

The Highland Council

Local Transport Strategy

Strategic Environmental Assessment

February 2010

Halcrow Group Limited

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16 Abercromby Place, Edinburgh EH3 6LB
Tel +44 (0)131 272 3300 Fax +44 (0)131 272 3301
www.halcrow.com

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Non Technical Summary

1.1 Introduction

The purpose of the Strategic Environmental Assessment is to provide a method of predicting, assessing mitigating and monitoring the significant environmental effects of the LTS

Section 14(3) of the Act requires the Environmental Report to include the information specified in Schedule 3 of the Act and to take account of the following:

- (a) Current knowledge and methods of assessment of environmental matters;
- (b) The contents of, and level of detail in, the Strategy
- (c) The stage of the Strategy in the decision-making process; and
- (d) the extent to which any matters to which the report relates would be more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

1.2 Background to the Local Transport Strategy

The Highland Council Local Transport Strategy has been drafted to set the framework for transport policy and decisions for the next three year period. The objectives and principles also aim to guide decision making beyond this period. It will replace the 2000-2006 Local Transport Strategy. The LTS will set out the Council's aims, objectives, policies and strategies addressing transport issues during defined time period.

The LTS is not a stand alone document – it relates to (and is informed by) policies across the local authority, the region and nationally.

Moreover, the LTS relates to the issues and policy priorities for non-transport sectors, in particular, health, social inclusion, economic development and environmental sustainability.

The objective of the LTS is

‘...to consider what the National objectives mean in the context of the Highland locations, considering at ore detailed level the problems encountered in towns and villages , in Inverness and along key transport corridors between them.’

1.3 Approach to SEA

In accordance with SEA protocol a Scoping Report was submitted to the Consultation Authorities, Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA) and Historic Scotland via the SEA Gateway on the 12th August 2009. The Scoping Report informed the Consultation Authorities of the scope and level of detail in the Environmental Report. In accordance with Schedule 3 of the Act the following approach was taken

- Review of relevant plans, programmes and strategies
- Comprehensive review of the baseline environment data
- Identify environmental problems and issues

A SEA Scoping Workshop was hosted by The Highland Council on the 30 July 2009. The Scoping Workshop was convened to identify the most appropriate issues for consideration. SNH and Historic Scotland were in attendance. SEPA provided comments through the Scoping Report statutory consultation period.

From this information and taking account of the National Transport Strategy and Regional Transport Strategy SEA objectives, a series of environmental objectives and criteria were determined for each of the relevant SEA topics. The objectives and criteria are presented in the table below.

Table 1: SEA Objectives and Assessment Criteria

Local Transport Strategy SEA Objectives	Assessment Criteria
To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.	<ul style="list-style-type: none"> • Will the LTS result in any likely significant effects upon Special Areas of Conservation (SAC) (including candidate), Special Protection Areas (SPA) (including proposed) and Ramsar sites? • Will the LTS result in any adverse effects on Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR), Sites of Importance for Nature Conservation (SINC) and RSPB/SWT Reserves? • Are there likely to be impacts to any UK or European Protected Species? • Are there likely to be impacts to any priority habitats and species as identified in the UK and Local Biodiversity Action Plans?
To promote accessibility, health and quality of life through the integration of the LTS.	<ul style="list-style-type: none"> • Does the LTS plan to increase social inclusion through increasing accessibility to services such as healthcare? • Does the LTS promote 'healthier lifestyles'

Local Transport Strategy SEA Objectives	Assessment Criteria
	<p>through increased promotion and provision of walking and cycling facilities? Are there links between the LTS and the Highland Council Core Path Network Plans?</p> <ul style="list-style-type: none"> • Will the LTS cause the deterioration of either the air or water quality of the region?
<p>To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.</p>	<ul style="list-style-type: none"> • If LTS proposals require land-take will there be an adverse impact upon the local geodiversity of the area? • Will any prime quality agricultural land be impacted? • Will any geologically designated sites (SPA, SSSI, or Regional Important Geological Sites (RIGS)) be impacted? • Will any peatland be impacted?
<p>To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.</p>	<ul style="list-style-type: none"> • Will the LTS policies result in a deterioration of current ground or surface waters? • Will any LTS policy result in direct impacts to flood plain areas?
<p>To protect and enhance the current air quality of the highland area.</p>	<ul style="list-style-type: none"> • Will the LTS maintain or enhance current air quality throughout the region? • Will sustainable transport be promoted which will help to reduce greenhouse gas emissions? • Will the LTS policies result in Government targets for emissions being exceeded leading to the declaration of Air Quality Management Areas (AQMA)?
<p>To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.</p>	<ul style="list-style-type: none"> • Will the proposals reduce the reliance on private vehicle transport? Are there likely to be any conflicts with policy given the highly rural nature of the study area? • Does the LTS promote either air or ferry travel, and if so what are the climatic implications? • Will modal shift to more sustainable forms of transport be promoted? • Do LTS proposals avoid or take account of areas at risk of landslip or coastal erosion?
<p>To protect and enhance existing infrastructure and promote more sustainable transport.</p>	<ul style="list-style-type: none"> • Will the LTS avoid severance or other detriment to existing walking and cycling routes?

Local Transport Strategy SEA Objectives	Assessment Criteria
To protect and, where appropriate, enhance the historic environment of the highlands.	<ul style="list-style-type: none"> • Will the LTS result in any adverse impacts upon the cultural heritage features of the Highlands?
To protect and, where possible enhance the landscape and visual amenity of the highlands.	<ul style="list-style-type: none"> • Will the LTS policies protect and where possible enhance landscape character, or visual amenity of sensitive receptors within the Highlands? • Will the LTS policies protect and where possible enhance designated areas (National Scenic Areas [NSAs] and Areas of Great Landscape Value [AGLV])?
To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.	<ul style="list-style-type: none"> • Will the LTS proposals result in any adverse impacts to sensitive receptors and/or residential areas in the Highlands? • Will there be any significant noise increase in the Highlands above those currently experienced as a result of the policies?

The Environmental Report has assessed the vision, objectives and core policies as proposed in the Scoping report. The assessment has also taken into consideration cumulative, secondary/indirect and synergistic impacts.

1.4 Alternatives

The SEA Act requires the environmental effects of reasonable alternatives to the strategy be identified, described and evaluated. It specifies that only reasonable SEA regulations do require that the environmental effects of such alternatives be considered

Following the Scoping Workshop and subsequent additional consultation with the Statutory Authorities alternative approaches that have been considered have focused on specific priority themes as follows

Alternative Strategy one – do nothing / do minimum. This is a scenario of moving forward with limited intervention by the local authority in terms of policy direction or investment as presented in the LTS

Alternative Strategy two – A strategy focused on public transport and active travel i.e. sustainable modes. This strategy has a strong focus on sustainable modes (i.e.) that is modes which have a lesser environmental impact than the private car or road based freight.

Alternative Strategy three – This strategy has a strong focus on developing and maintaining the road network infrastructure to serve individual users and businesses, through cars, road-based public transport and business related vehicles such as lorries.

In summary, the Council felt that an integrated Strategy approach as represented by the proposed LTS Core Policies better met the needs of all transport users, as well as meeting the objectives set for local transport and SEA objectives.

1.5 Supporting Assessment

Appropriate Assessment

An Appropriate Assessment (AA) on the Local Transport Strategy has been carried out in tandem with this SEA. An AA is required where any plan is likely to have a significant effect on a 'Natura 2000'¹ site, which has been designated under the EU Habitats and Birds Directives, which are transposed into Scottish law by the 'Conservation (natural Habitats &c) Amendment (Scotland) Regulations 2007.

The AA found that there were possible significant impacts on 41 Natura 2000 sites in total, yet impacts were unlikely to occur on 14 of these sites. For all sites where there was an uncertain impact, further details of the transport schemes will be needed to assess their likely impacts. A large number of schemes, including those listed as having uncertain effects, will require further, site-level AA.

The AA is provided as an appendix to this SEA report.

1.6 Findings of Environmental Assessment

A Vision, Key Objectives and Core Policies were developed for the LTS. The extent and significance of predicted environmental impacts of each were assessed where possible.

The LTS Vision and Key Objectives were all deemed to be compatible with SEA objectives, with some minor text changes recommended to enhance clarity.

With the exception of CP8: Air Services, all Core Policies were concluded to have a minor positive impact on the environment following mitigation. Changes and mitigation measures have been recommended to minimise predicted environmental impacts wherever possible; however, some impacts still remain.

¹ Special Areas of Conservation, Special Protection Areas. Ramsar sites also included, in accordance with Scottish Government guidance on AA.

- **Biodiversity:** Land-take associated with the construction of new development and intensification of water-based vessel traffic will deliver the most significant impacts to biodiversity across the region (see Core Policies 2, 3, 7, 8, 9, 10, 12 and 13).
- **Population and Human Health:** Adverse impacts to population and human health are currently unknown; these will depend on the specific requirements or outcomes to scheme proposals.
- **Soil:** Land-take associated with the construction of new development will deliver the most significant impacts to soil across the region (see Core Policies 2, 3, 7, 8, 10, 12 and 13).
- **Water Quality:** Development within or adjacent to designated marine sites and intensification of water-based vessel traffic will deliver the most significant impacts to water quality (see Core Policies 9 and 12).
- **Air Quality:** Any intensification of road traffic levels, particularly where it contributes to existing congestion problems, and any intensification of air traffic levels will adversely impact on air quality (see Core Policy 8).
- **Climatic Factors:** Any increase in greenhouse gas emissions, particularly as a result of intensified road or air traffic levels will adversely impact on climate factors (see Core Policy 8).
- **Material Assets:** Adverse impacts to population and human health are currently unknown; these will depend on the specific requirements or outcomes to scheme proposals.
- **Cultural Heritage:** Land-take associated with the construction of new development presents the most significant potential for impacts to cultural heritage sites across the region (see Core Policies 2, 3, 7, 8, 10 and 13).
- **Noise:** Any intensification of air traffic and construction works related to new development and/or maintenance to existing networks present the most significant potential for noise pollution (see Core Policies 3 and 8).
- **Landscape and Visual Amenity:** Land-take associated with the construction of new development presents the most significant potential for impacts to cultural heritage sites across the region (see Core Policies 2, 3, 7, 8, 10 and 13).

Given the strategic nature of the LTS, further environmental impacts are expected to arise from specific proposals for improvements to existing services and through the provision of new transport services and facilities. These will need to be subsequently assessed on a scheme-by-scheme basis.

1.7 Mitigation Measures

Throughout the assessment of the strategy vision, objectives and core policies mitigation measures have been proposed in the matrices to offset likely significant adverse impacts. These can be found in the detailed assessment summaries in sections 5.5 and 5.6. Section 6 provides guidance on strategic level mitigation and further studies/assessment that may be required at the project level.

1.8 Monitoring

Section 7 of the Environmental Report sets out a list of proposed indicators that could be used to monitor the environmental effects of the LTS. Following the adoption of the final LTS, a Post Adoption Statement will be produced which will be set out the final monitoring framework.

1.9 Next Steps

Table 2: The Next Steps

Expected date	Milestone
Winter 2009/2010	Publication of the Draft Local Transport Strategy and Environmental Report. This will be subject to a public consultation period of eight weeks
Spring 2010	Preparation of the Final Local Transport Strategy and Environmental Report. Develop a comprehensive monitoring framework
Spring 2010	Highland Local Transport Strategy and Environmental Report to be presented to The Highland Council Committee for approval
Summer 2010	Approval of the Local Transport Strategy along with Environmental Report, publication of Post Adoption Statement

Comments on the Environmental Report may be addressed to

The Highland Council
Glenurquhart Road
Inverness, IV3 5NX
Email:

2 Introduction

2.1 Background

The requirement to undertake Strategic Environmental Assessment (SEA) is established by European Directive 2001/42/EC, 'the Assessment of the Effects of Certain Plans and Programmes on the Environment' (the SEA Directive). SEA provides plan-making authorities with the ability to incorporate environmental considerations into decision-making at an early stage and in an integrated, transparent and documented manner.

The overall objective of SEA is to:

Provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development'
(Article 1 of the SEA Directive).

In Scotland, the 'Environmental Assessment (Scotland) Act 2005' (the SEA Act) provides the legislative mechanism for transposing the Directive into Scottish legislation. Scottish Government Ministers envisage Scotland as a world leader in SEA provision and, as such, Section 1 of the Act sets out the primary requirement, which is to secure the completion of an environmental assessment during the preparation of a qualifying plan or programme. The explanatory notes to the Act state,

*"Through the Act the aim is to improve protection of the environment, to improve public decision making and ...to legislate to introduce Strategic Environmental Assessment across the range of **all** new strategies, plans and programmes developed by the public sector in Scotland".*

The implementation of the Local Transport Strategy is likely to have significant environmental effects on the Highland Region and therefore an SEA has been carried out in accordance with Scottish Government guidance.

A scoping report was prepared and submitted to the statutory consultation authorities on the 12 August 2009. This informed the Consultation Authorities on the scope and level of detail to be contained in the Environmental Report.

The Statutory Consultation authorities are

- The Scottish Government who have delegated their responsibilities to Historic Scotland
- Scottish Natural Heritage; and

- The Scottish Environment Protection Agency

The Consultation Authorities responded with their views on the 9th September 2009. These responses have been summarised along with the Highland Council's response and are provided for reference in Appendix C. The responses to the Scoping report have been incorporated where appropriate.

2.2 Purpose of this Environmental Report and key facts about the Strategy

As part of the preparation of the Local Transport Strategy, the Highland Council is carrying out a Strategic Environmental Assessment (SEA). SEA is a systematic method for considering the likely environmental effects of plans, programmes and strategies. SEA aims to

- Integrate environmental factors into the plan preparation and decision-making;
- Improve the plan and further environmental protection;
- Increase public participation in decision making; and
- Facilitate openness and transparency on decision-making.

The table below summarises the key SEA stage and identifies SEA activities carried out to date, and identifies where further information can be obtained relating to each stage

Table 3: SEA Stages and Timescales

Stage	Summary	Timescale
Screening	Determining whether the Local Transport Strategy is likely to have significant environmental effects and whether an SEA is required	The part was missed due to the understanding that an SEA would be carried out due to potential significant impacts
Scoping	Deciding on the scope and level of detail of the Environmental Report, and the consultation period for the report – this is done in consultation with Scottish Natural Heritage, Historic Scotland and the Scottish Environment Protection Agency	This was carried out between June and August with the Scoping Workshop on the 30 July 2009. Scoping Report issued to the SEA Gateway on 12 th August 2009.
Environmental Report	Publishing an Environmental Report which outlines the environmental analysis undertaken for the Local	In February 2010 the Submission of the Environmental Report to the Statutory Authorities and made available for public consultation in

	Transport Strategy and its environmental effects, and consulting on that report	association with the draft LTS. Consultation will run for a period of eight weeks.
Adoption and SEA Statement	Providing information on: the Local Transport Strategy; how consultation comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the strategy	Will follow consultation and adoption stage
Monitoring	Monitoring significant environmental effects in such a manner so as to also enable the Responsible Authority to identify any unforeseen adverse effects at an early stage and undertake appropriate remedial action	To be undertaken by The Highland Council

The purpose of this Environmental Report is to:

- provide information on the Highland Local Transport Strategy
- identify, describe and evaluate the likely significant effects of the Local Transport Strategy and its reasonable alternatives;
- provide an early and effective opportunity for the Consultation Authorities and the public to offer views on any aspect of this Environmental Report.

