0	0	0	0	+
<b>Landscape</b>	To increase the contribution of forests and trees to scenic values, including distinctiveness and diversity of landscape.	++	0	0	0	0	0	0	++

**Mitigation**

3.11 The precise effects of the DGFWS are, in many cases, going to be difficult to predict at a very local level. The effects, whether positive, neutral or negative will depend on the following:

- how the strategy is implemented on the ground;
- the precise nature of any proposed development that are taken forward; and
- the specific environmental characteristics of the potential locations.

There are no significant adverse effects anticipated as a result of the implementation of the DGFWS and therefore no specific measures have been identified for the prevention, reduction or offsetting these. The Strategy should be read as a whole as the various themes and woodland expansion section are mutually supportive. Potential minor negative impacts are offset by other processes, such as EIA, or other related FCS guidance.

Table 8 SEA Assessment Results

Table 8a Theme A

Theme A: Woodlands and the Environment										
Objective	Biodiversity, flora and fauna	Population and human health	Material Assets	Soil	Water	Air	Climatic Factors	Cultural Heritage	Landscape	Comments
1. Conserve biodiversity	+	0	0	0	0	0	0	0	0	<p>The promotion of environmental good practice will have positive impacts in relation to the biodiversity SEA objectives and other environmental concerns. Enhanced woodland access will have mixed impacts on biodiversity as increased access and recreation to woodlands may impact on habitats and species through disturbance and erosion</p> <p>The text clearly highlights the importance of peaty soils and prioritises their protection.</p> <p>The importance of good air quality is noted including the role of forestry in air pollution.</p> <p>Reuse of vacant and derelict land by replanting will result in environmental improvements</p>
2. Protect, enhance and restore, water, soil and air environments	0	0	0	+	+	+	0	0	0	
3. Ensure planting is appropriate and enhances landscape setting	0	+	0	0	0	0	0	0	+	
4. Recognise contribution to valued historic environments and protection of sites and features	0	0	0	0	0	0	0	+	+	
5. Encourage sympathetic planting of restoration sites	+	0	+	0	0	0	0	0	+	

Table 8b Theme B

Theme B: Woodlands and Sustainable Growth										
Objective	Biodiversity, flora and fauna	Population and human health	Material Assets	Soil	Water	Air	Climatic Factors	Cultural Heritage	Landscape	Comments
1. Support predictable and stable timber supplies	0	+	0	0	0	0	0	0	0	Encouraging planting to provide a future high quality resource will contribute to habitat networks and create new resources to sustain the local economy.
2. Promote greater use of sustainable construction and adding value to local timber products	0	+	0	0	0	0	+	0	0	The use of locally sourced timber in construction, and a move towards more sustainable timber transport should have a positive impact on minimising the use of fuel.
3. Support forestry employment and skills development	0	+	0	0	0	0	0	0	0	Training and skills development could to help build capacity in the sector and support the supply chain. Targeted education programmes and job-creation activities could make an important contribution to improving outcomes in the local economy. The expansion of productive forestry will have positive impacts on population and human health by securing and initiating much needed economic activity and employment.
4. Continue to develop more sustainable timber transport	0	+	+	0	0	+	+	0	0	
5. Develop and enhance forestry related tourism	0	+	0	0	0	0	0	0	0	The sustainable timber transport emphasis of the timber policies should ensure an overall positive impact on air quality



Table 8d Theme D

Theme D: Woodlands For People										
Objective	Biodiversity, flora and fauna	Population and human health	Material Assets	Soil	Water	Air	Climatic Factors	Cultural Heritage	Landscape	Comments
1. Encourage and promote use of woodland resource to improve health and wellbeing	0	+	0	0	0	0	0	0	0	Enhanced access and recreation will have strong positive impacts on population and human health through health improvement initiatives and enhanced enjoyment and business opportunities.
2. Encourage and promote use of woodland resource for outdoor learning and forest schools	+	+	0	0	0	0	0	0	0	Education and lifelong learning initiatives combined with greater community participation in woodlands will help to reinforce community associations with woodland including an understanding of the cultural setting of the forest resource
3. Increase opportunities for access to woodland resource by all sectors of society	0	+	0	0	0	0	0	0	0	Development of high quality woodland assets close to settlements may also reduce the need for people to travel to participate in outdoor recreation  The multiple use of land for forestry and recreation will encourage integration between land uses.

Table 8e Theme E

Theme E: Woodlands and Development Management										
Objective	Biodiversity, flora and fauna	Population and human health	Material Assets	Soil	Water	Air	Climatic Factors	Cultural Heritage	Landscape	Comments
1. Ensure valued trees are protected and retained and where lost compensatory planting is provided	+	+	0	0	0	+	0	0	+	Ensuring the provision of and maintaining/retaining trees and woodland where appropriate within new developments will make a major contribution to enhancing a sense of place and distinctiveness within places, helping to improve the setting of settlements.
2. Encourage inclusion of trees in landscaping schemes	+	+	0	0	0	+	0	0	+	

Table 8f Woodland Expansion/Restructuring

Woodland Expansion/Restructuring										
Objective	Biodiversity, flora and fauna	Population and human health	Material Assets	Soil	Water	Air	Climatic Factors	Cultural Heritage	Landscape	Comments
1. Identify potential areas where woodland expansion could make a significant contribution to one or more of the themes within this strategy	+	+	+	+	+	+	+	+	+	Increasing woodland cover for carbon sequestration/timber production can have positive benefits for biodiversity, however, inappropriate expansion and management could impact on biodiversity and landscape. The importance of landscape is noted including the need for structural and species diversity, heritage trees, woodland creation, riparian woodland and designed landscapes.
2. Target opportunities for tree planting and woodland expansion to appropriate locations, using an appropriate mix of tree species	+	+	+	+	+	+	+	++		
3. Identify potential constraints and opportunities for enhancement through new planting and through restructure of the existing forest and woodland	+	+	+	+	+	+	+	+	+	

<b>resource</b> 4. Ensure a continuing supply of suitable timber and woodland produce to sustain and grow the region's forest industries		0																		
		+																		
		+																		
		0																		
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### **4. Monitoring**

4.1 Monitoring of the effects of implementing the DGFWS will be based on the performance of a set of key indicators which are indicated in Table 5 above. The majority of monitoring for the SEA objectives is already undertaken by the Council or by other government bodies or agencies. Any new identified data can be incorporated into the monitoring arrangements for the DGFWS. This allows SEA monitoring to be incorporated into the existing performance monitoring.

4.2 The Council has recently published the Local Development Plan Monitoring Report (December 2010) which includes many of the monitoring needs identified within this SEA. This will be a valuable baseline document to support the monitoring process. The requirements and mitigation measures identified during this DGFWS SEA process will feed into the next LDP Monitoring Report.

4.3 Further monitoring is undertaken for the Local Biodiversity Action Plans and Local Habitat Plans. It is expected that SEPA will continue to monitor water quality whilst SNH has responsibility to monitor and report on the condition of SSSIs and has a similar regime in place for monitoring the status of sites designated under the Habitats Directive. Locally designated sites and monitoring of key species and habitat management are the responsibility of local authorities. Monitoring will, therefore, rely on the continued day to day management and site knowledge of those managing land for which they have responsibility, and the ongoing activities of the environmental regulators.

## 5. Appendix 1: Baseline Information

5.1 There are local characteristics to the baseline information listed in Table 3 (page 27) that merit particular consideration in relation to the Dumfries and Galloway Forestry and Woodland Strategy.

### Biodiversity, Flora and Fauna

5.2 Dumfries and Galloway contains a wide variety of natural and semi-natural habitats. These habitats range from remote uplands through moorlands and marginal farmland to a diverse coastline and extensive intertidal estuaries. The quality and importance of these habitats is reflected in a range of national and international conservation designations. Table 9 indicates the range of statutory sites designated in the region (please note, however, that some sites have multiple designations):

Table 9 Statutory Designations

Designation	Number of Sites	Total area covered in Hectares
Ramsar Wetlands of International Importance	5	33,706
Special Areas of Conservation (SACs)	17	91,963
Special Protection Areas (SPAs)	7	48,713
Sites of Special Scientific Interest (SSSI)	97	75,380
National Nature Reserves (NNRs)	4	9,961
Local Nature Reserves (LNRs)	2	2,982