The key facts relating to the Highland Local Transport Strategy are set out in Table 4 below. This is based on the draft Local Transport Strategy which has been publicly available by THC via its website. (www.highland.gov.uk)

Table 4: Key Facts

Responsible Authority	The Highland Council (THC)
Plan Title	Local Transport Strategy for the Highlands
Plan Subject	The Local Transport Strategy sets out the framework for transport policy and development decisions in the Highland Region.
Period covered by PPS	3 years
Frequency of updates	3 years

Area covered by the Plan	The Highland Region
Summary of content/ Nature of the Plan	<p>The Local Transport Strategy sits within the framework of both the National and Regional Transport Strategies.</p> <p>It is intended to provide policy and guidance to address the problems identified in the Highland region not only from a transport perspective but also any decisions necessary to allow the community to function well across the region</p> <p>The Strategy provides high level objectives and core policies.</p>
Contact points	<p>Cameron Kemp Integrated Transport Manager, The Highland Council Tel: 01463702612 Email: cameron.kemp@highland.gov.uk</p> <p>Mike Roberts SEA Project Manager, Halcrow Group Ltd Tel: 01312723300 Email: robertsmi@halcrow.com</p>

2.3 Public and Stakeholder Consultation

Consultation events have been held over the month of September. The Council presented both the Development Plan Scheme and the Local Transport Strategy to the public during a series of events in September

Pre consultation has been carried out through Ward Forums across the Highland Council area, to inform the development of the Draft Highland Council Local Transport Strategy

In addition, individual consultation meetings were held with officer across the Highland Council

The draft LTS will have a second round of consultation when issued along with the Environmental report for consultation

2.4 Structure of the Environmental Report

Section 14(3) of the Act requires the Environmental Report to include the information specified in Schedule 3 of the Act and to take account of the following:

- (a) Current knowledge and methods of assessment of environmental matters;
- (b) The contents of, and level of detail in, the Strategy;

- (c) The stage of the Strategy in the decision-making process; and
- (d) the extent to which any matters to which the report relates would be more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

This SEA was undertaken in line with Scottish Government SEA toolkit. The Environmental Report is structured as follows:

<i>Section 3</i>	<i>Context of the Local Transport Strategy</i>
<i>Section 4</i>	<i>Scoping: Provides a summary of the Scoping Report</i>
<i>Section 5</i>	<i>Assessment of Environmental Effects: Presents the results of the Environmental Assessment, reviews alternatives to the Local Transport Strategy</i>
<i>Section 6</i>	<i>Mitigation: Presents proposal for mitigation of any significant environmental effects reported</i>
<i>Section 7</i>	<i>Monitoring: Presents approach to monitoring the environmental effects of the Local Transport Strategy</i>
<i>Section 8</i>	<i>Next Steps: Proposes the next steps following the issue of the Environmental Report</i>

The detailed appraisals are contained within the following appendices:

<i>Appendix A</i>	<i>Lists of Strategies, Plans and Programmes Reviewed</i>
<i>Appendix B</i>	<i>Environmental Baseline</i>
<i>Appendix C</i>	<i>Detailed Assessment Matrices for Vision and Objectives</i>
<i>Appendix D</i>	<i>Detailed Assessment Matrices for Core Policies</i>
<i>Appendix E</i>	<i>Council Response to Consultee Comments</i>
<i>Appendix F</i>	<i>Appropriate Assessment Screening</i>

3 Context of the Highland Local Transport Strategy

3.1 Introduction

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes “*an outline of the contents and main objectives of the plan or programme*”.

3.2 Background to the Local Transport Strategy

Scottish Integrated Transport White Paper (1998) stipulated that the Local Authorities were now required to produce Local Transport Strategies. The intention for the strategies is to set out the councils approach to an integrated transport framework. The first Highland Local Transport Strategy was published in 2000

The Highland Council Local Transport Strategy has been drafted to set the framework for transport policy and decisions for the next three year period. The objectives and principles also aim to guide decision making beyond this period. It will replace the 2000-2006 Local Transport Strategy. The LTS will set out the Council’s aims, objectives, policies and strategies addressing transport issues during defined time period. . The new LTS provides an opportunity to refocus on priorities for the Highland area, and address areas where further progress is still required.

In particular:

- More ambitious targets are required for road safety
- Greater levels of investment continue to be required to maintain and improve transport services and infrastructure, although the economic climate makes this a considerable challenge
- Greater effort is required to limit the rate of traffic growth, particularly on key corridors

The LTS is not a stand alone document – it relates to (and is informed by) policies across the local authority, the region and nationally. Moreover, the LTS relates to the issues and policy priorities for non-transport sectors, in particular, health, social inclusion, economic development and environmental sustainability.

The objective of the LTS is

‘...to consider what the National objectives mean in the context of the Highland locations, considering at ore detailed level the problems encountered in towns and villages , in Inverness and along key transport corridors between them.’

3.3 Outline and objectives of Strategy

The LTS supports the aims set out in the Highland Programme, and ultimately works towards achieving the outcomes set out in the Single Outcome Agreement. An outline vision, objectives and a list of the core policies included in the draft strategy are listed below.

3.3.1 Single Outcome Agreement

Following on from the Government's Single Purpose, all local authorities in Scotland have produced Single Outcome Agreements. The second Highland Single Outcome Agreement was signed in July 2009. This identifies the local outcomes which contribute to the 15 national outcomes set by the Scottish Government. It sets the strategic framework for policy delivery for the Council across all areas of responsibility – moreover, it is key to prioritising Council spending. Whilst the outcomes cut across areas of social and economic wellbeing, there are significant transport factors in delivering the agreement.

In particular there are actions in local outcomes 10.A and 10.1 which will be taken forward through the LTS:

- Increase the number of community transport schemes supported (10.A)
- Increase the availability of buses. (10.1)
- Increase the number of people using the bus network. (10.1)
- Increase use of public transport in and around Inverness. (10.1)
- Increase investment in lifeline roads and bridges in the Highlands. (10.1)

3.3.2 The Highland Council LTS Draft Vision

Through its Local Transport Strategy, the Highland Council seeks to enable and facilitate development and economic growth; support, include and empower communities, and create safe and sustainable environments in which people can live, work and travel.

3.3.3 LTS Objectives

The LTS objectives are as follows:

- ▶ **Economy:** Provide a transport network to enable sustainable economic growth, noting the very different conditions between urban and rural locations;
- ▶ **Social Inclusion:** Facilitate travel to enable economic/social involvement and improve access/travel choices to essential services for those without access to a private car;
- ▶ **Environment:** Manage/reduce the impacts of transport on the natural and built environment;
- ▶ **Health:** Increase levels of cycling walking to promote health improvement and modal shift;
- ▶ **Road Safety:** Improve road safety addressing locations where road accidents are above average levels;

- ▶ Personal Safety: Address issues of perceived safety and personal security particularly where they are a barrier to walking, cycling and public transport;
- ▶ Policy Integration: Identify policy overlap across Council services, and with other public bodies (e.g. NHS), maximise benefits and minimise contradiction;
- ▶ Investment integration: Identify benefits and opportunities of combined transport procurement for all Council services; and
- ▶ Traffic reduction: Where appropriate consider targets for reducing traffic, although noting the variation in conditions and requirements between rural and urban areas.

3.3.4 Core Policies

Each of the core policies contributes to meeting certain objectives of the LTS,

- ▶ CP1: Development Management Contribution to Transport;
- ▶ CP2: Road Network – Part 1 Road Improvement Schemes;
- ▶ CP3: Road Network – Part 2 Road Maintenance;
- ▶ CP4: Pedestrian and Cycle Network;
- ▶ CP5: Road based Public Transport – Part 1 Key Route network;
- ▶ CP6: Road based Public Transport – Part 2 Service frequency/journey times;
- ▶ CP7: Rail based Public Transport;
- ▶ CP8: Air Services;
- ▶ CP9: Ferry Services;
- ▶ CP10: Parking Policy;
- ▶ CP11: Travel Plans (including Council Travel Plan);
- ▶ CP12: Freight;
- ▶ CP13: Design guidelines for new developments; and
- ▶ CP14: Road Safety Plan (separate document).

The Strategy also includes the following

- Context for the Highland Local Transport Strategy – Issues and trends
- Policy framework and responsibilities
- Progress on Highland Local Transport Strategy 2000-2006

3.4 Relationship with other Plans, Programmes and Strategies and environmental objectives

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report (ER) includes consideration of the Strategy relationships with other relevant PPS, and how environmental protection objectives have been taken into account in the Strategy's preparation. This section covers these issues and describes the policy context within which the Strategy operates.

3.4.1 Hierarchy of plans, programmes and strategies

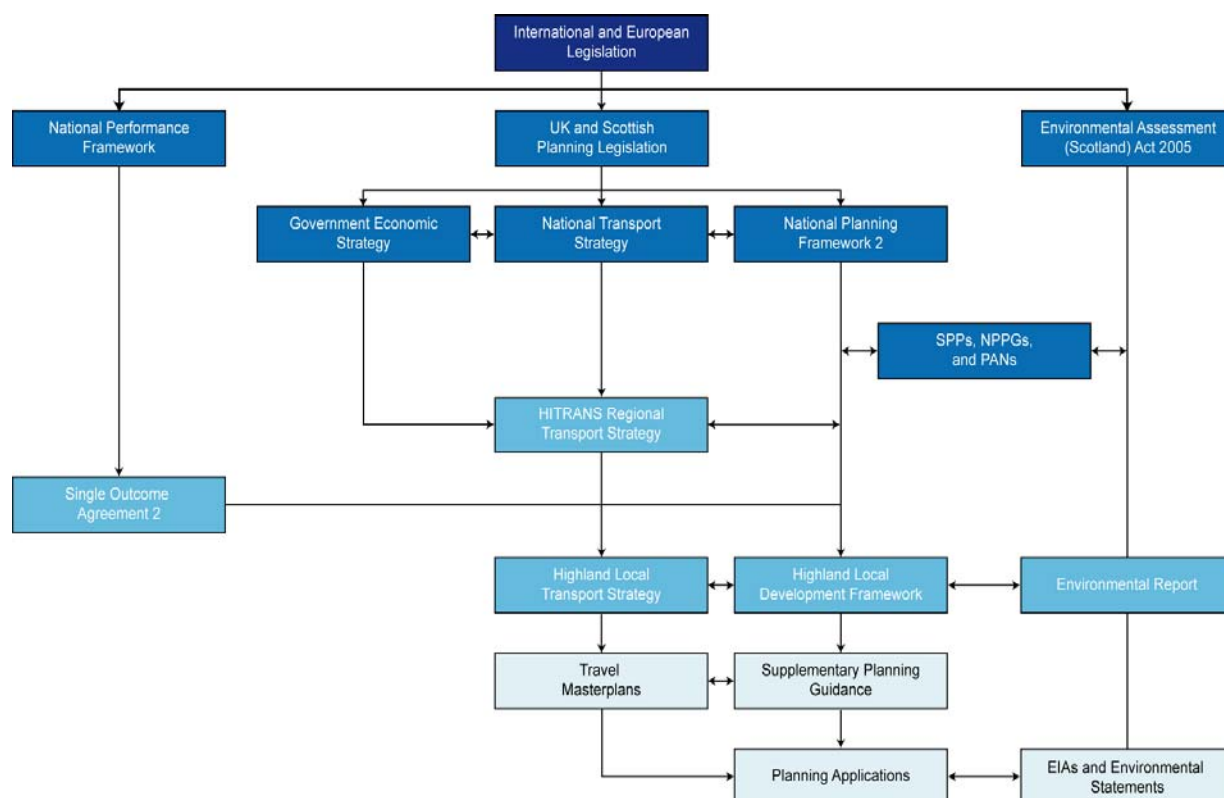


Figure 2: Relationship between the Local Transport Strategy and other Plans, Programmes and Strategies

3.4.2 Analysis of plans, programmes and strategies

A range of plans, programmes and strategies (PPS) have been reviewed to provide a context for the SEA at an international, regional and local level. A detailed review can be found within Appendix A

Consideration of the Local Transport Strategy within the context of a focused range of other PPS to identify current environmental protection objectives is an extremely important aspect of the SEA as it provides a checklist of the range of issues of which the Local Transport Strategy should take cognisance.

A review of the associated environmental protection objectives helps to highlight existing and potential problems, as well as opportunities for environmental enhancement, and serve as an important base upon which to build the SEA Assessment Framework.

Key points arising from the analysis:

- (i) Protect and enhance where appropriate designated areas of natural heritage and conservation.
- (ii) Recommend appropriate measures to avoid deterioration of these habitats and avoid disturbance of scheduled, scarce or rare species

- (iii) Recognise the statutory importance of protected sites and strive to ensure they are adequately protected.
- (iv) Consider the issue of Flood Risk and look at the potential impacts and required mitigation measures
- (v) Take account of targets for reducing CO2 emissions and strive to reduce greenhouse gas emissions
- (vi) Minimise the risk of pollution and damage to surface and ground waters
- (vii) Prevent deterioration of the status of water bodies
- (viii) Recommend safe disposal and recycling of waste materials
- (ix) Consider the impact of transport infrastructure on coastal biodiversity and coastal Ensure the protection of the historic features and the continued provision of access defences
- (x) Consider the aims of the landscape convention in the development of its core policies
- (xi) Maintain and enhance woodland networks
- (xii) Reduce social exclusion and improve quality of life for all
- (xiii) Reduce adverse impact on health of the population
- (xiv) Improve connectivity for all communities and user groups
- (xv) Improve access to goods, markets and services

From the review of the plans programmes and strategies a series of objectives were identified and carried forward in the process of establishing a complete set of objectives of the SEA.

3.5 Supporting Assessments

3.5.1 Appropriate Assessment (AA)

An Appropriate Assessment (AA) on the Local Transport has been carried out in tandem with this SEA. An AA is required where any plan is likely to have a significant effect on a 'Natura 2000' site, which has been designated under the EU Habitats and Birds Directives, which are transposed into Scottish law by the 'Conservation (natural Habitats &c) Amendment (Scotland) Regulations 2007'. Natura 2000 sites include Special Areas of Conservation and Special Protection

Areas. However, wetland sites designated under the international 'Ramsar' convention are also included, in accordance with advice from Scottish Natural Heritage.

The AA found that there were possible significant impacts on 41 Natura 2000 sites in total, yet impacts were unlikely to occur on 14 of these sites. For all sites where there was an uncertain impact, further details of the transport schemes will be needed to assess their likely impacts. A large number of schemes, including those listed as having uncertain effects, will require further, site-level AA.

The AA screening is provided as Appendix F to this report.

3.6 Environmental Impact Assessment (EIA)

As the detailed design develops, elements of the Local Transport Strategy will likely be subject to an Environmental Impact Assessment under Schedule 2 of the Environmental Impact Assessment (Scotland) regulations 1999. The Environmental Report will assess the overall impact of the Strategy; however there may be some assessment results of the SEA that will require further assessment by EIA at a project level. This will be highlighted in the assessment matrices.

3.7 Baseline Issues

3.7.1 Background and Approach

Part 2 of Schedule 3 (in relation to Section 14) of the Environmental Assessment (Scotland) Act 2005 establishes that Environmental Reports should record *“the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the plan or programme.”* This section summarises the key environmental issues which have been identified from a review of the baseline data, plans, programmes and strategies and the responses from the consultation authorities

Available Baseline data was collated and identified during the scoping stage and a detailed report can be found in Appendix B. The Baseline data has been updated from that presented in the Scoping Report to include additions suggested during the scoping consultation.

Appropriate baseline information is important to allow consideration of a Base Case and Business as usual option

3.7.2 Summary of Key Issues

With regard to Biodiversity, Flora and Fauna:

- A significant proportion of The Highland Council area is covered by international, European, national and/or local environmental designations for the protection of important species or habitats. This includes the Cairngorms National Park which extends into the study area.
- A significant proportion of the priority species and habitats in Scotland are found in the Highland region, and an extensive list of species and habitats are covered by local biodiversity action plans.
- Protected species such as otter and badger are known to be vulnerable to road traffic collisions, where these occur it should be noted by the Highland Council’s road maintenance crews to help inform the design of road improvements, contribute to Scotland’s duty to undertake surveillance, and to inform the Scottish Badgers database of Road Traffic Accidents (RTAs). If there are found to be development areas which potentially affect protected species, or are in the vicinity of a known

badger RTA site then site specific survey work should be undertaken to determine the need for a detailed mitigation strategy to be developed during further detailed site specific environmental assessments.

With regard to Population and Human Health:

- A large proportion of Highland region is classified as “fragile” due to compounding pressures including population decline, unemployment and access by private car or public transport to key services.
- Health concerns relating to physical inactivity remain a key concern nationally. Walking and cycling statistics for the Highland region compare favourably to the rest of Scotland, however there is limited region-specific information regarding physical activity in general.
- The most recent road accident statistics available indicate that there were 626 reported injury accidents and 929 casualties in the Highland region in 2007. The long-term trend for reported casualties is significantly less in the Highland region than is being experienced nationally.

With regard to Water:

- The Highland region presents a diverse water environment, with a number of protected areas designated for their water quality, ecological potential or commercial outputs.
- The overall water quality in the Argyll (Lochaber) and West Highland Regions is very high. The overall water quality in the North East Scotland and North Highland region is lower with some areas of particular concern.
- There is a flood risk associated with coastal areas and waterbodies across the Highland region.

With regard to Soil:

- The Highland region is primarily dominated by highly organic peaty soils (peat, peaty gleys and peaty podzols). This type of soil stores significant concentrations of carbon which could result in the soils becoming significant sources of greenhouse gases.
- There is no region-specific data with regard to soil quality available for the Highlands, however soil quality in Scotland is considered to be generally good.
- Erosion, compaction, contamination and salinisation are considered to be the key localised threats with regard to soil quality.
- The Highland region has experienced an increase in the availability of derelict and urban vacant land in recent years. It has the third highest rate of derelict land in the Scotland.

- The Highland region includes 34.7% of the agricultural land in Scotland. The percentage of prime agricultural land is not known and is seen as a data gap at this stage.

With regard to Air Quality:

- Air quality in the Highland region is generally very good. However, increased traffic flows, particularly within existing built up areas, could potentially lead to a deterioration of air quality to levels below national targets.
- Any increase in air travel could potentially impact on air quality and should be carefully monitored.

With regard to Climate Factors:

- Increase traffic generation may contribute to greenhouse gas (GHG) emissions and therefore impact upon the government's targets to reduce GHG emissions by 60% by 2050.
- Climate induced sea level rise will increase risk of flooding above that outlined in SEPA's flood risk maps which outline a 1 in 200 year event, but do not incorporate estimates of increased risk due to climatic factors.
- The impacts of climate change as related to bioclimate will likely have a significant effect on the distribution of species and habitats over time, with implications for local conservation management.
- SNH has advised that Highland Council climatic data is currently being collated. This information is currently unavailable for assessment under this SEA. Consideration should be given to this data as it becomes available and as travel masterplans are being developed.
- Consideration should be given to the potential for landslips and/or flooding where interventions are proposed in coastal areas, areas of known flood risk, and areas of the Highlands where interventions would be bounded by steep sided slopes.

With regard to Cultural Heritage:

- A significant number of sites and structures across the Highland region are protected for their significance to the cultural heritage and historic environment. Conflict with archaeological sites is of particular concern in selecting sites and aligning transport infrastructure.

With regard to Landscape

- There are a significant number of sites designated for their contribution to the landscape character and quality of the region.

- The landscape character of the Highlands is distinct. This is shaped by the local land form and the historic lack of human activity and development to form an overall sense of 'remoteness' through the region.

With regard to Material Assets:

- The Highland Council area includes over a quarter of the total trunk road network and about one-seventh of the Scottish road network, more than any other local authority. Roughly 28% of all trunk roads and 39% of the roads network in The Highland Council area were estimated to be in need of repair in 2006.
- Scottish Water is currently making significant improvements to the water, wastewater and drainage infrastructure in the Highlands. These need to be considered in line with individual transport assessments.
- The Highland Council does not compare well to other local authority areas with regard to recycling. It had a recycling and composting rate of 30.7% for 2007/8. In order to achieve the 2010 target of 40%, it will be important to increase residents' access to recycling services, either through kerbside pickup or to local recycling points and centres. This should be considered through individual transport assessments.
- There are a number of pedestrian and cycle networks throughout the Highland region. LTS policy should link to existing routes and use existing infrastructure where possible.

With regard to Noise:

- There is currently no readily available data to current baseline noise levels in the Highland region.
- Consideration should be given to the impact of noise and vibration on the marine environment and on Listed Buildings.
- Consideration should be given to impact of noise and vibration if there is an increase in air travel

3.7.3 Data Gaps

The following data gaps were identified:

- The percentage of agricultural land within the Highlands which is classed as Prime Quality Agricultural land by the Macaulay Institute is not currently known;
- Consultation with SNH highlighted the need to include information relating to Upland Paths across the Highland region, however no comprehensive information has been obtained and this is therefore seen as a data gap.
- There is no comprehensive region-specific climatic trend data for the Highland region. SNH has advised that THC climatic data is currently

being collated. This information is currently unavailable for assessment under this SEA. Consideration should be given to this data as it becomes available and as travel appraisals are being developed.

The implications of the identified data gaps are not considered detrimental to the SEA process. Wherever possible, information regarding designated areas has been inferred from general management information or national databases. Routes to acquiring site-specific information are considered in the Environmental Report.

3.8 Existing environmental problems and issues

Schedule 3 paragraph 4 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes a description of existing environmental problems, in particular those relating to any areas of particular environmental importance. The purpose of this section is to explain how existing environmental problems will affect or be affected by the Local Transport Strategy and whether the Strategy is likely to aggravate, reduce or otherwise affect existing environmental problems.

Environmental problems were identified through discussions with Historic Scotland (HS), Scottish Natural Heritage (SNH), Scottish Environmental Protection Agency (SEPA) and an analysis of the baseline data. Relevant environmental problems are summarised in Table 5.

Table 5: Environmental problems relevant to Highland Local Transport Strategy

Problem	Supporting Data	Implication
Natura 2000 sites in The Highland Council area.	SNH	Impacts to internationally designated sites to be assessed through Appropriate Assessment.
Nationally and locally designated sites of ecological value in The Highland Council area.	SNH	Impacts to nationally and locally designated sites to be assessed at EIA level.
Protected species in The Highland Council area.	Environmental designations / management plans HAPs, SAPs, BAPs	Impacts to habitat sites to be assessed at EIA level.
Fragile (Rural) Areas in The Highland Council area.	The Highland Council	SEA to ensure LTS policies address regional issues relating to geographic access deprivation. Impacts of specific proposals to be assessed at EIA level.

Problem	Supporting Data	Implication
Deprivation with regard to geographic access in The Highland Council area.	Scottish Government SIMD	SEA to ensure LTS Policies address regional issues relating to geographic access deprivation. Impacts of specific proposals to be assessed at EIA level.
Comparatively high road casualty trends in The Highland Council area.	Scottish Government Road Casualty Statistics	SEA to ensure LTS Policies address regional issues relating to road safety. Impacts of specific proposals to be assessed at EIA level.
Flood Risk (coastal and active flood plain).	SEPA Flood Maps; Climate Change indicators	Flood risk and impacts to be assessed at EIA level.
Areas of poor water quality, particularly in North Highland.	SEPA Draft Area Management Plans	Impacts to water quality to be assessed at EIA level.
Increasing availability of derelict and urban vacant land in The Highland Council area.	Scottish Government Planning Statistics	SEA to ensure LTS Policies address regional opportunities to re-use derelict and urban vacant land. Impacts of specific proposals to be assessed at EIA level.
Sites of cultural significance in The Highland Council area.	Pastmap	Impacts to setting of Listed Buildings and Scheduled Ancient Monument to be assessed at EIA level.
Sites of archaeological importance in The Highland Council area.	Pastmap	Impacts to archaeological sites to be assessed at EIA level.
Sites of landscape value and local character in The Highland Council area.	SNH	Impacts to landscape and character sites to be assessed at EIA level.
Reduced air quality as a result of traffic-related emissions in built-up areas.	Air Quality Scotland	Impacts to congestion and emissions levels to be assessed at EIA level.
Site-specific soil quality data is beyond the scope of this SEA.		Ground investigations and potential mitigation strategy for specific proposals to be at EIA level.
Site-specific noise data is beyond the scope of this SEA.		Potential impacts of specific proposals to be assessed at EIA level.
Site-specific light pollution data is beyond the scope of this SEA.		Potential impacts of specific proposals to be assessed at EIA level.
No region-specific climatic trend data.		Potential impacts of specific proposals to be assessed at EIA level.

3.9 Likely evolution of the Environment without the Highland Local Transport Strategy

Table 6 provides a draft summary of the evolution of the environmental baseline without the LTS against each of the topic headings.

Table 6: Evolution of the baseline without the LTS

SEA Topic	Evolution of the baseline without the LTS
Biodiversity, Flora & Fauna	Where a habitat is connected to transport infrastructure it would remain predominately unchanged. There would be no impact from policies proposed in the LTS i.e. trunk road extensions. Loss would still occur through development promoted through the Structure and Local Plan and the Regional Transport Strategy.
Water	There would be no impact on water quality from construction highlighted in the LTS. There would be a continued impact from maintenance. Construction in line with other plans would still occur and potentially cause pollution of water bodies.
Climatic Factors	Without the promotion of walking, cycling and the use of public transport there could be an increase in greenhouse gas emissions.
Material Assets	Impacts of projects promoted in the LTS would not occur. However the LTS promotes access to material assets i.e. recycling facilities which could result in a decrease in recycling.
Population & Human Health	<p>Without the promotion of more sustainable modes of transport through the LTS there would be an increase in congestion. This would lead to a decrease in local air quality and effects on human health arising from poor air quality and increase noise.</p> <p>A lack of improvement to public transport and cycleway/footways could result in fewer opportunities for people to exercise.</p>
Cultural Heritage/ Historic Environment	Impacts on the historic environment from policies promoted in the LTS would not occur. Impacts from other strategic plans will not be altered.
Landscape	Any impact on landscape and visual impacts from projects promoted in the LTS would not occur. An increase in traffic congestion in certain areas may have minor effects on features of landscape value.
Air	Without a push for sustainable modes such as walking and cycling, air quality would deteriorate.
Soil	Soil will still be impacted through other schemes so the lack of LTS will not minimise impact significantly.
Noise	An increase in road traffic and congestion could lead to an increase ambient noise levels in some areas.

4 Scoping

4.1 Introduction

The purpose of the Scoping Report is to provide sufficient information on the Local Transport Strategy, and the proposed SEA assessment methodology, to enable the Consultation Authorities (CA) to form a view on the scope for assessment and the level of detail to be included in the SEA Environmental Report (ER).

A SEA Scoping Workshop was hosted by The Highland Council on the 30 July 2009. The Scoping Workshop was convened to identify the most appropriate issues for consideration and to help focus the scope of the SEA. SNH and Historic Scotland were in attendance and SEPA has been kept up to date on all correspondence.

The Scoping Report was prepared in accordance with:

- the European SEA Directive (2001/42/EC);
- national SEA Regulations (the 2005 Act) as noted above;
- Office of the Deputy Prime Minister (ODPM, now DCLG) Guidelines (2005);
- Scottish Executive SEA Gateway SEA Templates (2005); and
- current best practice.

4.2 Results of Scoping Consultation

A scoping workshop was held on the 30 July 2009 with representative stakeholders from the Highland Council, Halcrow, Historic Scotland and Scottish Natural Heritage.

During the Scoping Workshop it was agreed that all SEA topics are to be considered during the assessment and reporting phase of the project. The formal Consultee responses that followed the meeting confirmed acceptance of this approach.

5 Assessment of Environmental Effects

5.1 Introduction

The SEA Act requires that the Environmental Report presents the assessment and evaluation the likely significant impacts that the Local Transport will have on the environment.

It is important to recognise that the SEA focuses on Strategic level issues and does not consider detailed mitigation measures for site development and construction. Such impacts will be the focus of project level Environmental Impact Assessment (EIA).

5.2 Approach

The following elements of the Local Transport Strategy have been assessed

- Strategic Vision;
- Objectives; and
- Core Policy

An assessment will be carried out on the vision and objectives of the LTS. This will include a high level assessment considering the compatibility of both the vision and objectives against the SEA objectives shown in table 5 of this report and a significance assessment.

More detailed significance assessments will be carried out on the individual core policies to identify and assess any specific impacts likely to be associated the proposed policy. Following each stage of assessment, any potentially negative impacts will be discussed and effective recommendations for strategic, or lower-level, mitigation identified.

The key outcome of the assessments will likely include recommendations on refining the objectives and policies based on the environmental criteria considered, including indirect, secondary and cumulative impacts.

5.3 SEA Objectives and Criteria

In order to demonstrate consistency with the SEA carried out at the National Transport Strategy and Regional Transport Strategy levels we have produced a provisional list of SEA objectives that take the high level national objectives as a starting point and refine the objectives to account for more local criteria.

SEA objectives are outlined in Table 7 below.

Table 7: Objectives and Criteria

Topic	National Transport Strategy (2006) (NTS)	Regional Transport Strategy (2006) RTS	Local Transport Strategy SEA Objectives	Assessment Criteria
Biodiversity	To conserve biodiversity at all levels and accord to the protection of statutory nature conservation sites.	To minimise damage to designated wildlife/biodiversity sites and protected species	To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.	<ul style="list-style-type: none"> • Will the LTS result in any likely significant effects upon Special Areas of Conservation (SAC) (including candidate), Special Protection Areas (SPA) (including proposed) and Ramsar sites? • Will the LTS result in any adverse effects on Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR), Sites of Importance for Nature Conservation (SINC) and RSPB/SWT Reserves? • Are there likely to be impacts to any UK or European Protected Species? • Are there likely to be impacts to any priority habitats and species as identified in the UK and Local Biodiversity Action Plans?
Population and Human Health	<p>To improve the living environment for all communities, particularly through improved access to services and opportunities.</p> <p>To promote the health of the human population with improved air quality,</p>	To create conditions to improve the health of the regions of population	To promote accessibility, health and quality of life through the integration of the LTS.	<ul style="list-style-type: none"> • Does the LTS plan to increase social inclusion through increasing accessibility to services such as healthcare? • Does the LTS promote ‘healthier lifestyles’ through increased promotion and provision of walking and cycling facilities? Are there links between the LTS and the Highland Council Core Path Network Plans? • Will the LTS cause the deterioration of either the

Topic	National Transport Strategy (2006) (NTS)	Regional Transport Strategy (2006) RTS	Local Transport Strategy SEA Objectives	Assessment Criteria
	improved access to facilities and greater opportunity for engagement in physical activity.			air or water quality of the region?
Soil	To safeguard the quantity and quality of the soil resource.	To limit contamination of soils from the transport network and infrastructure development to levels that do not damage the natural systems	To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.	<ul style="list-style-type: none"> • If LTS proposals require land-take will there be an adverse impact upon the local geodiversity of the area? • Will any prime quality agricultural land be impacted? • Will any geologically designated sites (SPA, SSSI, or Regional Important Geological Sites (RIGS)) be impacted? • Will any peatland be impacted
Water	To reduce the impact the quantity and quality of the water environment resulting from transport infrastructure.	Limit water pollution from the transport to levels that do not damage natural systems	To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.	<ul style="list-style-type: none"> • Will the LTS policies result in a deterioration of current ground or surface waters? • Will any LTS policy result in direct impacts to flood plain areas?

Topic	National Transport Strategy (2006) (NTS)	Regional Transport Strategy (2006) RTS	Local Transport Strategy SEA Objectives	Assessment Criteria
Air Quality	To improve air quality through reducing emissions and pollution.	To keep air quality of a good standard and below national Air quality Standards in all areas	To protect and enhance the current air quality of the highland area.	<ul style="list-style-type: none"> • Will the LTS maintain or enhance current air quality throughout the region? • Will sustainable transport be promoted which will help to reduce greenhouse gas emissions? • Will the LTS policies result in Government targets for emissions being exceeded leading to the declaration of Air Quality Management Areas (AQMA)?
Climatic Factors	To reduce energy consumption and CO ₂ emissions and the associated impacts of climate change (e.g. flooding).	To help tackle climate change by minimising the increase in CO ₂ emissions from road and rail and air traffic during the life of the plan and helping to meet targets to nationally reduce overall emissions of greenhouse gases by 12.5% BY 2008-12 in comparison with the 1990 baseline	To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.	<ul style="list-style-type: none"> • Will the proposals reduce the reliance on private vehicle transport? Are there likely to be any conflicts with policy given the highly rural nature of the study area? • Does the LTS promote either air or ferry travel, and if so what are the climatic implications? • Will modal shift to more sustainable forms of transport be promoted? • Do LTS proposals avoid or take account of areas at risk of landslip or coastal erosion?