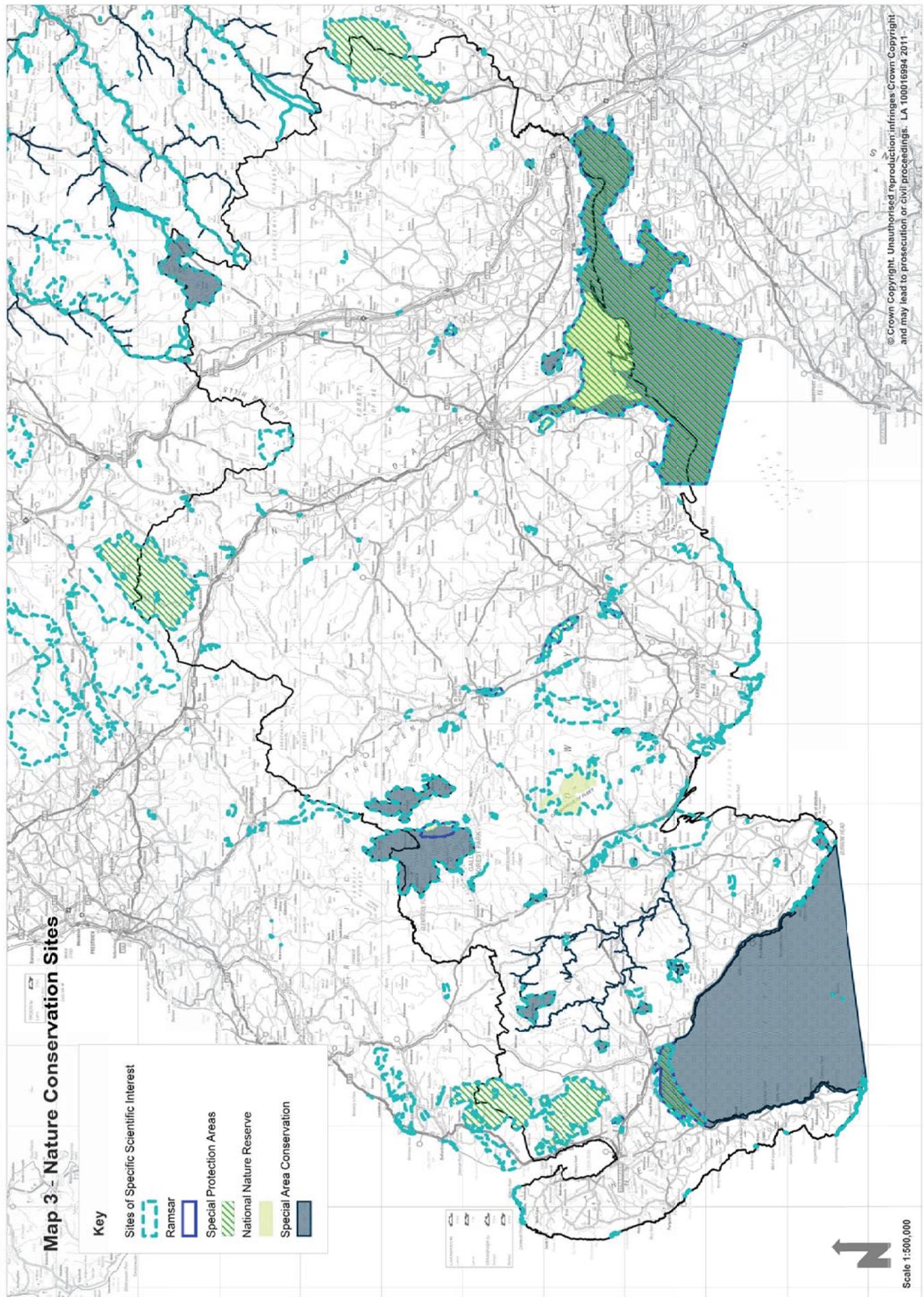
Source: Dumfries and Galloway Local Biodiversity Action Plan (2009)

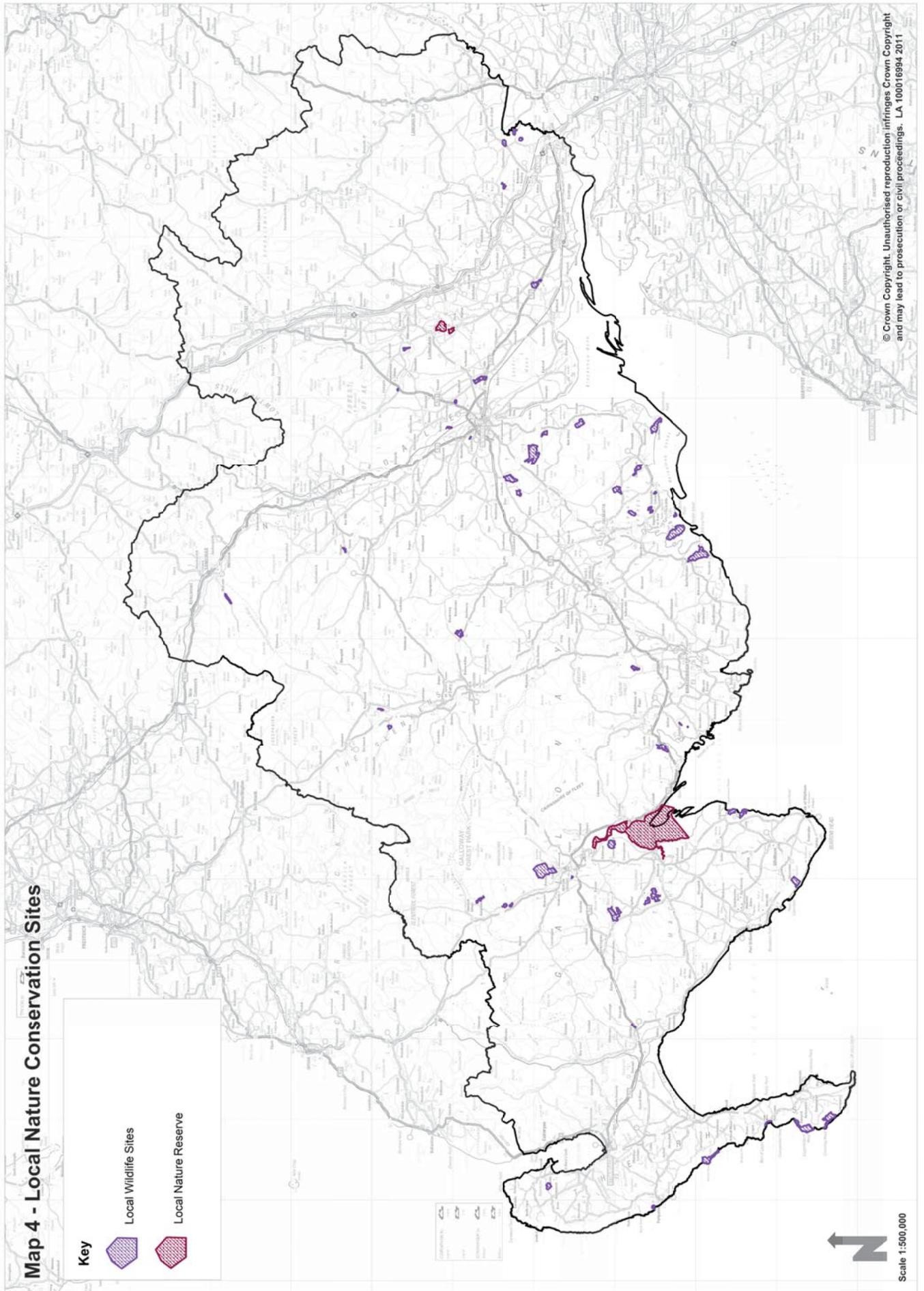
5.3 The locations of the above designations are shown on Maps 3 & 4. The region also contains 52 non-statutory Local Wildlife Sites (LWS), also shown on Map 4.

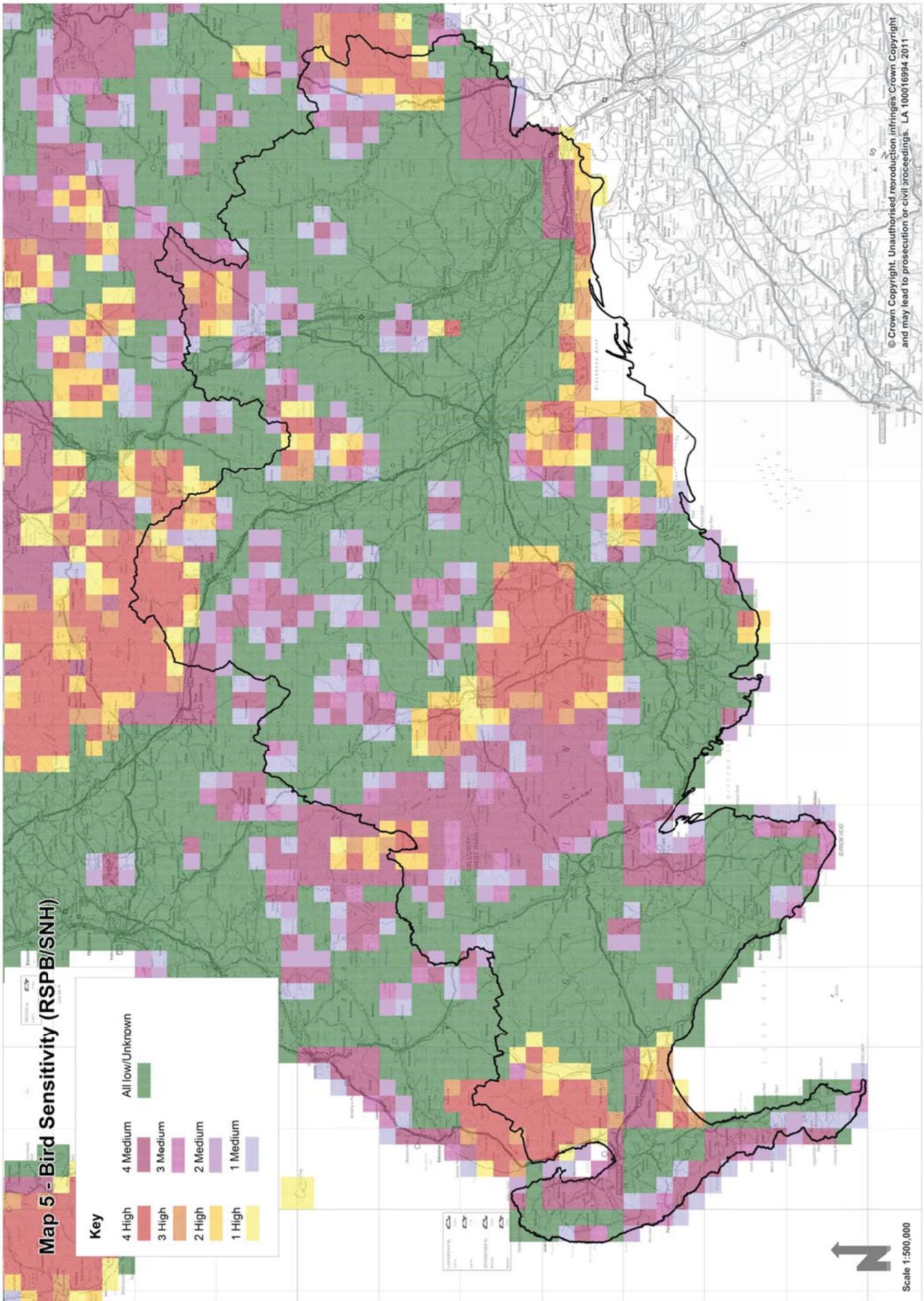
5.4 Some species, due to their nature, move around over or long or short distances, which can make their presence difficult to map accurately. SNH should be contacted in relation to their presence, and that of other protected species, on specific sites. The Forestry Commission Scotland has recently completed a national consultation on red squirrel strongholds (of which there are 2 in the region).

5.5 Map 5 indicates the RSPB/SNH bird sensitivity areas.

5.6 Approximately 28% of the region is under forestry and woodland cover. This coverage is indicated on Map 2, page 18.







5.7 A biosphere reserve has been designated within Galloway and Southern Ayrshire due to its unique combination of special landscapes and wildlife areas, rich with cultural heritage and communities that care about their environment and culture and want to develop it sustainably. Biosphere reserves are established through the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) Programme on MAN and the Biosphere. The Galloway and Southern Ayrshire biosphere reserve is the first in Scotland and only the third in the UK under the new IUCN criteria. The proposed biosphere boundaries are shown on Map 6.

### Population and Human Health

5.8 The region's population is concentrated in small towns and villages with a large, thinly populated rural hinterland (Map 7).

5.9 Figures released on 28<sup>th</sup> April 2009 by the General Register Office for Scotland (GROS) estimate the population of Dumfries and Galloway to have been 148,580 on 30<sup>th</sup> June 2008, an increase of 800 (0.54%) since 2001.

5.10 Three factors influence population change – births, deaths and migration. Over the past decade Dumfries and Galloway's population has been in a state of 'natural decline' with more deaths per year than births. This along with improvements in mortality rates and the ageing of the 'baby boomers' has resulted in a generally older population

5.11 Dumfries with a population of 37,846 is the largest settlement in the region with only two other settlements above 5,000 in population, namely Stranraer (10,851) and Annan (8,389). There are 13 settlements with a population between 1,000 and 5,000 and 9 settlements with a population between 500 and 1,000.

5.12 There are low levels of household income in the region with the:

- proportion of employees earning less than £7 per hour is the third highest in Scotland
- number of households in receipt of tax credits over and above the family element is the highest in Scotland

In the region between 2002 and 2008, the percentage of households in relative poverty increased from around 17% to 22%.

5.13 The Council has adopted a core path network which is shown in Map 9.

### Material Assets

5.14 The main settlements (those outlined as the regional centre, district and local centres within the Main Issues Report, 2011) are shown on Map 8.

### Soil

5.15 There is only a very small proportion of land in the region that is considered to be prime agricultural land (MacAulay land classification 1, 2 and 3.1) mainly located in the Rhins, the Machars, and around Dumfries, Annan and Lochmaben, shown on Map 10. There are also large areas of peatland within the region.

### Water

5.16 The baseline for the quality of waterbodies in the region is contained in the Solway Tweed River Basin Management Plan 2009. This can be viewed at [www.sepa.org.uk/water/river\\_basin\\_planning.aspx](http://www.sepa.org.uk/water/river_basin_planning.aspx). In 2008 49% of water bodies were considered to be at good status or higher.

## Dumfries and Galloway Forestry and Woodland Strategy

5.17 In relation to flood data the most important source of baseline information is the SEPA Indicative River and Coastal Flood Map for Scotland. There are significant flood risks across the whole width of the region.

### **Air**

5.18 There are no Air Quality Management Areas within the region at present, although this may change after further monitoring particularly at specific locations in Dumfries.

### **Climatic Factors**

5.19 Due to the rural nature of the region the population is often more dependent on their own transport and therefore emissions of carbon dioxide from transportation are considerably higher than in Scotland as a whole (3.73 Kg/capita and 1.89 g/capita respectively).

5.20 Greenhouse gases appear less per capita than in wider Scotland (3620.92 Kg/capita against 4859.89 Kg/capita), however, being a dairy farming region, the amount of methane produced by livestock is likely to be significant.

5.21 Average temperatures experienced within the region have increased by 1°C since 1970, which is comparable with the UK average. It is anticipated that average temperatures will continue to rise in line with the rest of the UK. It is also likely that the number of extreme weather events will also increase (including flooding, storms, etc.).

### **Cultural Heritage**

5.22 The region has a rich cultural heritage with:

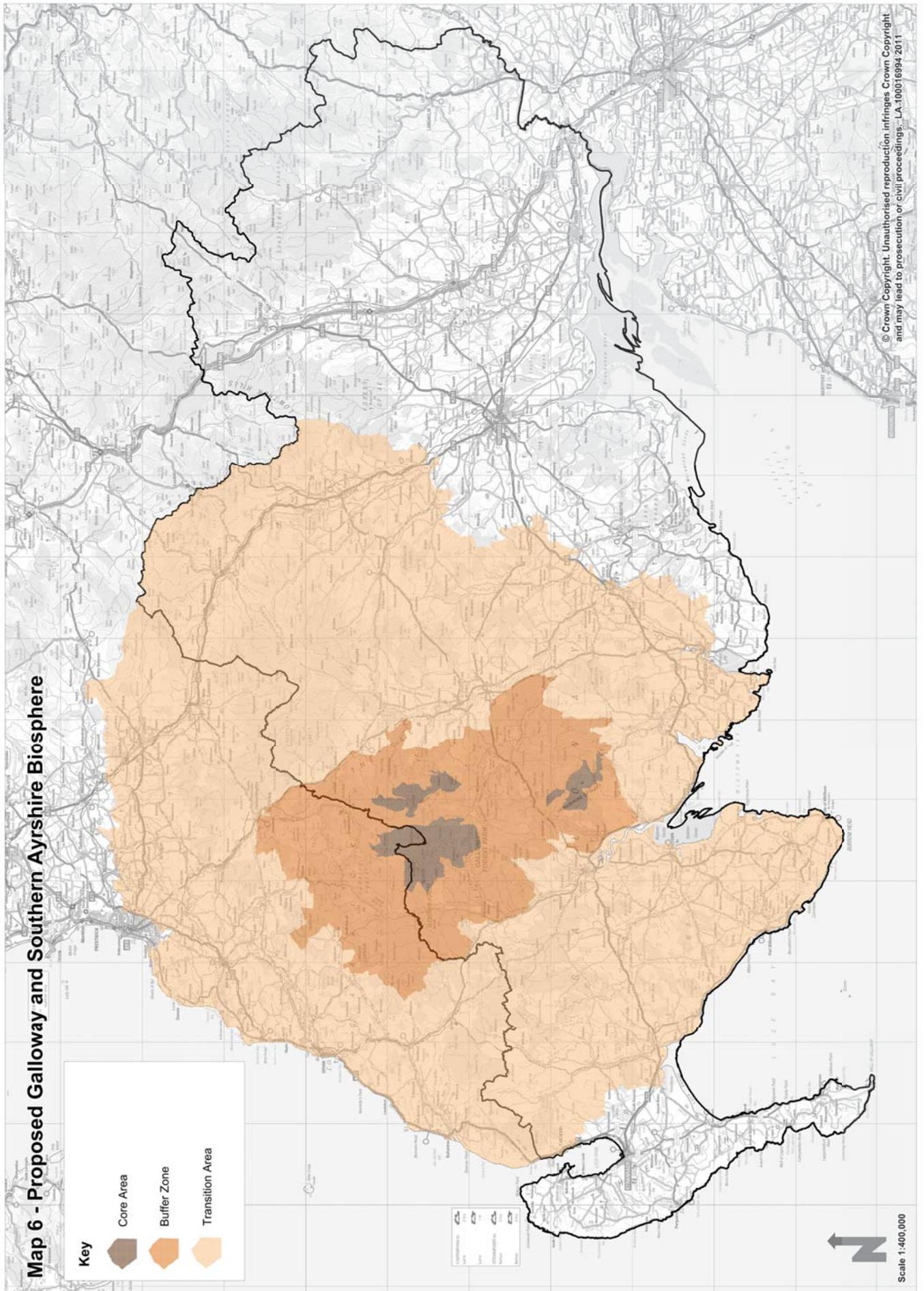
- 3,400 listed buildings (7% are Category A and 53% are Category B)
- 38 Conservation Areas of which 16 are classified as outstanding
- 32 designated Archaeological Sensitive Areas
- 1039 important scheduled ancient monuments
- 20 Inventory Gardens/Designed Landscapes
- 180 Non-Inventory Gardens/Designed Landscapes