Topic	National Transport Strategy (2006) (NTS)	Regional Transport Strategy (2006) RTS	Local Transport Strategy SEA Objectives	Assessment Criteria
Material Assets	To manage, maintain and promote efficient use of the existing transport infrastructure and the efficient use of resources in the development of new infrastructure.		To protect and enhance existing infrastructure and promote more sustainable transport.	<ul style="list-style-type: none"> • Will the LTS avoid severance or other detriment to existing walking and cycling routes?
Cultural Heritage	To safeguard the features of the historic environment.	To preserve historic buildings archaeological sites and other culturally and historically important features	To protect and, where appropriate, enhance the historic environment of the highlands.	<ul style="list-style-type: none"> • Will the LTS result in any adverse impacts upon the cultural heritage features of the Highlands?
Landscape and Visual Amenity	To safeguard the character, diversity and unique qualities of the landscape To safeguard the quality of the visual amenity.	Avoid effects on areas of protection designated to protect visual amenity	To protect and, where possible enhance the landscape and visual amenity of the highlands.	<ul style="list-style-type: none"> • Will the LTS policies protect and where possible enhance landscape character, or visual amenity of sensitive receptors within the Highlands? • Will the LTS policies protect and where possible enhance designated areas (National Scenic Areas [NSAs] and Areas of Great Landscape Value [AGLV])?

Topic	National Transport Strategy (2006) (NTS)	Regional Transport Strategy (2006) RTS	Local Transport Strategy SEA Objectives	Assessment Criteria
Noise	To limit noise related nuisances from operation of the transport system and development of new infrastructure.	To ensure the existing levels of annoyance from noise caused by traffic do not significantly increase	To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.	<ul style="list-style-type: none"> • Will the LTS proposals result in any adverse impacts to sensitive receptors and/or residential areas in the Highlands? • Will there be any significant noise increase in the Highlands above those currently experienced as a result of the policies?

5.4 Approach to Alternatives

The SEA Act requires the environmental effects of reasonable alternatives to the strategy be identified, described and evaluated. It specifies that only reasonable SEA regulations do require that the environmental effects of such alternatives be considered

Scottish Transport Appraisal Guidance (STAG) advocates optioneering as a sound approach in transport appraisal, and this essentially means that alternative approaches to addressing particular issues identified are explored and assessed to enable a sound decision on which approach is best. The process of Strategic Environmental Assessment also requires evidence of how alternative approaches to plan or strategy development have been carried out, and how the environmental assessment of these alternatives has been fed through to decisions made on a way forward.

At a strategic level, it is difficult to develop meaningful alternative approaches to developing a strategy that must by its very nature meet the needs of a broad user group, and which must contribute to a broad range of transport planning objectives. However, alternative approaches that have been considered have focused on specific priority themes as follows:

Alternative strategy one – do nothing / do minimum. This is essentially a scenario of moving forward with limited intervention by the local authority in terms of policy direction or investment as presented in this LTS. It assumes existing commitments will be delivered, as existing from the Highland Council, Transport Scotland and other key transport stakeholders (e.g. transport operators). Other bodies, in particular Transport Scotland, have made policy commitments to certain investments in the region (particularly through the Strategic Transport Projects Review). However, the Highland Council feels that without an LTS which guides policies and delivery at the local level, transport investment will not be focused on where it is most needed. Furthermore, investment continues to be needed from the local authority in transport service and infrastructure delivery, particularly through the Single Outcome Agreement approach now adopted across Scotland which sees local authorities charged with playing a significant role in service planning and delivery across all sectors.

Alternative strategy two – a strategy focused on public transport and active travel i.e. sustainable modes. This strategy has a strong focus on sustainable modes (i.e.) that is modes which have a lesser environmental impact than the private car or road-based freight. It advocates priority investment in public transport services and infrastructure, as well as networks and policies to support walking and cycling in developments and communities. It performs strongly against several transport planning objectives such as those relating to social inclusion (focusing on those without access to a car), environment and health. However, the Council believes policies should also be in place to guide investment in the road network for individuals and freight to support economic growth for the region. Roads play a vital role in the transport network of the region, not least by enabling road-based public transport to operate. The condition of the road network has been a longstanding issue for the region, with many communities linked to vital services by a single lifeline route.

Alternative strategy three – a strategy focused on private transport for both individuals and businesses. This strategy has a strong focus on developing and maintaining the road network infrastructure to serve individual users and businesses, through cars, road-based public transport and business-related vehicles such as lorries. Whilst such a strategy performs well against economic development and road safety objectives, it has a lesser impact on promoting active travel and public transport services as a whole, and therefore has minimal impact on tackling the negative environmental impacts of transport, in particular vehicle related emissions. The Council feel that such a strategy has too narrowly focused to meet the needs of all transport users in the region, and moreover, to deliver the policy priorities of the Council and the Government as a whole as expressed in the National Transport Strategy.

5.4.1 Compatibility matrix of Alternatives with SEA Objectives

In Table 8 below the SEA objectives are compared against the LTS objectives.

Table 8: Compatibility Assessment of Alternatives against SEA Objectives

<p>Key</p> <p>✓✓✓ - Strongly Supports</p> <p>✓✓ - Supports</p> <p>✓ - Some Support</p> <p>o - Neutral</p> <p>x – Some Conflict</p> <p>xx - Conflicts</p> <p>xxx – Strongly Conflicts</p>	<p>Biodiversity - To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.</p>	<p>Population and Human Health - To promote accessibility, health and quality of life through the integration of the LTS.</p>	<p>Soil - To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.</p>	<p>Water - To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.</p>	<p>Air Quality - To protect and enhance the current air quality of the highland area.</p>	<p>Climatic Factors - To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.</p>	<p>Material Asset - To protect and enhance existing infrastructure and promote more sustainable transport.</p>	<p>Cultural Heritage - To protect and, where appropriate, enhance the historic environment of the highlands.</p>	<p>Landscape and Visual Amenity - To protect and, where possible enhance the landscape and visual amenity of the highlands.</p>	<p>Noise - To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.</p>
<p>An Integrated Strategy approach - proposed LTS Core Policies</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓✓</p>
<p>Alternative Strategy one – do minimum / do nothing</p>	<p>x</p>	<p>xx</p>	<p>o</p>	<p>o</p>	<p>xx</p>	<p>xx</p>	<p>✓</p>	<p>o</p>	<p>o</p>	<p>x</p>
<p>Alternative strategy two – a strategy focused on public transport and active travel i.e. sustainable modes</p>	<p>✓</p>	<p>✓✓</p>	<p>o</p>	<p>o</p>	<p>✓✓</p>	<p>✓✓</p>	<p>✓</p>	<p>o</p>	<p>✓</p>	<p>✓✓</p>
<p>Alternative strategy three – a strategy focused on private transport for both individuals and businesses</p>	<p>✓</p>	<p>✓</p>	<p>o</p>	<p>o</p>	<p>xx</p>	<p>xx</p>	<p>✓</p>	<p>o</p>	<p>o</p>	<p>x</p>

5.4.2 Environmental Appraisal of Alternatives

Table 9 below sets out the likely environmental effects of the alternative strategies

Table 9: Significance Assessment of Alternatives against SEA Objectives

	Biodiversity	Population and Human Health	Soil	Water	Air Quality	Climatic Factors	Material Asset	Cultural Heritage	Landscape and Visual Amenity	Noise	Comments
++ Significant positive impact; + No or minimal positive impact; ? Neutral or unknown impact; - No or minimal negative impact; -- Significant negative impact											
An Integrated Strategy approach - proposed LTS Core Policies	++	++	?	?	++	++	++	+	++	++	The integrated strategy builds on all the positives from each of the alternative strategies put forward.
Alternative Strategy one – do minimum / do nothing	-	--	?	?	--	--	+	?	?	-	Alternative Strategy 1 will result in a degradation of the environment with a particular emphasis on air quality and climate change especially in urban/built-up areas
Alternative strategy two – a strategy focused on public transport and active travel i.e. sustainable modes	+	++	?	?	++	++	+	+	+	++	An anticipated modal shift to public transport will help to reduce congestion resulting in benefits to population and human health as well as air quality and climate change.
Alternative strategy three – a strategy focused on private transport for both individuals and businesses	-	-	?	?	--	--	++	?	?	-	Likely to lead to a deterioration in human health, air quality and climate change although material assets will benefit.

In summary, the Council felt that an integrated Strategy approach as represented by the proposed LTS Core Policies better met the needs of all transport users, as well as meeting the objectives set for local transport and SEA objectives.

5.4.3 The without – plan scenario

The Local Transport Strategy is set within a framework of National and Regional Strategies. Both the National Transport Strategy (NTS) and Regional Transport Strategy (RTS) contain policies which impact upon the environment, with or without the Local Transport Strategy (LTS)

If there was no Local Transport Strategy it is likely development would continue to be promoted through the NTS, RTS or through the Development Plan. This could result in infrastructure designed to service individual developments a lack of coherent guidance.

If the current local transport strategy was not updated it would be irrelevant and out of date. The council would have out of date guidelines which would not take into account legislative, economic or demographic changes.

In addition community input would be out of date and as such there would no indication of current community requirements.

5.5 Summary of Assessment of Vision and Objectives

Table 10 summaries the compatibility and significance assessments of the LTS Vision and Objectives. The detailed compatibility and significance assessment matrices can be found in Appendix C of this report.

LTS Vision	Summary of Assessment
<p>Through its Local Transport Strategy, the Highland Council seeks to enable and facilitate development and economic growth; support, include and empower communities, and create and sustainable environments in which people can live, work and travel.</p>	<p>The LTS vision sets a framework which could have benefits to biodiversity, population and human health, air quality, climate change and landscape, particularly where a modal shift to sustainable modes of transport is promoted. Impacts to cultural heritage features, water quality and noise are currently unknown although it is hoped that long-term benefits would be seen in these categories through the creation of “sustainable environments”.</p> <p>The statements in the vision require further clarification. Consider re-wording to clarify that the Council will seek “to enable and facilitate <i>sustainable</i> development and economic growth; support, include and empower communities <i>through transparent decision-making</i>; and <i>establish a transport network which supports</i> sustainable environments in which people can live, work and travel” through this strategy.</p>

LTS Objective	Summary of Assessment
<p>Economy: Provide a transport network to enable sustainable economic growth, noting the very different conditions between urban and rural locations.</p>	<p>The economic objective seeks to establish a modal shift toward sustainable modes of travel, with associated benefits to population and human health, local air quality and climate change over the long-term.</p> <p>More emphasis should be placed upon the modal shift to public transport. Consider re-wording to incorporate the following: <i>“For rural and remote areas, facilitating improvements to public transport / travel services to enable continued economic involvement”</i>.</p>
<p>Social Inclusion: Facilitate travel to enable economic / social involvement and improve access / travel choices to essential services for those without access to a private car.</p>	<p>The social inclusion objective seeks to provide equal access to a range of transport modes for all, with clear benefits to population and human health and material assets. Impacts to biodiversity, air quality, climate change, water quality and cultural heritage will depend on the mode of transport promoted in each area.</p> <p>The second sub-objective should clarify the transport mode(s) to be promoted to maintain/improve links to the Islands, to allow a more accurate assessment of significance.</p>

LTS Objective	Summary of Assessment
<p>Environment: manage / reduce the impacts of transport on the natural and built environment.</p>	<p>The environment objective does not explicitly respond to those environmental issues within the Highlands which are particularly at risk through the provision and upkeep of transport infrastructure. It also promotes the provision of new infrastructure without considering re-use or re-development of brownfield sites; this would potentially result in a range of negative environmental impacts.</p> <p>It is recommended that the sub-objectives text is altered to reflect the objectives set out within the SEA for the 10 identified SEA Environmental topics to ensure environmental benefits are embedded within the LTS.</p>
<p>Health: Increase levels of cycling walking to promote health improvement and modal shift.</p>	<p>The health objective ultimately promotes a more compact urban form, thereby reducing land-take required for new development / infrastructure provision. This will have benefits to biodiversity, cultural heritage and landscape and visual amenity. The promotion of sustainable travel methods will extend benefits to population and human health, air quality and climate factors.</p> <p>The first sub-objective should be re-worded to clarify how the provision of transport infrastructure can influence development site-selection. Consider replacing “appropriate location” with text that more clearly promotes siting new development within existing settlement networks and, specifically, to prioritise brownfield development, wherever possible, to continually safeguard greenfield sites.</p>
<p>Road Safety: Improve road safety addressing locations where road accidents are above average levels.</p>	<p>The road safety objective will have clear long-term benefits to population and human health.</p> <p>Consider extending the scope of road safety to include wildlife, particularly along the trunk road network where wildlife fatalities arise as a result of road traffic accidents.</p>
<p>Personal Safety: Address issues of perceived safety and personal security particularly where they are a barrier to walking, cycling and public transport.</p>	<p>Improving personal safety and security associated with transport could encourage the use of more sustainable modes of transport, with benefits to human health, local air quality, climate factors and material assets.</p> <p>Consider re-wording to “Address real and perceived issues relating to safety and personal security, particularly where they are a barrier to walking, cycling and public transport.”</p>

LTS Objective	Summary of Assessment
<p>Policy Integration: Identify policy overlap across Council services and with other public bodies (e.g. NHS), maximise benefits and minimise contradiction.</p>	<p>Clarifying areas of policy overlap could streamline the implementation of service and infrastructure improvements. Where common priorities are identified long-term benefits can be provided by combining resources to ensure a more efficient public transport provision and therefore reducing the reliance upon the private vehicle trips. Initially this objective will benefit the local population through identifying priorities, in the long-term more environmental benefits may be identified if a modal shift is achieved.</p> <p>Consider re-wording to <i>“Identify and clarify areas of policy overlap across Council and public body services (e.g. NHS) to minimise contradiction, maximise benefits and streamline policy implementation.”</i></p>
<p>Investment Integration: Identify benefits and opportunities of combined transport procurement for all Council services.</p>	<p>The investment integration objective will have benefits to the material asset value in the long-term.</p>
<p>Traffic reduction: Where appropriate consider targets for reducing traffic, although noting the variation in conditions and requirements between urban and rural areas.</p>	<p>The traffic reduction objective will help to contribute towards improvements to air quality and climate change whilst also reducing noise emissions over the long term, particularly in congested urban areas.</p> <p>It is recommended that the objective is re-worded to state <i>“Where appropriate, consider targets for reducing traffic and associated congestion...”</i>. The objective should also state that interventions should be delivered alongside public transport improvements to encourage a modal shift toward sustainable transport modes.</p>

Table 10: Summary of assessment of the LTS Vision and Objectives

5.6 Summary of Detailed Assessment of Core Policies

Table 11 summaries the environmental assessment of the LTS Core Policies, the detailed assessment matrices can be found in Appendix D of this report.