The locations of the above can be found on Maps 11-15, although please note that only Category A Listed Buildings have been mapped for the purposes of the SEA.

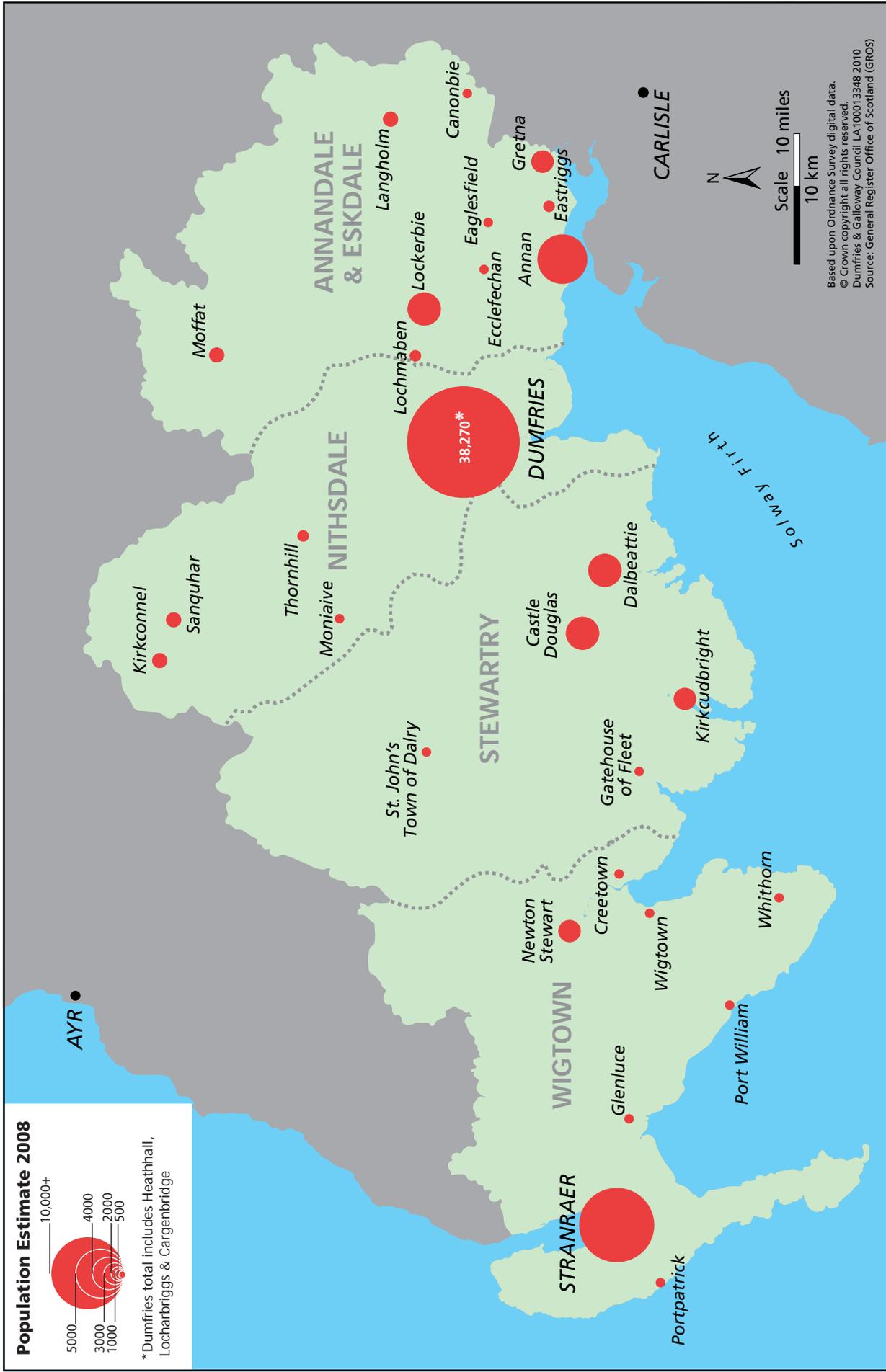
### **Landscape**

5.23 The Landscape Character Assessment of Dumfries and Galloway identified four broad regional character areas which are divided into a number of landscape types and subtypes. The current landscape character types are shown in Map 16.

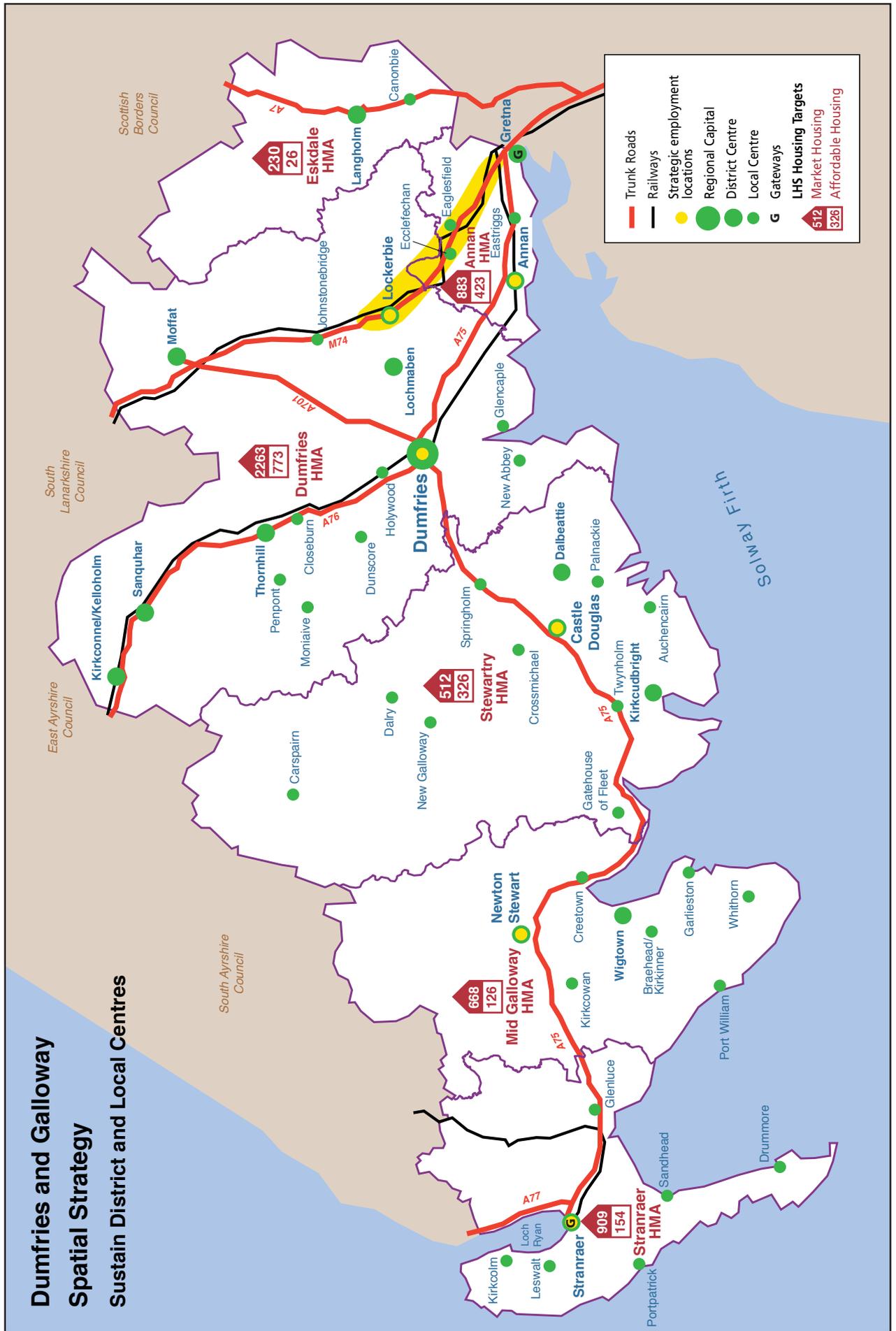
5.24 The region also contains three National Scenic Areas (NSAs) and ten Regional Scenic Areas (RSAs) shown on Map 17. NSAs are nationally important areas of outstanding beauty, representing some of Scotland's grandest landscapes. The purpose of such designations is to preserve and enhance their character or appearance. RSAs are locally designated and are areas which are valued regionally or locally for their special scenic qualities.



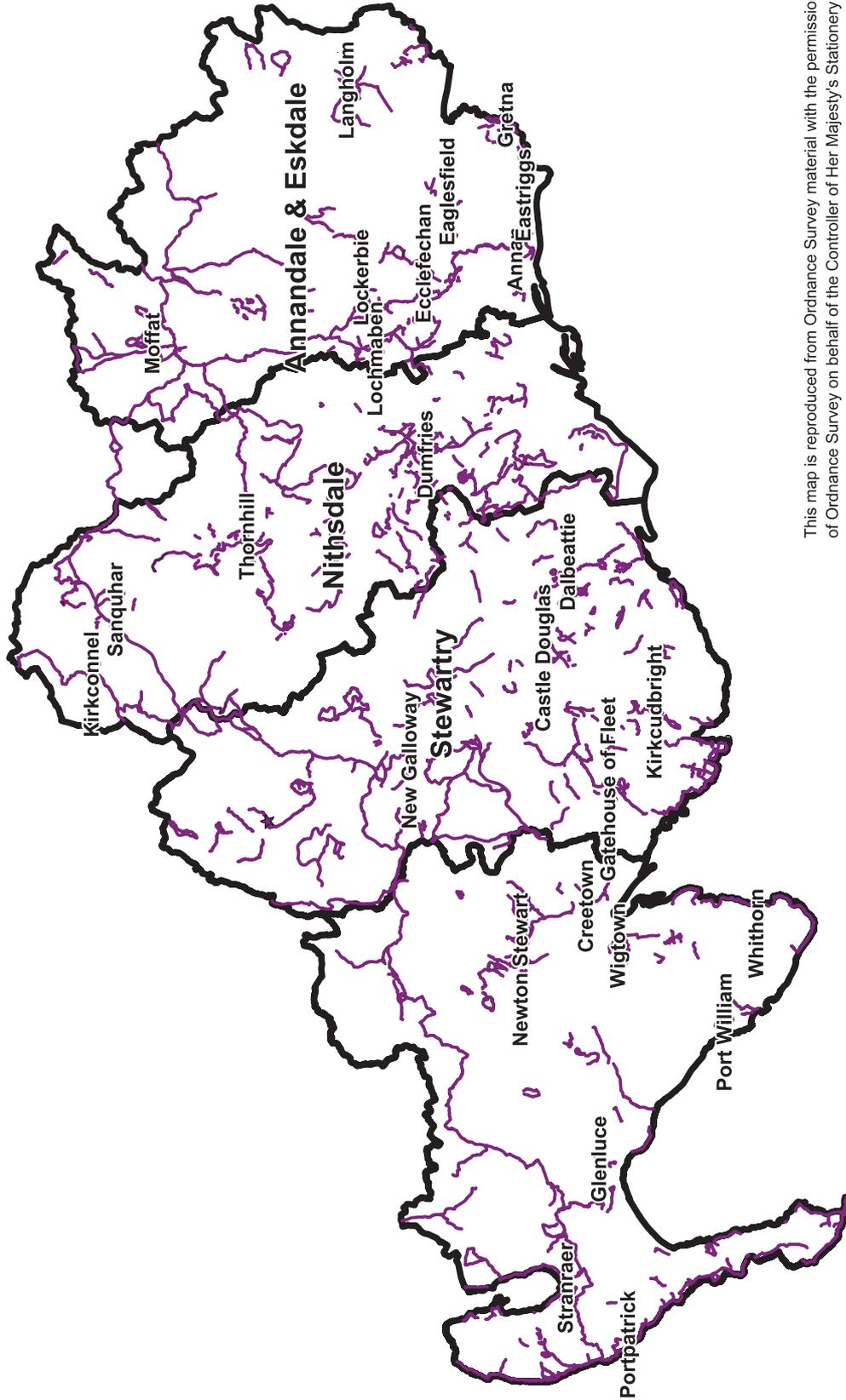
Map 7 - Population Distribution



Map 8 - Main Settlements within Dumfries and Galloway



Map 9 - Core Path Network



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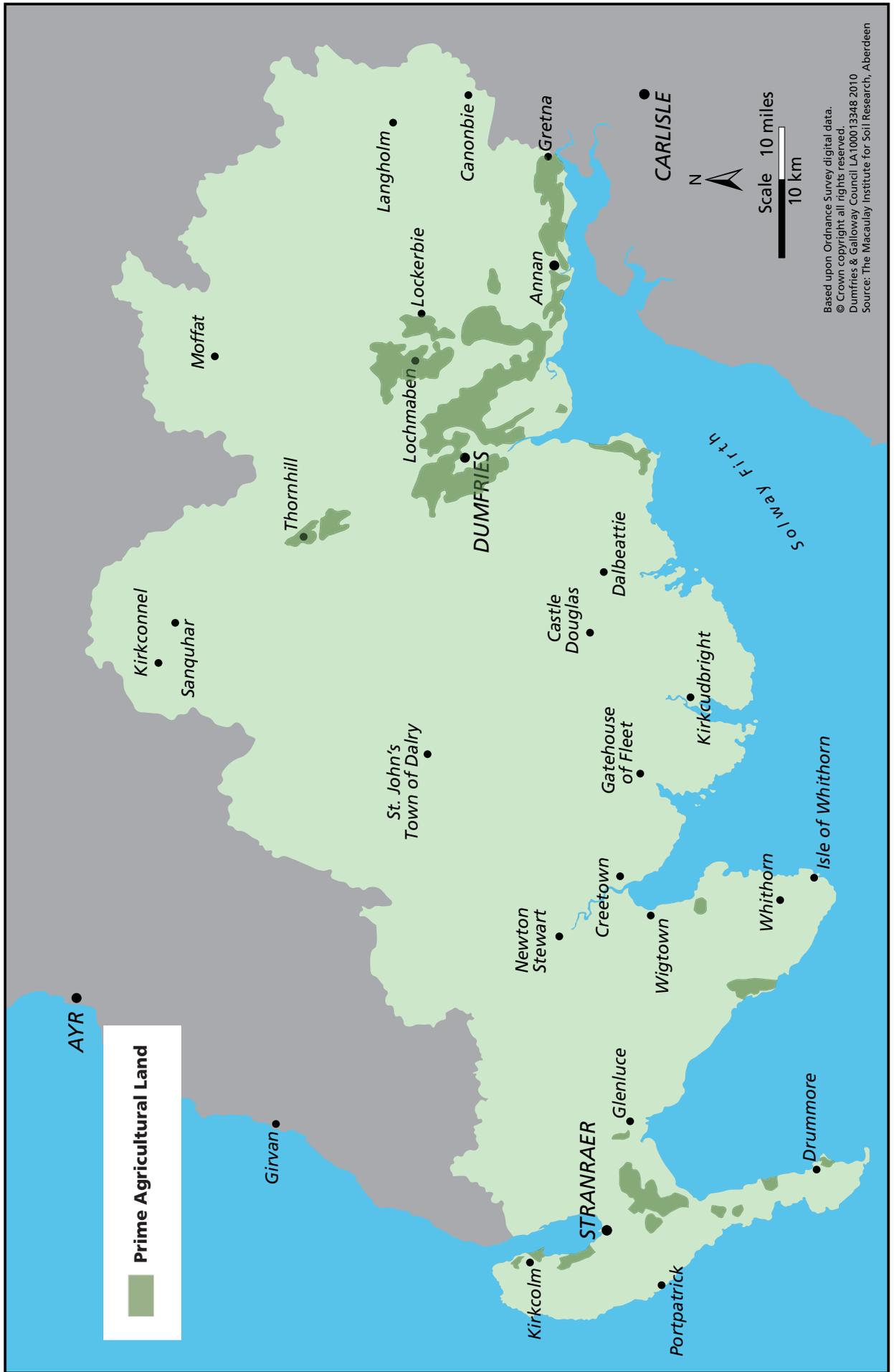
Countryside Service  
Dumfries and Galloway Council,  
Militia House,  
Dumfries, DG1 2HR.  
[access@dumgal.co.uk](mailto:access@dumgal.co.uk)