Table 11: Summary of Detailed Assessment of Core LTS Policies

LTS Core Policy	Summary of Assessment
CP1: Development Management Contribution to Transport	<p>Minor Positive</p> <p>Actions proposed under this policy will increase the material asset value throughout the lifespan of the strategy. Further impacts upon the environment will be dependant upon the requirements of individual development schemes; it is recommended that environmental assessments of individual schemes are undertaken to identify impacts and mitigation measures.</p>
CP2: Part 1 Road Improvement Scheme	<p>Minor Positive</p> <p>Actions proposed to address congestion issues would lead to improvements in local air quality, reduced greenhouse gas emissions and reduced noise emissions. Associated benefits would also extend to population and human health, particularly where road safety issues are addressed. At the same time, it is likely that new route options will require land-take, particularly for the provision of new trunk roads. This will likely have adverse impacts on biodiversity, soil, water quality and cultural heritage sites. It is recommended that environmental assessments of individual schemes are undertaken to identify impacts and mitigation measures.</p>
CP3: Part 2 Road Maintenance	<p>Minor Positive</p> <p>Actions proposed under this policy would benefit the material asset value throughout the lifespan of the strategy. Associated benefits could also extend to population and human health where maintenance works address existing road safety and accessibility issues. Implementation of this policy will likely result in local construction works, which could have adverse impacts on noise emissions. Further impacts upon the environment will be dependant upon the location and scope of maintenance requirements.</p> <p>Noise related to construction works should be monitored by the Council and work should be carried out in such a way to minimise noise pollution. Where necessary, this may require the Council to restrict working hours or provide other mitigation recommendations under the Control of Pollution Act 1974.</p>

LTS Core Policy	Summary of Assessment
<p>CP4: Pedestrian and Cycle Network</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport. Further impacts upon the environment will be dependant upon the requirements of individual schemes or improvements.</p> <p>It is recommended that decisions on planning applications should consider whether site locations or street layout proposals minimise land-take required for new and major developments wherever possible. Development proposals, including active travel masterplans, should seek to identify environmental benefits or enhancements which could be delivered in line with sustainable transport proposals. Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures.</p> <p>Pedestrian / cycle counts, traffic counts and air quality monitoring should be undertaken to determine the cumulative benefits of policy implementation as a result of a wider modal shift toward sustainable transport modes.</p>
<p>CP5: Road based Public Transport – Part 1 Key route network</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport. Further impacts upon the environment will be dependant upon the requirements of individual schemes or improvements.</p> <p>Further clarification is required as to how the Council intends to implement extensions to the existing bus network as a result of new development.. Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures.</p> <p>Passenger counts, traffic counts and air quality monitoring should be undertaken to determine the cumulative benefits of policy implementation as a result of a wider modal shift toward sustainable transport modes.</p>

LTS Core Policy	Summary of Assessment
<p>CP6: Road Based Public Transport – Part 2 Service frequency/journey times</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Further clarification is required regarding specific targets and actions to be undertaken by the Council to achieve the objectives of this policy</p>
<p>CP7: Rail based Public Transport Part 1 Key Route network</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Environmental assessments of specific proposals should be undertaken, particularly where the need for a new rail station or park & ride facility is established, to identify impacts and mitigation measures.</p> <p>Passenger counts, traffic counts and air quality monitoring should be undertaken to determine the cumulative benefits of policy implementation as a result of a wider modal shift toward sustainable transport modes.</p>
<p>CP8: Air Services</p>	<p>Moderate adverse</p> <p>Actions proposed under this policy will increase the material assets value and have associated benefits to population and human health where it improves accessibility in fragile areas. However, any increase in air traffic frequency will have adverse impacts to local air quality, climate factors generally, and noise emissions to local receptors near the airport and under flight paths. This could extend to water quality and ecology where sea planes are used. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>It is recommended that any increase in air traffic frequency is assessed in terms of its impact to noise and local and regional air quality. Where new physical development is required, sensitive design and sustainable materials should be used, where possible. Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures.</p>

LTS Core Policy	Summary of Assessment
<p>CP9: Ferry Services</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will benefit population and human health, local air quality and climate factors, particularly where improved services improve accessibility to fragile areas and / or where it encourages a modal shift toward sustainable transport. However, adverse impacts to local water quality and ecology will arise where vessel traffic is increased in quantity or frequency. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Environmental assessments will need to be undertaken for proposals which seek to increase the quantity or frequency of vessel traffic or where construction of new infrastructure is required, particularly for proposals within or adjacent to sites designated for water quality or ecological value. This could include undertaking an Appropriate Assessment where European-designated sites are likely to be affected. Cleaner technology should be promoted to reduce impacts where possible.</p> <p>Water quality and biodiversity (including marine habitat sites) should be regularly monitored along ferry routes throughout the life of the strategy and mitigation measures implemented where adverse impacts are identified.</p>
<p>CP10: Parking policy</p>	<p>Minor Positive</p> <p>Actions proposed under this policy will benefit local air quality and climate change where the integration of parking facilities promotes a modal shift toward sustainable transport modes. Benefits will extend to local populations through increased accessibility, particularly where improvements provide multi-modal interchange opportunities or improve arrangements for individuals with limited mobility. Potential adverse impacts to biodiversity, soil, cultural heritage and/or landscape and visual amenity could arise from land-take required to deliver parking facilities.</p> <p>It is recommended that the site-selection process for new parking facilities, including Park & Ride facilities, should seek to minimise land-take wherever possible, particularly on greenfield land. The provision of new facilities within settlements should be directed to derelict or vacant sites where viable. Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures. Cleaner technology should be promoted to reduce impacts where possible.</p>

LTS Core Policy	Summary of Assessment
<p>CP11: Travel Plans</p>	<p>Minor Positive Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport through the design of major new development. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures.</p>
<p>CP12: Freight Transport</p>	<p>Minor Positive Actions proposed under this policy will benefit air quality and climate factors where road-based lorry trips are replaced by more sustainable modes of travel. This will also lead to further potential benefits to population and human health by improving road safety and reducing noise impacts associated with freight travel along the network. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Environmental assessments will need to be undertaken for proposals which seek to increase the quantity or frequency of sea or canal vessel traffic or where construction of new infrastructure is required, particularly for proposals within or adjacent to sites designated for water quality or ecological value. This could include undertaking an Appropriate Assessment where European-designated sites are likely to be affected. Cleaner technology should be promoted to reduce impacts where possible.</p> <p>Water quality and biodiversity (including marine habitat sites) should be regularly monitored along ferry routes throughout the life of the strategy and mitigation measures implemented where adverse impacts are identified.</p>
<p>CP13: Design guidelines for new developments</p>	<p>Minor Positive Actions proposed under this policy will have a long-term benefit to population and human health, local air quality and climate factors where it can encourage a modal shift toward sustainable transport through the design of major new development. Promotion of good design which considers the visual and environmental context of the site could also enhance the landscape and visual amenity of the area. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Design guidelines should incorporate methodologies for the enhancement of the existing landscape as well as measures such as habitat creation.</p>

LTS Core Policy	Summary of Assessment
CP14: Road Safety Plan	<p>Minor Positive</p> <p>Actions proposed under this policy will have clear benefits to population and human health. Benefits could extend to local air quality and climate factors where sustainable modes of travel are promoted. Further impacts upon the environment will be dependant upon the requirements of specific improvements.</p> <p>Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures. Regular road safety monitoring should be undertaken by the Council for the lifespan of the strategy. This could include wildlife fatalities that arise from road traffic accidents, particularly along the trunk road network.</p>

5.7 Cumulative Effects

The cumulative effects of the draft LTS (over and above those which occur as a result of combinations of interventions proposed across each core policy) have been assessed with respect to impacts to other plans/programmes/strategies which could result in additional impacts to the LTS. The appraisal has been considered by determining the interaction between the LTS and other land use development plans across the Highlands through the implementation life of the LTS. The predicted cumulative effects are summarised in Table 12:

Table 12: Predicted Cumulative Impacts

SEA Topic	SEA Objective	Cumulative Impact of the LTS	Cumulative Impact with other PPS
Biodiversity	To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.	There is the potential for adverse impacts to occur where proposed interventions result in habitat loss. However as more interventions are implemented the potential for habitat creation also increases in the long-term.	Potential for significant impacts to occur to habitats and protected species across the Highlands through cumulative impacts between transport and land use plans.
Population and Human Health	To promote accessibility, health and quality of life through the integration of the LTS.	Positive impact with the LTS encouraging a modal shift to sustainable transport modes and increasingly accessibility to more remote communities.	Positive if transport and landuse plans are developed with accessible public transport and the provision of additional facilities for sustainable travel such as core paths, cycleways etc.
Soil	To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.	No significant impacts to the soil resource of the Highlands are anticipated.	Positive if both transport and land use plans favour the development of brownfield land over greenfield sites.
Water	To prevent the deterioration of the water environment (including ground and surface	No significant impacts are anticipated however increased ferry services do have the potential to lead	Uncertain, the implementation of new transport interventions has the potential to stimulate new development which may impact

SEA Topic	SEA Objective	Cumulative Impact of the LTS	Cumulative Impact with other PPS
	waters) and any associated protected sites and flood plain areas.	to adverse impacts to the water quality. Local benefits may occur from site specific schemes	upon the water resources of the Highlands in the long-term.
Air Quality	To protect and enhance the current air quality of the highland area.	Generally positive impact however this will be dependant on the level of modal shift occurring. Effect will be greater over time as more measures are implemented however, some negative impacts will be seen through increased air services.	Uncertain (positive and negative impacts), new land use development across the Highlands may result in increased private vehicle trips leading to reduced air quality, and the expansion of air services through plans such as the Inverness Airport Masterplan may lead to further reductions in air quality. Effective implementation of the LTS in conjunction with other plans such as the Core Path Plan may encourage further use of sustainable transport modes.
Climatic Factors	To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.	Generally positive impact however this will be dependant on the level of modal shift occurring. Effect will be greater over time as more measures are implemented however, some negative impacts will be seen through increased air services.	Uncertain (positive and negative impacts), new land use development across the Highlands may result in increased greenhouse gas emissions, and the expansion of air services through plans such as the Inverness Airport Masterplan may lead to further impacts. Effective implementation of the LTS in conjunction with other plans such as the Core Path Plan may encourage modal shift to sustainable transport modes.
Material Assets	To protect and enhance existing infrastructure and promote more sustainable transport.	Positive with enhancements to existing transport infrastructure and an encouragement of modal shift to sustainable	Positive impacts anticipated through modal shift to sustainable transport modes, and the integration of sustainable transport options into new

SEA Topic	SEA Objective	Cumulative Impact of the LTS	Cumulative Impact with other PPS
		transport modes throughout the LTS.	developments.
Cultural Heritage	To protect and, where appropriate, enhance the historic environment of the highlands.	Uncertain, however there is the potential for adverse impacts to occur to archaeological and cultural heritage features.	Uncertain, however there is the potential for adverse impacts to occur to archaeological and cultural heritage features through cumulative impacts between transport and land use plans.
Landscape and Visual Amenity	To protect and, where possible enhance the landscape and visual amenity of the highlands.	Generally positive impact with new policies providing the opportunity to provide and improve both new and existing townscapes and landscapes. The potential to update design guidelines may also result in further landscape benefits as the LTS is implemented.	Uncertain (positive and negative impacts), potential for adverse impacts from combinations of transport and land use developments, however there is potential for combined enhancements to landscape/streetscape through sensitive design and planning.
Noise	To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.	Neutral to slight positive impacts, the level of improvement will be dependant upon the level of modal shift occurring, this is only likely to result in significant improvements locally from specific interventions.	<p>Uncertain (positive and negative impacts), new land use development across the Highlands may result in increased private vehicle trips leading to increased noise and vibration, and the expansion of air services through plans such as the Inverness Airport Masterplan may lead to further noise impacts.</p> <p>Effective implementation of the LTS in conjunction with other plans such as the Core Path Plan may encourage further use of sustainable transport modes and help in reducing noise impacts.</p>

The cumulative impacts identified highlight the need for co-operative working throughout the Highland Council to ensure that the identified environmental benefits of the LTS and the other regional plans are realised. The cumulative impacts also suggest that in the long-term the provision of sustainable transport options which serve existing and new development across Scotland is vital if the environmental benefits are to be achieved.

6 Mitigation

6.1 Introduction

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires the Environmental Report to provide possible measures to prevent, reduce or, where possible, offset any significant adverse effects on the environment from the implementation of the Local Transport Strategy

6.2 Strategic Level Mitigation

Schedule 3 highlights the importance of modifying the Strategy in response to the environmental process. Specific recommendations and mitigations for the LTS Vision, Key Objectives and Core Policies are presented in Tables 10 and 11 above. In addition, the following strategic level mitigation measure should be included:

- For future Local Transport Strategies the Council should establish a baseline database for climatic factors and set targets for reducing greenhouse gas emissions in line with the Climate Change (Scotland) Act 2009.

6.3 Project Level Mitigation

Further impacts to the environment will arise from specific proposals put forward to implement the policies outlined in the LTS. These will need to be assessed on a scheme-by-scheme basis and mitigated at project level. Recommended project-level mitigation measures are presented in Table 13 below by each SEA Topic. It should be noted that detailed mitigation measures at project level can only be provided when objectives have been fully developed and the Plan is at the implementation stage. An Environmental Impact Assessment (EIA) and Construction and Operational Management Plans can provide mitigation measures that are tailored to the finalised Master Plan and its objectives. At this stage, the results of the Habitats Regulations Assessment and the Flood Risk Assessment will also be known and may also be able to influence the development of targeted mitigation measures.

Table 13: Project Level Mitigation Measures

SEA Topic	Proposed measures for the reduction/prevention and offset of significant adverse effects
Biodiversity	<ul style="list-style-type: none"> • Sensitive ecological sites will be avoided where possible. Any intervention which may result in adverse impacts to sites designated for their international significance (SPA, SAC, or Ramsar Sites) will be subject to a site specific Appropriate Assessment and will be subject to screening to determine whether or not an Environmental Impact Assessment is required. • Appropriate surveys will be required for interventions with the potential to result in adverse impacts to protected species under the Habitats Directive, EU or UK legislation or priority BAP species/habitats. Detailed mitigation such as mammal tunnels, otter ledges and fish passes may subsequently be required to be incorporated into the scheme design. • Measures for the enhancement of biodiversity should implemented where possible, measures such as the use of native species where planting is required, the use of SUDS ponds and the creation of greenways for the continued linkage of habitats should all be considered. Where possible mitigation measures should seek to find linkages with the priorities highlighted within the local BAP.
Population and Human Health	<ul style="list-style-type: none"> • The Highland Council will promote (in partnership with HITRANS) the use of alternatives to private vehicles focusing on sustainable transport modes such as walking and cycling. • Interventions should be designed to improve the safety of pedestrians and cyclists
Water	<ul style="list-style-type: none"> • SEPA’s Pollution Prevention Guidelines (PPGs) should be adhered to for best practice guidelines including: <ul style="list-style-type: none"> ▶ PPG01: General guide to the prevention of water pollution; ▶ PPG04: Disposal of sewage where no mains drainage is available; ▶ PPG05: Works in near or liable to affect watercourses; ▶ PPG06: Working at construction and demolition sites; ▶ PPG21: Pollution Incident Response Planning; and ▶ PPG23: Maintenance of Structures Over Water; • All construction activities should be undertaken in accordance with the appropriate legislation (CAR and WEWS) and construction licences applied for where appropriate. • During the detailed design phase of the preferred strategy a Flood Risk Assessment (FRA) should be undertaken. The proposals should take account of Scottish Planning Policy 7: Planning and Flooding. New developments will require to be ‘flood neutral’. • Sustainable Urban Drainage Systems (SUDS) should be developed to maintain the original drainage pattern of the study area. Consultation should also be undertaken with SEPA with regards the location and design of any SUDS. SUDS design should ensure that there is no increase in run-off over and above the Greenfield levels experienced prior to construction.