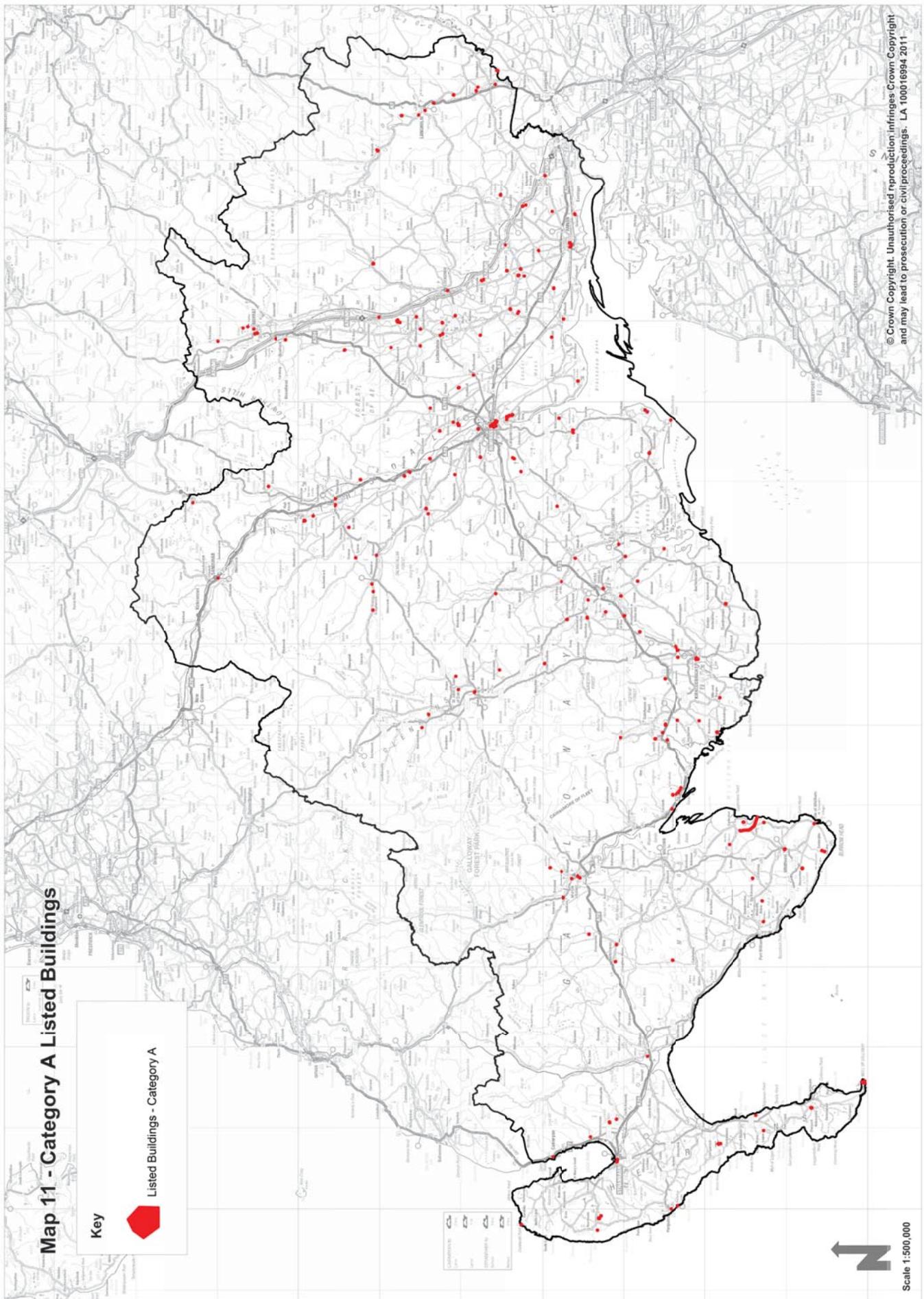
Dumfries & Galloway Core Paths

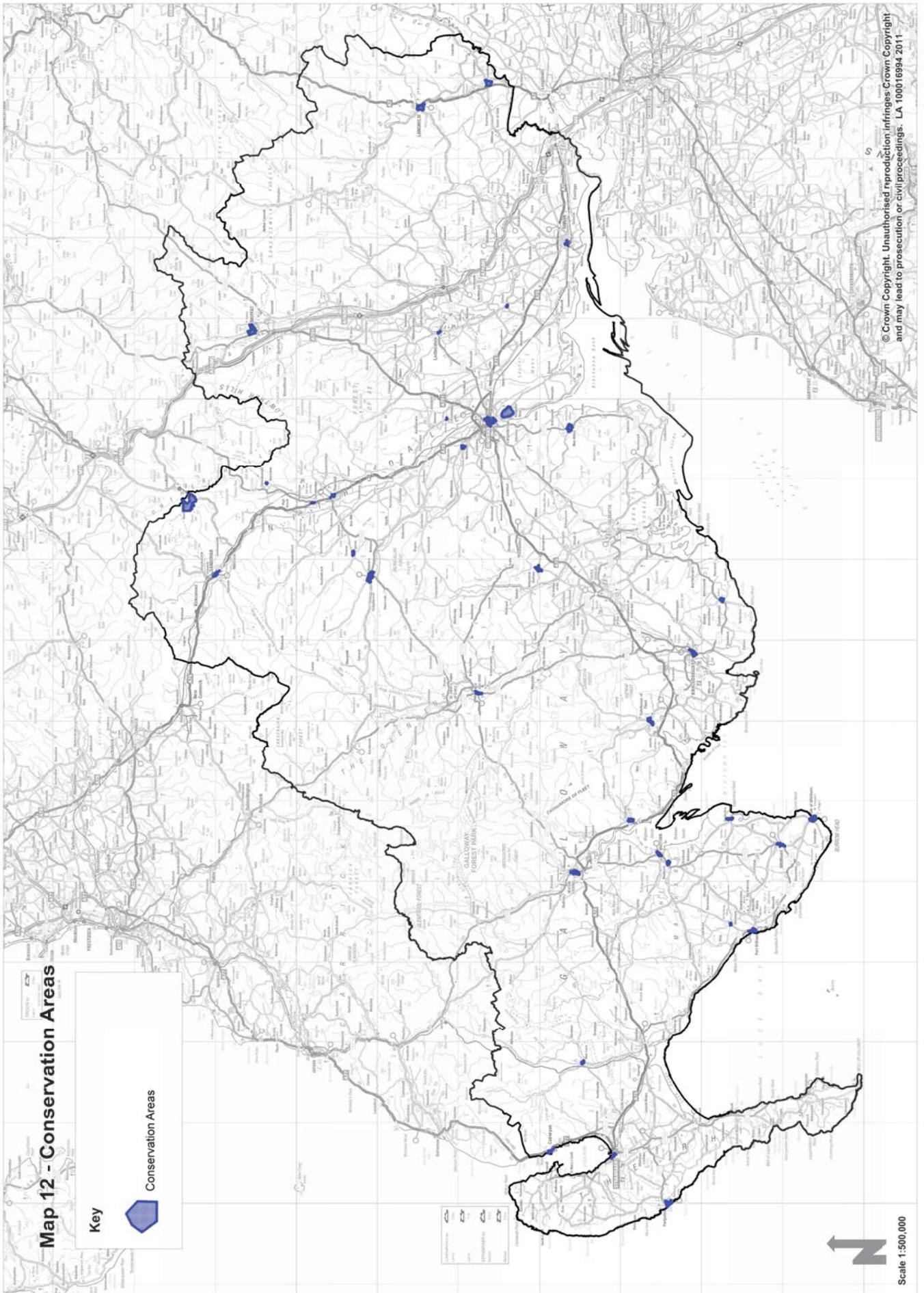
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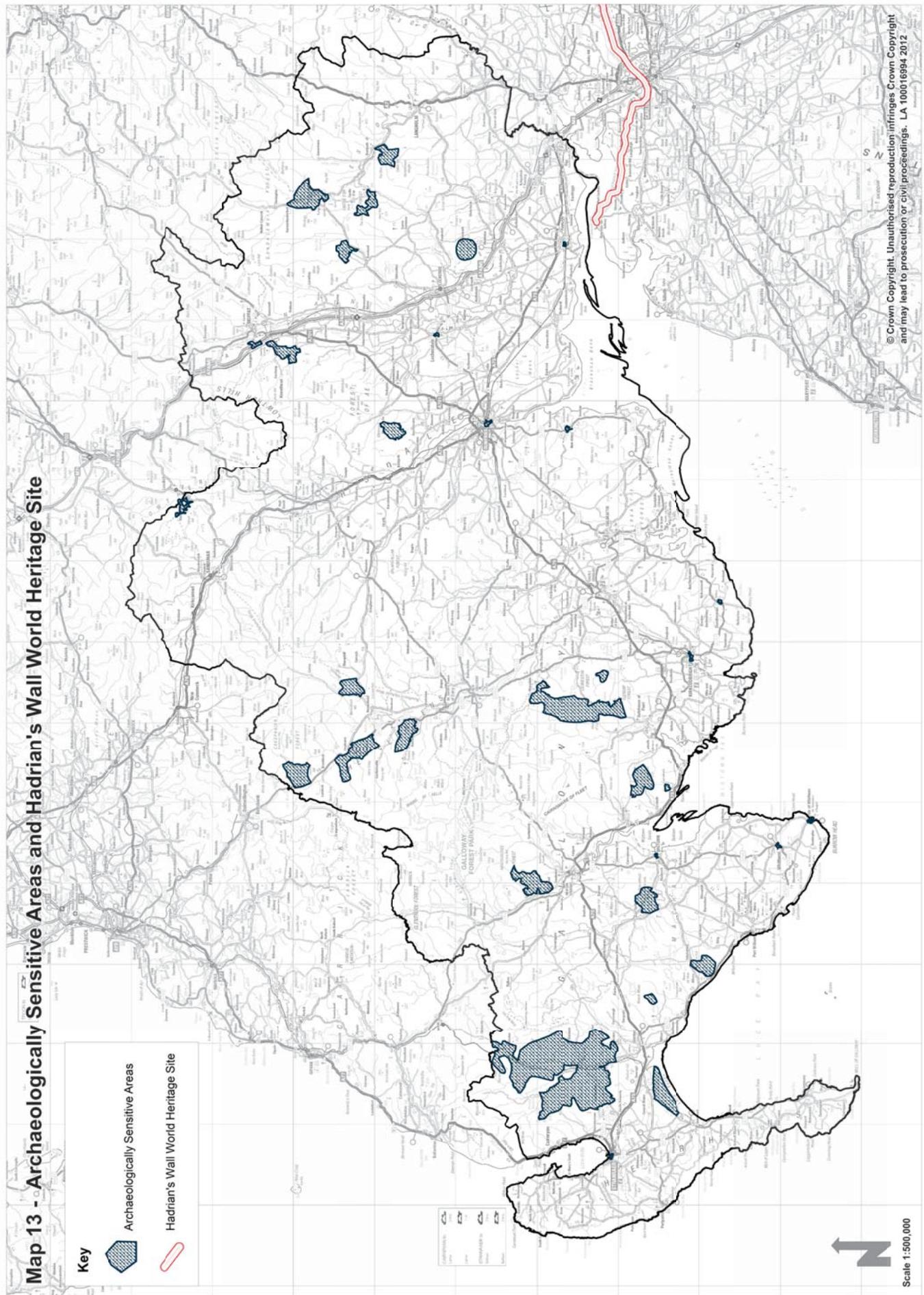
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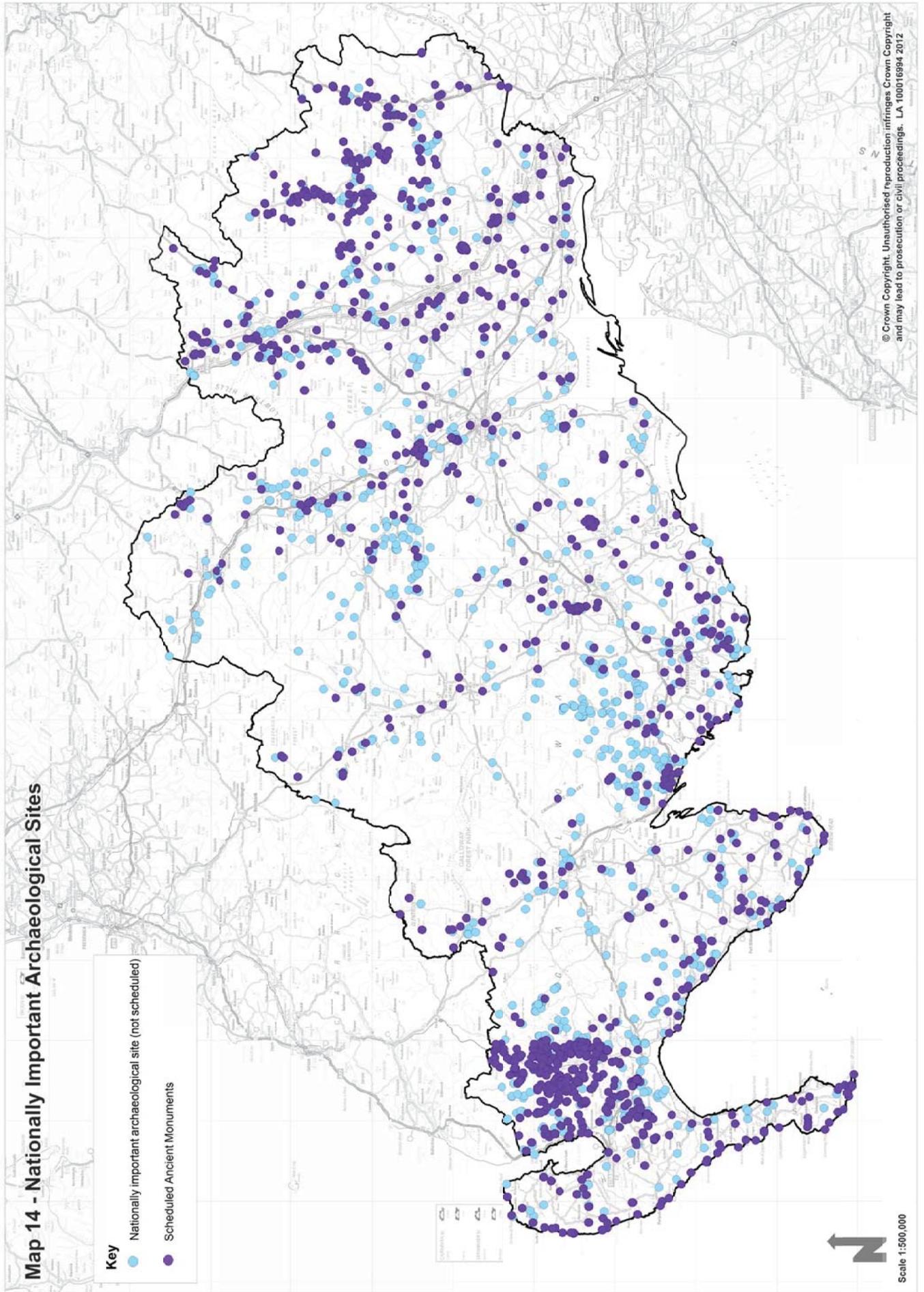
Map 10 - Prime Agricultural Land