SEA Topic	Proposed measures for the reduction/prevention and offset of significant adverse effects
	<ul style="list-style-type: none"> An Environmental Management Plan (EMP) should be devised containing a pollution incident response plan as well as a programme for the monitoring of water quality throughout the life of the intervention. Where interventions are proposed they should be designed to withstand impacts from predicted future climate change such as sea level rise and increased fluvial risks.
Soil	<ul style="list-style-type: none"> Transport interventions should be designed to avoid significant adverse impacts to Prime Quality Agricultural Land Good site management practices and the adherence to SEPA's Pollution Prevention Guidelines (PPGs) will assist in the prevention of erosion to existing soils, as well as reducing the pollution risk to soils and the underlying geology (and associated groundwater) during both construction and operation. New interventions should be designed to ensure slope stability. Any interventions which are to be implemented in areas of known slope instability should be appropriately designed and consultation with SEPA undertaken throughout the design process. Where soil is excavated for the implementation of an intervention they should be re-used within the proposed scheme or other local construction works.
Air Quality	<ul style="list-style-type: none"> The LTS contains several strategies aimed at reducing the impacts to local air quality and climate change through the encouragement of a modal shift away from private vehicles to walking, cycling and the use of public transport (bus and rail).
Climatic Factors	<ul style="list-style-type: none"> The LTS contains several strategies aimed at reducing the impacts to local air quality and climate change through the encouragement of a modal shift away from private vehicles to walking, cycling and the use of public transport (bus and rail). Co-ordination with both the Regional and National Transport Strategies will be important in realising a reduction in traffic related emissions and associated benefits to climate change. Measures to reduce the need to travel through better integration of existing and future transport interventions and land use planning will help to reduce the reliance on private vehicles.
Cultural Heritage	<ul style="list-style-type: none"> Any intervention which is likely to result in adverse impacts to designated historical features (such as Scheduled Ancient Monuments and Historic Gardens and Designed Landscapes) will be subjected to screening to determine whether or not an Environmental Impact Assessment is required. Where transport interventions are proposed within existing conservation areas the design of the infrastructure shall reflect the existing nature and character of the conservation area. Where new transport interventions are proposed (road, rail, air or ferry) they will be assessed to determine whether or not the associated changes in vibrations will impact upon the structural integrity of listed buildings or other historic features. Following survey work detailed mitigation measures can then be recommended on a site specific basis.

SEA Topic	Proposed measures for the reduction/prevention and offset of significant adverse effects
	<ul style="list-style-type: none"> Where new interventions are proposed a Desk Based Assessment (DBA) should be undertaken to assess the potential for impacts to buried archaeological features. Following the reporting of the findings archaeological excavations may be required and a programme of archaeological recording undertaken. Consultation with Historic Scotland and the Highland Council's Archaeological Officer will be required to determine the level of archaeological reporting required. The setting of existing historical features should be assessed where new interventions are proposed and any mitigation measures such as planting sensitively designed to ensure that the setting of existing features are not adversely impacted.
Landscape/Visual	<ul style="list-style-type: none"> Proposed interventions that have the potential to result in impacts to designated features such as National Scenic Areas, Areas of Great landscape Value or the Cairngorms National Park will be subjected to screening to determine whether or not an Environmental Impact Assessment is required. Landscape and Visual Assessments will be undertaken where proposed interventions are deemed to result in adverse impacts to either designated landscape features or sensitive visual receptors. These assessments will include a detailed mitigation strategy for each specific intervention identified. High quality design and construction principles will ensure that the interventions achieve an appropriate 'fit' within the existing landscape All transport interventions should seek to retain any existing landscape characteristics specific to the area including field boundaries and hedgerows in line with the guidance set out in the appropriate Landscape Character Assessment (published by Scottish Natural Heritage). Where transport interventions are proposed within existing conservation areas the design of the infrastructure shall reflect the existing nature and character of the conservation area. The use of appropriate street furniture and designs will be incorporated into those urban transport interventions proposed to ensure a fit within the existing town/streetscape.
Material Assets	<ul style="list-style-type: none"> The Highland Council should seek to encourage the use of public transport and other sustainable modes to reduce fossil fuel emissions. Where soil is excavated for the implementation of an intervention they should be re-used within the proposed scheme or other local construction works.
Noise	<ul style="list-style-type: none"> Noise impacts should be determined through survey works associated with site specific interventions where appropriate. Detailed site specific mitigation measures such as the implementation of noise bunding or acoustic fencing can then be recommended where deemed necessary.

7 Monitoring

7.1 Introduction

Section 19 of the Environmental Assessment (Scotland Act) Act 2005 requires the Highland Council, as the Responsible Authority to monitor the likely adverse impacts on the environment. This section of the SEA sets out the proposed approach to the monitoring of the predicted effects of the LTS upon the environment of the Highlands. Table 14 sets out draft indicators against which the predicted significant environmental impacts of the LTS should be monitored. The proposed monitoring framework set out in Section 6 of the LTS should be expanded to include these indicators.

Table 14: Proposed SEA Monitoring Programme

SEA Topic	Objective	Indicator	Source/Responsibility
Biodiversity	To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.	<ul style="list-style-type: none"> The Road Maintenance crews should record any incidents of protected species RTA and inform the appropriate authority Report any damage to protected habitats Habitat monitoring should be undertaken along the length of new schemes to record damage/enhancements to the existing environment Number of designated sites impacted by the LTS should be recorded. 	The Highland Council, Transport Scotland
Population and Human Health	To promote accessibility, health and quality of life through the integration of the LTS.	<ul style="list-style-type: none"> Decrease in fragile areas as defined in the Councils fragility index Number of new public transport schemes Surveys of numbers of people utilising public transport Length of new cycleways Length of new pathways (including core paths and upland paths) 	The Highland Council HITRANS
Soil	To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality	<ul style="list-style-type: none"> The number of surface/ground water pollution events directly related to transport The amount of prime quality agricultural land across the Highlands Record the amount of brownfield land 	The Highland Council and in association the Macaulay Institute

SEA Topic	Objective	Indicator	Source/Responsibility
	agricultural land will be protected and enhanced where possible.		
Water	To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.	<ul style="list-style-type: none"> The number of surface/ground water pollution events directly related to transport Record the number of new SUDS scheme on new and existing roads Monitor changes in water quality through SEPA's monitoring system 	The Highland Council SEPA
Air Quality	To protect and enhance the current air quality of the highland area.	<ul style="list-style-type: none"> Number of AQMAs Record the number of days of 'poor air quality' through monitoring trends in roadside NO₂ and PM₁₀ 	The Highland Council
Climatic Factors	To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.	<ul style="list-style-type: none"> Record the amount of modal shift taking place Traffic counters to be used on key road links and air quality modelling to be used to model emissions Number of vehicles failing emission testing 	The Highland Council Scottish Transport Statistics
Material Assets	To protect and enhance existing infrastructure and promote more sustainable transport.	<ul style="list-style-type: none"> Surveys of numbers of people utilising public transport Data on the number of road repairs required across the Highlands 	The highland Council
Cultural Heritage	To protect and, where appropriate, enhance the historic environment of the highlands.	<ul style="list-style-type: none"> Number of direct impacts to historical features/listed buildings as a result of transport related schemes Number of applications for Listed Building or Scheduled Ancient Monument consent associated with transport projects Conservation Area Appraisals 	The Highland Council Historic Scotland
Landscape and Visual Amenity	To protect and, where possible enhance the landscape and visual amenity of the highlands.	<ul style="list-style-type: none"> Number of transport schemes accompanied with a detailed landscape and visual assessment and associated design Number of significant positive and 	The Highland Council

SEA Topic	Objective	Indicator	Source/Responsibility
		negative impacts identified in Environmental Statement for transport schemes <ul style="list-style-type: none"> Number of objections received to transport schemes specifically related to landscape/visual impacts. 	
Noise	To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.	<ul style="list-style-type: none"> Traffic counters to be used on key road links and noise modelling (contours) to be used to model noise emissions Number of objections received to transport schemes specifically related to noise and vibration impacts 	The Highland Council

A final monitoring framework and associated targets are to be agreed with The Highland Council and will be developed and presented in the Post Adoption SEA statement. An example table for this more detailed framework is shown in Table 15.

Table 15: Exemplar Post Adoption Monitoring Framework

SEA Topic	Objective	Indicator/Target	Anticipated Trend	Trigger Activity	Responsibility	Monitoring Frequency
Biodiversity						

Through monitoring the implementation of the LTS policies the following will be ensured:

- The LTS is contributing towards the delivery of the SEA objectives
- The mitigation measures detailed in Section 6 of the Environmental Report are either working effectively or require to be updated to further help reduce/avoid impacts to the environment
- Whether new environmental mitigation measures/objectives/indicators are required as the LTS evolves

8 Next Steps

The assessment results within this report will be used to make a decision on the approach for the Local Transport Strategy, which along with the Environmental Report will be subject to public consultation for a period of eight weeks. All comments and representations will be considered before finalising the Strategy and Environmental Report.

Table 16 lists future milestones in the development of the Local Transport Strategy and its SEA, and the dates when these are expected to be completed.

Table 16: Anticipated plan-making and SEA milestones

Expected date	Milestone
Winter 2009/ 2010	Publication of the Draft Local Transport Strategy and Environmental Report. This will be subject to a public consultation period of eight weeks
Spring 2010	Preparation of the Final Local Transport Strategy and Environmental Report. Develop a comprehensive monitoring framework
Spring 2010	Highland Local Transport Strategy and Environmental Report to be presented to The Highland Council Committee for approval
Summer 2010	Approval of the Local Transport Strategy along with Environmental Report, publication of Post Adoption Statement

Appendix A

Key Plans, Programmes and Strategies (PPS)

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
INTERNATIONAL TIER			
1	<p>EC Directive on the assessment of the effects of certain plans and programmes on the environment</p> <p>Strategic Environmental Assessment (SEA) Directive (2001/42/EC)</p> <p>http://ec.europa.eu/environment/eia/sea-legalcontext.htm</p>	<p>The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</p> <p>Aims to identify and mitigate significant environment effects arising from certain plans and programmes.</p> <p>Emphasis is placed on integrating sustainability considerations into the preparation and adoption of plans and programmes.</p>	<p>Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.</p> <p>The Environmental Assessment (Scotland) Act 2005 transposes the directive into Scottish legislation.</p>
2	<p>United Nations Framework Convention on Climate Change (UNFCCC)</p> <p>Kyoto Protocol (1998)</p> <p>http://unfccc.int/resource/docs/convkp/kpeng.html</p>	<p>United Nations international treaty on climate change.</p> <p>The Protocol entered into force in February 2005.</p> <p>Developed countries that have ratified the Protocol are committed to reducing their emissions of greenhouse gasses.</p> <p>Commitment signed by 38 countries (plus the EU) to introduce legally binding targets to limit or reduce greenhouse gas emissions by at least 5% of 1990 levels in the period 2008 – 2012.</p> <p>The UK has committed to an 8% reduction on 1990 levels between 2008 and 2012.</p>	<p>The Local Transport Strategy principles should take account of targets for reducing CO2 emissions and should seek to reduce emissions.</p>
3	<p>The Second European Climate Change Programme</p>	<p>The programme notes the work identified in the first programme is being undertaken according to plan, but that further measures will be required in order to meet the EU's commitments under the Kyoto agreement It explores options for reducing greenhouse gas emissions in synergy with the EU'</p>	<p>The Local Transport Strategy principles should seek to reduce emissions</p>

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	http://ec.europa.eu/environment/climat/eccpii.htm	'Lisbon Strategy for increasing economic growth and job creation	
4	EC Directive establishing a framework for the Community action in the Field of Water Policy Water Framework Directive (2000/60/EC) http://ec.europa.eu/environment/water/water-framework/index_en.html	Represents the most substantial piece of EU water legislation to date. Central to the framework is an integrated approach through River Basin Management Planning (RBMP) which will consider the cumulative impacts of all activities within a river basin and district and the risk posed to the environment. Environmental objectives will be set for each water body, with due consideration to economic and social costs. Aims to prevent deterioration in status and to achieve “good” ecological status in all surface and ground water bodies by 2015 and limit the quantity of groundwater abstraction to that portion of overall recharge not required by ecology. The basic objectives to be achieved as set out in Article 4(1) can be summarised as follows: <ul style="list-style-type: none"> • prevent deterioration of the status of groundwater bodies; • protect, enhance and restore all bodies of groundwater with the aim of achieving good groundwater status by 2015; • prevent or limit the input of pollutants to groundwater and reverse any significant and sustained upward trend in the concentration of pollutants in groundwater; • comply with European wide measures against priority and priority hazardous substances; and • achieve compliance with any relevant standards and objectives for protected areas 	The Local Transport Strategy should promote means to minimise the risk of pollution and damage to surface and ground waters The Local Transport Strategy should promote sustainable water use and discharge and the SEA will encourage proper consideration of impacts affecting the water environment. The Local Transport Strategy must consider current land use and future climate scenarios in order to minimise the effects of flooding and drought events and to facilitate long term improvements in water quality.

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
5	<p>EU Air Quality Directive (96/62/EC)</p> <p>http://ec.europa.eu/environment/air/ambient.htm</p>	<p>This Directive revises existing legislation and introduces new air quality standards for previously unregulated air pollutants, setting the timetable for the development of subsequent directives on a range of pollutants.</p> <p>Mandatory standards set for air quality together with limits and guidance.</p>	<p>The Local Transport Strategy should consider the relationships with policies on air quality</p> <p>The SEA will include consideration of air quality related issues and highlight the need for more detailed assessment the detailed design level where appropriate.</p>
6	<p>EU Thematic Strategy on Air Pollution (2005)</p> <p>http://europa.eu/legislation_summaries/environment/air_pollution/l28159_en.htm</p>	<p>The Strategy sets out objectives for improving air quality and proposes measures, for achieving them by 2020 placing the emphasis on the most harmful pollutants, and highlighting potential sectors and policies that may have an impact on air pollution.</p>	<p>The Local Transport Strategy principles should seek to improve air quality in particular minimising any harmful pollutant emission</p> <p>The SEA will consider the issue of air quality within its scope</p>
7	<p>EU Waste Framework Directive (75/442/EEC)</p> <p>http://ec.europa.eu/environment/waste/legislation/a.htm</p>	<p>Along with subsequent Directives, this Directive aims to create an integrated approach to waste management in order to reduce waste production.</p> <p>It requires all necessary measures to be taken to ensure that waste is recovered or disposed of without harming human health.</p>	<p>The Local Transport Strategy principles should reflect the need to reduce the overall amount of waste material that is produced, as well as the need to dispose of waste sustainably in accordance with the appropriate licences</p> <p>The SEA will look at waste handling within its objectives</p>
8	<p>Directive on the Assessment and Management of Flood Risks (EC Directive 2007/60/EC)</p>	<p>The flood directive aims to reduce and manage risks that floods pose to human health, the environment, cultural heritage and economic activity This Directive now requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. With this Directive also reinforces the rights of the public to access this information and to have a say in the</p>	<p>The Local Transport Strategy should review the potential Flood Risk impact on Highland Region and consider its impact upon potential transport projects</p> <p>The SEA will consider the issue of Flood Risk</p>

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	http://ec.europa.eu/environment/water/flood_risk/index.htm	planning process.	within its Scope. It will look at the potential impacts and propose mitigation measures.
9	Thematic Strategy on the Protection and Conservation for the Marine Environment (2002) http://ec.europa.eu/environment/water/consult_marine.htm	The purpose of the Marine Strategy is to protect and conserve the marine environment. It aims to protect Europe's seas and oceans and ensure that human activities in these seas and oceans are carried out in a sustainable manner	The Local Transport Strategy principles should seek to protect and conserve the marine environment. In particular where there may be an increase in ferry services.
10	The Convention on Biological Diversity (1992) http://www.biodiv.org/convention/default.shtml	International commitment to maintaining the world's biodiversity. Three main goals established: <ul style="list-style-type: none"> • the conservation of biological diversity; • the sustainable use of its components and • the fair and equitable sharing of the benefits from the use of genetic resources. Requirement for each country that has signed the declaration to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity	The Local Transport Strategy should consider biodiversity impacts within its objectives. The SEA will consider impacts affecting biodiversity
11	EU Environmental Noise Directive (2002/49/EC) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELE	The key objectives are as follows Monitoring the environmental problem-developing 'strategic noise maps' to gauge how many people are annoyed and sleep deprived throughout Europe. Informing and consulting the public about noise exposure, its effects and	The Local Transport strategy should consider the impact that increased traffic generation may have on noise levels and how this will impact upon adjacent communities.