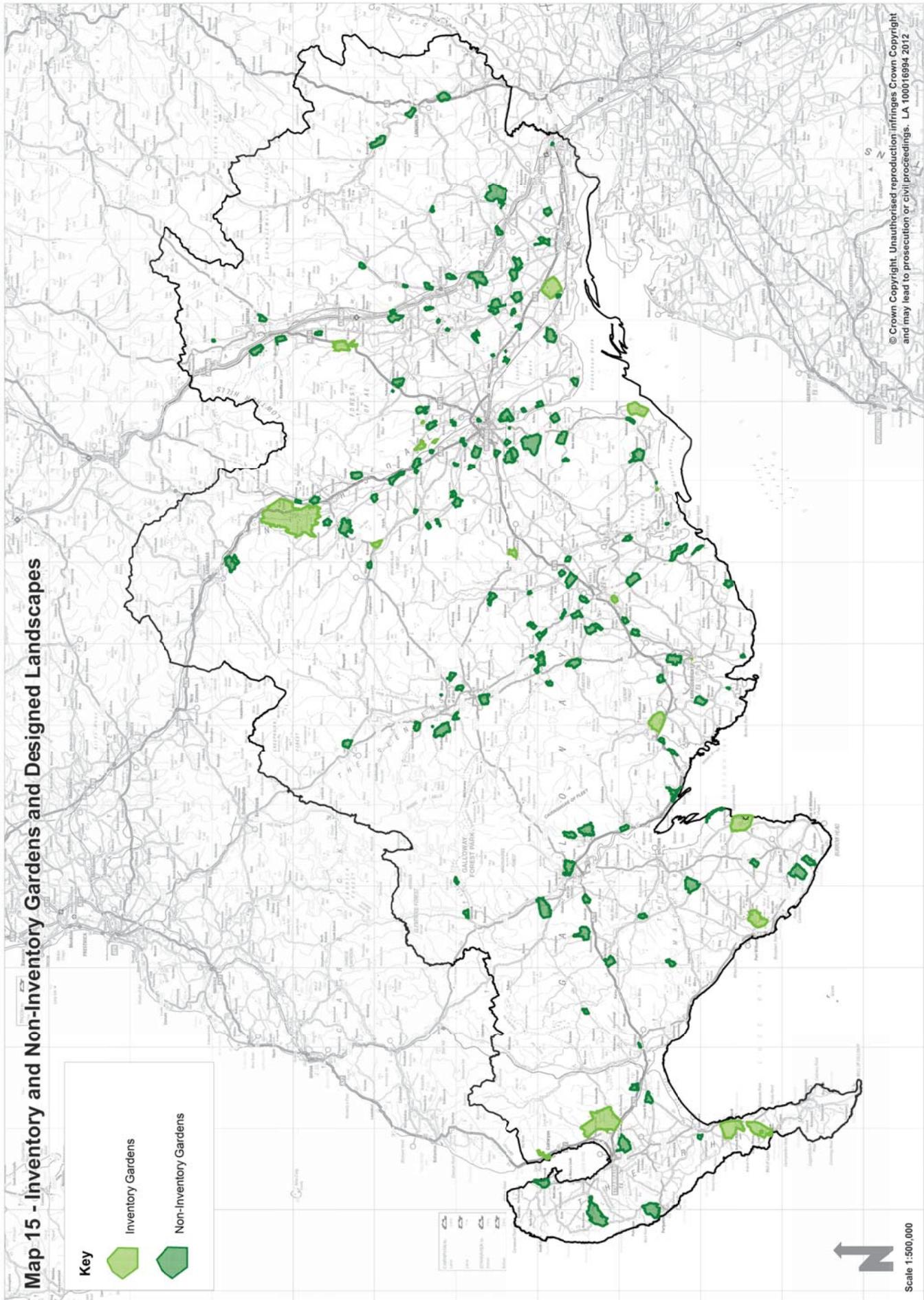




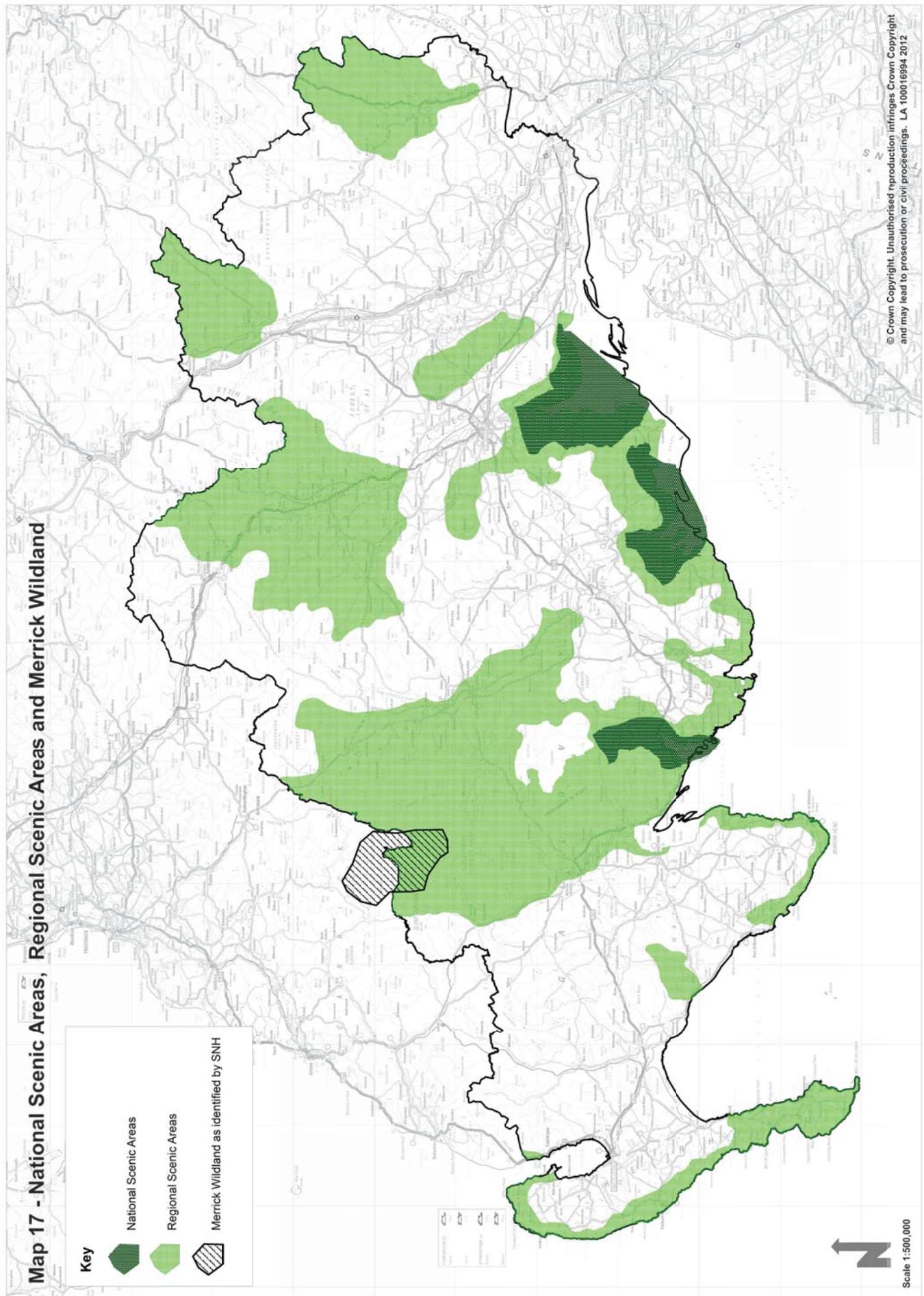












## Appendix 6. Full Wording of Objectives

### Theme 1: Woodlands and the Environment

Key policy objectives under this theme are:

1. Conserve and enhance biodiversity within the region
2. Protect, enhance and restore the Water (including flood management), soil and air environment
3. Ensure that tree, forest and woodland planting or restructuring are appropriate to and enhance their landscape setting.
4. Recognise the contribution of trees and woodlands as key components of valued historic environments and to ensure protection of sites and features of interest in woodlands and forests.
5. Encourage the sympathetic planting of restoration sites, creating new habitat, green networks and/or productive forestry and woodland.

### Theme 2: Woodlands and Sustainable Growth

Key policy objectives under this theme are:

1. Support predictable and stable timber supplies
2. Promote greater use of sustainable construction using local timber and supporting greater adding of value to local forest products
3. Support forestry employment and skills development
4. Continue to explore and develop more sustainable timber transport
5. Further develop and enhance forestry related tourism

### Theme 3: Woodlands, Forestry and Climate Change

Key policy objectives under this theme are:

1. Encourage sustainable forest practices and appropriate woodland expansion to mitigate the effects of Climate Change
2. Encourage effective development of renewable energy from forests in the form of biomass woodfuel and the integration of appropriate renewable energy schemes within forests and woodlands

### Theme 4: Woodlands for People

Key policy objectives under this theme are:

1. Encourage and promote the use of forests and woodlands to improve health and wellbeing in a variety of ways
2. Encourage and promote the use of forests and woodlands for outdoor learning

- 3. Increase the opportunities for access and links to and enjoyment of forests and woodlands by all sectors of society, particularly by developing new woodlands close to towns and villages and promoting community development and participation in woodland management**

### **Theme 5: Woodlands and Development Management**

Key policy objectives under this theme are:

- 1. Protect and retain trees valued for their rarity, visual amenity or cultural significance or ensure appropriate compensatory planting occurs where trees are lost as part of permitted development works**
- 2. Encourage the inclusion of tree planting in landscaping schemes**

### **Opportunities for Woodland Expansion**

Key policy objectives under this element are:

- 1. Identify potential areas where woodland expansion could make a significant contribution to one or more of the themes within this strategy**
- 2. Target opportunities for tree planting and woodland expansion to appropriate locations, using an appropriate mix of tree species**
- 3. Identify potential constraints and opportunities for enhancement through new planting and through restructure of the existing forest and woodland resource**
- 4. Ensure a continuing supply of suitable timber and woodland produce to sustain and grow the region's forest industries**