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	X:32002L0049:EN:NOT	<p>the measures considered to address it</p> <p>Addressing local noise issues – requires authorities to have action plans for problem areas and maintain environmental noise quality where it is good.</p> <p>Developing a long-term EU strategy – Reduce number of people affected by noise in long term and produce a framework for developing existing Community policy on noise reduction from the source.</p>	
12	<p>EU Habitats Directive (92/43/EC)</p> <p>http://www.jncc.gov.uk/page-1374</p>	<p>Aims to ensure biodiversity by conserving natural habitats of wild flora and fauna.</p> <p>It requires Special Areas of Conservation (SACs) to be identified which form a network of protected areas called Natura 2000 along with SPAs.</p> <p>Projects are only permitted to adversely affect such sites under exceptional circumstances</p> <p>Also aims to maintain or restore in a favourable condition designated natural habitat types and habitats of designated species listed in Annex I and II of the directive respectively.</p> <p>Particular attention should be paid to reducing negative impacts on protected species (Annex IV European Protected Species) found in Scotland.</p> <p>Any development or works that could potentially affect SPA or SAC sites – the Natura 2000 network must be subjected to an Appropriate Assessment if there is likely to be a significant effect either alone or in combination with other plans and proposals.</p> <p>Any development or works that could potentially affect a European Protected Species can only be permitted if a licence to disturb can be obtained from the Scottish Government.</p>	<p>The Local Transport Strategy should be mindful of the list of sites of natural habitats and species and recommend appropriate measures to avoid the deterioration of these habitats and avoid disturbance of scheduled, scarce or rare species, in support of the Scottish Biodiversity Strategy.</p> <p>Consideration should also be given to the Article 10 features – wildlife corridors and the need to avoid fragmentation and to seek connectivity</p> <p>Ensure the Local Transport Strategy promote protection of such sites and aim to maximise the area of these habitats.</p>

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
13	<p>The EU Biofuels Directive 2003/30/EC</p> <p>http://ec.europa.eu/energy/res/legislation/doc/biofuels/en_final.pdf</p>	<p>The Directive proposes to tackle a wide range of measure to promote sustainable development and in particular to tackle rising greenhouse gas emissions from transport. It aims to reduce life-cycle emissions of carbon dioxide from transport across Europe, and to reduce life-cycle emissions of carbon dioxide from transport across Europe, and to reduce the EU's future reliance on external energy sources (in this oil). The directive aims to promote the use of biofuels or other renewable fuels as a substitute for petrol or diesel in the transport sector.</p>	<p>The Local Transport Strategy should consider the opportunities for Bio fuel</p>
14	<p>The EC Directive on the Conservation of Wild Birds (79/409/EEC)</p> <p>http://www.jncc.gov.uk/page-1373</p>	<p>The Directive provides a framework for the conservation and management of human interactions with wild birds in Europe. It sets broad objectives for a wide range of activities in order to sustain populations of naturally occurring wild birds. The key aim is to sustain habitats in order to maintain populations at ecologically and scientifically sound levels.</p> <p>Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species</p> <p>Any development or works that could potentially affect SPA or SAC sites – the Natura 2000 network must be subjected to an Appropriate Assessment if there is likely to be a significant effect either alone or in combination with other plans and proposals.</p> <p>Any development or works that could potentially affect a European Protected Species can only be permitted if a licence to disturb can be obtained from the Scottish Government.</p>	<p>The Local Transport Strategy should consider the impact of its policies on wild birds and their habitats and should ensure their protection</p>
15	<p>The European Landscape Convention</p> <p>http://www.coe.int/t/dg4/cultureheritage/convention</p>	<p>The conventions aim to promote European Landscape protection, management or planning and to organise European co-operation on landscape issues.</p>	<p>The Local Transport Strategy should consider the aims of the landscape convention in the development of its core policies.</p>

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	s/Landscape/Default_en.asp		
16	<p>EU Bathing Waters Directive</p> <p>2006/7/EC</p> <p>http://ec.europa.eu/water/water-bathing/index_en.html</p>	<p>Proposal included three categories for the classification of bathing sites: “excellent,” “good” or “poor”.</p> <p>All sites should achieve at least the classification “good” to comply with the directive.</p> <p>However, in its common position, the Council had a different opinion and took the view that sites should be considered compliant even when they achieved the standards of a fourth category, called “sufficient,” situated between “good” and “poor.”</p> <p>Directive 2006/7/EC requires Member States to draw up a management plan for each site to minimise risks to bathers, based on an assessment of the sources of contamination that are likely to affect it.</p> <p>Users of the site should be actively involved in developing the management plan.</p> <p>Where bathing sites have a history of poor water quality, preventive measures should be taken to close the bathing area when such conditions are forecast.</p> <p>If the quality standards are not respected, remedial measures must be taken.</p> <p>Information on a bathing site’s quality classification, the results of water quality monitoring, the site’s management plan and other relevant information is to be made readily available to the public, both through displays at the site and through the media and internet.</p> <p>While the current directive requires regular monitoring of 19 pollutants or other parameters (for example, water colour), the revised directive reduces this list to just two microbiological indicators of faecal contamination, E. Coli</p>	<p>SEPA indicate that compliance with the bathing water classifications is essentially assured during dry weather, but there remains a risk of pollution to some beaches during or after wet weather.</p> <p>The Local Transport Strategy should work to maintain these efforts and limit diffuse pollution entering Scotland’s water environment.</p>

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
		<p>and Intestinal Enterococci.</p> <p>This simplification reflects recognition that faecal material, for instance due to inadequate sewage treatment and pollution from animal waste, is the primary health threat to bathers.</p> <p>It will apply to surface water where a large number of people are expected to bathe, establishing a method for monitoring bathing water quality during the bathing season.</p> <p>The classification of water quality at a bathing site will be determined on the basis of a three-year trend instead of a single year's result as at present.</p> <p>This means that the classification will be less susceptible to bad weather or one-off incidents.</p> <p>Where water quality is consistently good over a three-year period the frequency of sampling may be reduced, thereby cutting costs.</p>	
17	<p>Taking Sustainable Use of Resources Forward: A Thematic Strategy on the prevention and recycling of waste</p> <p>http://europa.eu/legislation_summaries/environment/sustainable_development/128168_en.htm</p>	<p>This strategy sets out guidelines for European Union (EU) action and describes the ways in which waste management can be improved.</p> <p>The aim of the strategy is to reduce the negative impact on the environment that is caused by waste throughout its life-span, from production to disposal, via recycling. This approach means that every item of waste is seen not only as a source of pollution to be reduced, but also as a potential resource to be exploited.</p>	<p>The Local Transport Strategy should recommend safe disposal and recycling of waste materials.</p> <p>The SEA will assess the impact of waste generation and provide mitigation measures where appropriate.</p>
UK NATIONAL TIER			
18	UK DTi Energy White Paper	Defines a long-term strategic vision for energy policy combining environmental, security of supply, competitiveness and social goals.	The Local Transport Strategy should consider the incorporation of micro- regeneration and energy efficiency measures into the principles to

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005		
	<p>Our Energy Future – Creating a Low Carbon Economy (2003) http://www.dti.gov.uk/files/file10719.pdf</p>	<p>Four key goals detailed within the White Paper:</p> <ul style="list-style-type: none"> • To develop a path to cut the UK's carbon dioxide emissions, the main contributor to global warming, by 60% by about 2050 with real progress by 2020; • To maintain the reliability of energy supplies; • To promote competitive markets in the UK and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and • To ensure that every home is adequately and affordably heated. 	<p>contribute to the reduction of CO2 emissions</p>		
<p>19</p>	<p>Department for the Environment, Food and Rural Affairs (DEFRA) Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Published 2007) http://www.defra.gov.uk/environment/airquality/strategy/</p>	<p>Describes the plans drawn up by the Government and devolved administrations to improve and protect ambient air quality in the UK in the medium term.</p> <p>Standards set for 8 main air pollutants of particular concern to human health:</p> <table border="0"> <tr> <td> <ul style="list-style-type: none"> • benzene; • carbon monoxide; • nitrogen dioxide; • particles (PM10); </td> <td> <ul style="list-style-type: none"> • 1,3- butadiene; • lead; • ozone; • sulphur dioxide. </td> </tr> </table> <p>Local authorities are charged with drawing up their own strategies to tackle the air quality objectives in their areas. Target dates for standards range from 2005 to 2020</p> <p>The standards are purely health based and objectives are to be derived from these, taking into account practicality, technical feasibility and economic factors.</p> <p>The Strategy also sets out the short to medium term policy framework for ambient air quality in Scotland and the rest of the UK.</p>	<ul style="list-style-type: none"> • benzene; • carbon monoxide; • nitrogen dioxide; • particles (PM10); 	<ul style="list-style-type: none"> • 1,3- butadiene; • lead; • ozone; • sulphur dioxide. 	<p>Although there are no Air Quality Management Areas within the Highland Region the Local Transport strategy should seek to minimise impact on air quality and promote sustainable modes of transport.</p>
<ul style="list-style-type: none"> • benzene; • carbon monoxide; • nitrogen dioxide; • particles (PM10); 	<ul style="list-style-type: none"> • 1,3- butadiene; • lead; • ozone; • sulphur dioxide. 				

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
20	The Climate Change (Scotland) Act 2009	The Climate Change (Scotland) Act 2009 aims to create a long-term framework for the current and successive administrations in Scotland to ensure that emissions will be reduced by 80% by 2050. Whilst it is not intended to allocate sector specific targets for reducing emissions, it is intended that the bill will assist in realising the mitigation potential for all sectors, including emissions from soils. Scotland's Climate Change Adaption Framework will identify strategic principles and priority actions as a means of providing leadership, guidance and consistency of approach to government and non-government decision makers. The framework will also identify roles and responsibilities for public and private decision makers across Scotland and outline the levels of risk being applied to manage climate change. The framework was issued in draft for consultation in 2008, and re-drafted for consultation in April 2009. A final adaption framework will be published in autumn 2009.	The Local Transport Strategy should draft policies that will help to achieve the targets set in the Climate Change (Scotland) Act. The SEA will highlight impacts on climatic factors and promote the reduction of CO2 emissions
21	The Future of Transport: The Transport White Paper (2004) http://www.dft.gov.uk/about/strategy/whitepapers/previous/fot/	The future of transport white paper builds on the progress that has already been made by the 10 year plan for transport. The paper extends investment plans to 2014-15. There are three central themes; <ul style="list-style-type: none"> • Sustained investment – increase investment over the time period covered by the paper with an increase in the 10 year spending budget • Improvements in transport management – including reorganisation of the railway and better traffic management and where it appears economically and environmentally viable increased capacity of road network • Planning Ahead – government to lead the way on road pricing 	The Local Transport Strategy should reflect the objectives highlighted within the White Paper

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
22	Wildlife and Countryside Act (as amended) (1981) http://www.jncc.gov.uk/page-1377	Principal legislative mechanism for the protection of wildlife in Great Britain. Requires any land that is identified as being of special interest by reason of any of its flora, fauna, geological or physiographical features to be classified as a Site of Special Scientific Interest (SSSI) and afforded certain protection against damaging measures. Requires strict protection of species under Schedules 1, 5 and 8 except in exceptional circumstances	There are a significant number of designated sites in the Highland Region including SSSIs, SAC, SPA etc. The Local Transport Strategy should recognise their statutory importance in terms biodiversity and strive to ensure they are adequately protected. The SEA will highlight impacts on biodiversity and promote the protection of all designated sites.
23	Nature Conservation (Scotland) Act 2004	The Wildlife and Countryside Act (1981), is amended by the Nature Conservation (Scotland) Act 2004, which imposes a duty on all public bodies and office holders to conserve biodiversity and therefore affords a degree of protection to all plant and animal species.	The local Transport Strategy should seek to protect and conserve all plant and animal species where possible. The SEA will highlight where impacts upon species and habitats are likely to occur and high level mitigation will be recommended.
24	The Conservation (Natural Habitats, &c.) Regulations 1994	The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.	The local Transport Strategy should seek to protect and conserve all plant and animal species where possible. The SEA will highlight where impacts upon species and habitats are likely to occur and high level mitigation will be recommended.

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
25	UK Biodiversity Action Plan (1994) http://www.ukbap.org.uk/	This was published in response to the Convention on Biological Diversity. The UK Biodiversity Action Plan (BAP) highlights a number of priority habitats and 382 species with associated action plans at the species, habitat and local level. Priority mammalian species in Scotland include red squirrels, dolphins, otters, water voles and bats.	The Local Transport Strategy will take account of the principles within the UKBAP and the Scottish Biodiversity Strategy. The SEA will consider biodiversity impacts within its objectives and support more detailed assessment.
26	UK The Protection of Badgers Act 1992 http://www.opsi.gov.uk/ACTS/acts1992/Ukpga_19920051_en_1.htm	UK legislation offering specific protection to badgers and their setts. It is an offence to wilfully kill, injure or mistreat a badger. Their setts are also protected from obstruction, destruction, damage and, when active, disturbance.	Any work within 30 metres of a badger sett may require a licence from SNH. If destruction of a sett is unavoidable, a licence will definitely be required from SNH beforehand. The SEA will consider biodiversity impacts and wildlife conservation within its scope.
27	UK Wild Mammals (Protection) Act 1996 http://www.opsi.gov.uk/ACTS/acts1996/1996003.htm	Offers protection for rare wild mammals throughout the UK, including species such as red squirrels, bats and otters – all of which are to be found in Scotland.	The Local Transport Strategy will provide measures to ensure the protection of rare wild mammals.
28	UK Safeguard the Sea's http://eelink.net/~asilwildlife/BritishMarineStewardship.pdf	The objective of the policy is to propose initiatives to ensure the protection of the marine environment. The key initiatives are <ul style="list-style-type: none"> • Protecting important habitats • Improving marine conservation in the UK • Pressing for sustainability • Becoming more integrated • Working more effectively • Improving co-ordination in Government 	The Local Transport Strategy principles should seek to protect and conserve the marine environment. In particular where there may be an increase in ferry services.

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
		<ul style="list-style-type: none"> • Assessing progress • Involving stakeholders • Delivering development goals • Affording more protection to marine species and habitats on the high seas • Better international co-operation • Improved marine scientific research • Effective monitoring 	
SCOTTISH REGIONAL/NATIONAL TIER			
Planning Policies/ Guidance			
29	<p>The National Planning Framework (2004)</p> <p>http://www.scotland.gov.uk/Publications/2004/04/19170/35317</p>	<p>The National Planning Framework sets out a Scotland-wide strategic approach to spatial planning to guide the development of Scotland to 2025</p> <p>It identifies the high-level, long-term issues that impact on the development of Scotland in physical and land use terms with the purpose of enabling Scotland to reach its full potential in social, environmental and economic terms.</p> <p>It is a material consideration in the development of planning policy and the assessment of planning applications.</p> <p>The key aims of the strategy are</p> <ul style="list-style-type: none"> • to support the development of Scotland's cities as the main drivers of the economy; • to spread the benefits of economic activity by promoting environmental quality and connectivity; • to enable the most disadvantaged communities to benefit from growth and opportunity; 	<p>The framework recognised the importance of an efficient transport infrastructure which will facilitate economic growth.</p> <p>Local Transport Strategy should develop policies to enable economic growth while minimising impact on the environment</p>

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		<ul style="list-style-type: none"> • to strengthen external links; • to promote economic diversification and environmental stewardship; • to highlight long-term transport options and promote more sustainable patterns of transport and land use; • to invest in water and drainage infrastructure to support development; • to realise the potential of Scotland's renewable energy resources; • to provide the facilities to meet waste recycling targets; and • to extend broadband coverage in every area of Scotland. 	
30	<p>The Second National Planning Framework (2009)</p> <p>http://www.scotland.gov.uk/Publications/2008/01/07/093039/</p>	<p>The second National Planning Framework (NPF2) was adopted in June 2009 and sets out Scotland's spatial development until 2030 It identifies the high-level, long-term issues that impact on the development of Scotland in physical and land use terms with the purpose of enabling Scotland to reach its full potential in social, environmental and economic terms.</p> <p>It is a material consideration in the development of planning policy and the assessment of planning applications.</p> <p>The key aims of the strategy are:</p> <ul style="list-style-type: none"> • support strong, sustainable growth for the benefit of all parts of Scotland; • promote development which helps to reduce Scotland's carbon footprint and facilitates adaptation to climate change; • support the development of Scotland's cities as key drivers of the economy; • support sustainable growth in the rural economy; • conserve and enhance Scotland's distinctive natural and cultural heritage; • expand opportunities for communities and businesses by promoting 	See above

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		<p>environmental quality and good connectivity;</p> <ul style="list-style-type: none"> • enable disadvantaged communities to benefit from growth and access opportunities; • strengthen links with the rest of the world; • promote more sustainable patterns of transport and land use; • realise the potential of Scotland's renewable energy resources and facilitate the generation of power and heat from clean, low carbon sources; • encourage a sufficient supply of homes that are affordable in places where people want to live; and • facilitate the achievement of waste management targets. 	
31	<p>Scottish Planning Policy (2008) http://www.scotland.gov.uk/Publications/2008/10/28115149/0</p>	<p>The Scottish Planning Policy will combine all SPP and NPPG into one condensed document and supersedes SPP1: The Planning System</p> <p>The SPP is split into three sections:</p> <ul style="list-style-type: none"> • Part One: The Scottish Government's view of the purpose of planning and the core principles for the system's operation. • Part Two: The objectives for key parts of the system (development planning, development management and enforcement). • Part Three: Thematic policies. To be published during 2009. Until then the thematic policies remain in force 	<p>The Local Transport Strategy should consider all relevant planning policies and guidance in the development of its principles.</p>
32	<p>SPP2 Economic Development (2002) http://www.scotland.gov.uk/Publications/2002/11/15782/13587</p>	<p>Sets out the Governments' planning policy on how the planning system can contribute to Economic Growth. The key aim is to raise the quality of people's lives through increasing economic opportunities that are socially and environmentally sustainable.</p> <p>Key aims are</p>	<p>The Local Transport Strategy should promote sustainable economic growth through its policies</p>

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		<ul style="list-style-type: none"> • providing a range of development opportunities to ensure that there is range and choice of sites for new employment opportunities throughout Scotland; • securing new development in sustainable locations to improve integration between transport and locations for development and to encourage more sustainable forms of development; • safeguarding and enhancing the environment to make sure that new development contributes to a high standard of quality and design and that the natural and built heritage is protected; and • promoting a dialogue between councils and business to encourage a positive culture of engagement and better understanding of the priorities of the business community and the role of the planning system in enhancing economic competitiveness. 	
33	<p>SPP7 Planning and Flooding (2004) http://www.scotland.gov.uk/Publications/2004/02/18880/32953#1</p>	<p>Sets out the Government planning policy on how flood risk should be taken into consideration in the preparation of development plans and determination of planning applications.</p> <p>Key Principles are</p> <ul style="list-style-type: none"> • Developers and planning authorities must give consideration to the possibility of flooding from all sources. • New development should be free from significant flood risk from any source. • In areas characterised as 'medium to high' flood risk for watercourse and coastal flooding new development should be focussed on built up areas and all development must be safeguarded from the risk of flooding. • New development should not: <ul style="list-style-type: none"> - materially increase the probability of flooding elsewhere; - add to the area of land which requires protection by flood prevention measures; 	<p>The Local Transport Strategy should review the potential Flood Risk impact on Highland Region and consider its impact upon potential transport projects</p> <p>The SEA will consider the issue of Flood Risk within its Scope. It will look at the potential impacts and propose mitigation measures.</p>

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		<ul style="list-style-type: none"> - affect the ability of the functional flood plain to attenuate the effects of flooding by storing flood water; - interfere detrimentally with the flow of water in the flood plain; - compromise major options for future shoreline or river management. • Flooding from sources other than watercourses and on the coast must be addressed where new development is proposed, if necessary through a drainage assessment. Any drainage measures proposed should have a neutral or better effect on the risk of flooding both on and off the site. • Alterations and small scale extensions to buildings are generally outwith the scope of this SPP provided they would not have a significant effect on the storage capacity of the functional flood plain or affect local flooding problems 	
34	SPP 11 Open Space and Physical Activity http://www.scotland.gov.uk/Publications/2007/11/12/152424/0	Sets out government planning policy on open space and facilities for sport and recreation. Key Principles are <ul style="list-style-type: none"> • To protect and enhance open space; • To ensure a strategic approach to open space and other opportunities for sport and recreation by requiring local authorities to undertake an open space audit and prepare an open space strategy for their area; • To protect and support opportunities for sport and recreation; • To provide guidance on the quality and accessibility of open space in new developments and on providing for its long-term maintenance and management; • To provide guidance on planning for development of new indoor and outdoor facilities for sport and recreation 	The Local Transport Strategy principles should seek to protect and enhance areas of open space.
35	SPP17 Planning for Transport (2005)	Sets out the Governments planning policy on transport infrastructure with a view to the promotion of more sustainable modes of transport and avoiding	The Local Transport Strategy should consider more sustainable transport options as a means of

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	http://www.scotland.gov.uk/Publications/2005/08/16154406/44078	and mitigating adverse environmental impacts.	accessing the site. The objectives/policies should promote environmental protection as key in any transport infrastructure proposals.
36	SPP23 Planning and the Historic Environment (2008) http://www.scotland.gov.uk/Publications/2008/10/28135841/2	This consolidates NPPG5: Archaeology and Planning and NPPG18: Planning and the Historic Environment. Sets out Government planning policies in relation to the historic environment with a view to its protection, enhancement and conservation. Government seeks to encourage the preservation of our heritage of sites and landscapes of archaeological and historic interest, so that they may be enjoyed today and passed on in good order to future generations.	The over-arching aim of the Act and related regulations and guidelines is the protection and enhancement of Scotland's historic environment. The Local Transport Strategy should ensure the protection of historic features and the continued provision of access. The SEA will highlight cultural heritage and the protection of the historic environment.
37	NPPG13 Coastal Planning (1997) http://www.scotland.gov.uk/Publications/1997/08/npg13-coastal	Sets out Government Planning policy on how planning can contribute to achieving sustainable development and also maintaining and enhancing biodiversity on the coast.	The Local Transport Strategy should consider the impact transport infrastructure may have on coastal biodiversity and coastal defences.
38	Scottish Government, (2002) National Planning Policy Guideline No. 14 – Natural Heritage http://www.scotland.gov.uk/Publications/1999/01/npg14	Sets out land use planning considerations relating to natural heritage, including the conservation and possible enhancement of: <ul style="list-style-type: none"> • the overall populations and natural ranges of native species and the quality and range of wildlife habitats and ecosystems; • geological and physiographical features; • the natural beauty and amenity of the countryside and the natural heritage interest of urban areas; and • opportunities for enjoying and learning about the natural environment Aims to ensure that the natural heritage is conserved and enhanced for	The Local Transport Strategy should consider a commitment to environmental enhancement as well as conservation.

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		<p>present and future generations.</p> <p>Also stipulates that planning authorities should take particular care to avoid harm to protected species (includes badgers, bats, otters and red squirrels).</p>	
39	<p>PAN 33 Development of Contaminated Land (revised 2000)</p> <p>http://www.scotland.gov.uk/Publications/2000/10/pan33</p>	<p>The PAN provides advice on the development of contaminated land. The guidance is to be used in the preparation of Development plans and the submission/determination of planning applications.</p> <p>Planning Authorities are encouraged to promote the re-use of Brownfield land including contaminated land.</p>	<p>The Local Transport Strategy should look at the potential constraints relating to contaminated land.</p> <p>The SEA should consider the impact of developing on contaminated land and propose appropriate mitigation measures</p>
40	<p>Scottish Executive Planning Advice Note 42</p> <p>Archaeology – The Planning Process and Scheduled Monument Procedures</p> <p>http://www.scotland.gov.uk/Publications/1994/01/17081/21711</p>	<p>Includes advice on the handling of archaeological matters within the planning process and on the separate controls over scheduled monuments under the Ancient Monuments and Archaeological Areas Act 1979.</p> <p>The PAN supports NPPG5 -Archaeology and Planning - which sets out the Governments planning policy on how archaeological remains and discoveries should be handled within the development plan and development control systems.</p>	<p>The Local Transport Strategy will need to consider any impact on archaeological features</p>
41	<p>PAN 51 Planning, Environmental Protection and Regulation (Revised 2006)</p> <p>http://www.scotland.gov.uk/Publications/2006/10/20</p>	<p>The PAN supports existing planning policy on the role of planning in relation to the environmental protection regimes including:</p> <ul style="list-style-type: none"> • Pollution Prevention and Control • Protection of the Water Environment • Drinking Water Quality - public and private water supplies • Contaminated Land 	<p>The Local Transport Strategy should consider the relevant environmental regimes.</p> <p>The SEA will consider the key environmental issues within the scope of the SEA topics and provide relevant mitigation measures.</p>

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	095106/0	<ul style="list-style-type: none"> • Radioactive Substances • Statutory Nuisance including Noise • Litter • Light • Local Air Quality Management • Environmental Noise <p>It provides guidance on the statutory requirement of the environmental protection bodies and the relevant legislation required to inform the determination/submission of planning applications</p>	
42	PAN 52 Planning and Small Towns http://www.scotland.gov.uk/Publications/1997/04/pa n52	<p>The PAN sets out objectives regarding the development of small towns. The key principles are to:</p> <ul style="list-style-type: none"> • promote awareness of the valuable legacy of small towns • identify factors which threaten that legacy • raise aspirations about the need for quality in new development • encourage co-ordinated working to secure quality • provide best practice in planning for small towns 	<p>The Local Transport Strategy principles should be mindful of the value of small towns and seek to ensure their protection and enhancement.</p>

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43	PAN 56 Planning for Noise (1999) http://www.scotland.gov.uk/Publications/1999/04/PAN56	This PAN provides advice on how noise issues should be addressed in the preparation of development plans and in the assessment of planning applications. It builds on principles set out in SODD Circular 10/1999 Planning and Noise providing specific guidance on <ul style="list-style-type: none"> • how noise issues should be handled in development plans and development control; • ways of mitigating the adverse impact of noise; • noisy and noise-sensitive development; • the use of noise exposure categories; the use of planning conditions relating to noise. 	The Local Transport Strategy should ensure that noise impacts are considered where there may be increase traffic generation The SEA will look at potential impacts and provide appropriate mitigation measure is necessary.
44	PAN 58 Environmental Impact Assessment (1999) http://www.scotland.gov.uk/Publications/1999/10/pan58-root/pan58	This PAN provides detailed guidance on the Environmental Impact Assessment process (EIA). The statutory requirement for EIA applies to the types of projects described in the Environmental Impact Assessment (Scotland) Regulations 1999 (Schedules 1 and 2)	EIA is always required for a Schedule 1 project which by virtue of its nature or scale is always likely to have significant environmental effects. EIA is only required for a Schedule 2 project if it is judged likely to have significant environmental effects. EIA will be required at the detailed planning submission stage.
45	PAN 59 Improving Town Centres http://www.scotland.gov.uk/Publications/1999/10/pan59-root/pan59	This PAN provides information on the importance of town centres and gives more detailed advice on how planning authorities can safeguard and improve them,	The Local Transport Strategy should ensure the protection and enhancement of Town Centres. For example thorough the promotion of new links and more sustainable modes of transport
46	PAN 60 Planning for Natural Heritage (2000)	This PAN provides advice on how development and the planning system can contribute to the conservation, enhancement and enjoyment of Scotland's natural environment. It requests that planning authorities and	The Local Transport Strategy should consider not only the protection of the surrounding natural environment but the enhancement where

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	http://www.scotland.gov.uk/Publications/2000/08/pan60-root/pan60	<p>developers consider benefit to local communities and social and economic benefit when putting forward proposals for conservation.</p> <p>It aims to provide specific guidance on how development should be read alongside the National Planning Policy Guideline on Natural Heritage (NPPG 14).</p>	possible. Enhancing natural heritage should be integrated with benefit to the surrounding communities.
47	<p>PAN 61 Planning and Sustainable Urban Drainage Systems (2001)</p> <p>http://www.scotland.gov.uk/Publications/2001/07/pan61</p>	<p>This PAN provides advice on Sustainable Urban Drainage Systems (SUDS) It encourages the promotion of SUDS throughout the development plan process.</p> <p>The PAN gives good practice advice for planners and the development industry and complements the principles in the Sustainable Urban Drainage Systems Design Manual for Scotland and Northern Ireland</p>	The Local Transport Strategy should promote SUDS where new/improved infrastructure development is proposed.
48	<p>PAN 75 Planning and Transport</p> <p>http://www.scotland.gov.uk/Publications/2005/08/16154453/44538</p>	The PAN supports existing planning policy on the role of planning in transport. The document provides guidance on how the linkages between planning and transport can be managed and clarifies the roles and responsibilities of those involved.	The Local Transport Strategy should consider more sustainable transport options as a means of accessing the site.
49	<p>PAN 76 New Residential Streets</p> <p>http://www.scotland.gov.uk/Publications/2005/11/0393727/37273</p>	The PAN provides advice on the design of better quality residential streets. It focuses on some key factors which can create successful street design and clarifies the roles and responsibilities of those involved	The Local Transport Strategy should ensure that improved transport infrastructure considers the impact on the quality of residential streets
50	<p>PAN 77 Designing Safer Places</p> <p>http://www.scotland.gov.uk/Publications/2006/03/08</p>	The PAN provides guidance on how new development should be designed to ensure it creates attractive, well-managed environments which help to discourage antisocial and criminal behaviour. It provides guidance on how new development can be located and designed in a way that deters such behaviour.	The Local Transport Strategy should consider the development of transport infrastructure in relation to 'secure by design' policy

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	094923/0		
51	PAN 79 Water and Drainage (2006) http://www.scotland.gov.uk/Publications/2006/09/26152857/0	<p>This PAN provides advice in terms of the planning process on water and drainage. It provides guidance on the currently system within which Scottish Water provides and contributes to new water infrastructure and contains advice on the appropriateness of private schemes.</p> <p>The Planning system should be directing developments to appropriate sites with regards to water infrastructure where availability of existing infrastructure is a key consideration but not an over riding one.</p> <p>It also highlights the respective roles of Scottish Water and the Scottish Environment Protection Agency (SEPA), indicating when and how they should interact with the planning system.</p>	<p>The Local Transport Strategy should consider any constraints in terms of water infrastructure.</p> <p>Specific impacts on existing infrastructure will be considered at project level.</p>
Land Management			
52	The Pollution Prevention and Control (Scotland) Regulations 2000	<p>Regulations to ensure that Part A installations are operated such that there are no emissions to land, or where there are emissions to land, that no significant land, water or air pollution results;</p> <p>Also works to ensures that Part A installations are returned to a satisfactory state upon cessation of activities; and that installations are operated such that no significant land pollution arises from emissions to air.</p>	<p>The Local Transport Strategy should ensure that all future works are carried out in accordance with the pollution prevention regulations.</p>
53	Part I of Environmental Protection Act 1990	<p>Aims to prevent the release of certain prescribed substances to land from processes, or where that is not possible, to minimise the release and render harmless the substances released;</p> <p>Works to ensure that substances released to air, land and water from prescribed processes do not cause harm, or that harm is minimised, to living organisms supported by land;</p> <p>Also that substances released to the air from processes prescribed for local control (LAPC) do not cause harm, or that harm is minimised, to living</p>	<p>The Local Transport Strategy policies should incorporate the requirements of the Environmental Protection Act.</p>

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		organisms supported by land.	
54	Part II of Environmental Protection Act 1990 (Waste On Land)	Works to ensure that the treating, keeping or disposing of controlled waste does not result in harm to living organisms supported by land; Site licence cannot be surrendered unless restoration has taken place and there is negligible risk to the living organisms supported by land.	See Above
55	Part IIA of the Environmental Protection Act 1990	Part IIA is concerned with addressing problems associated with historically contaminated sites, rather than protection from current land use activities. It does not address all sites where soil quality is poor; only those where substances present an unacceptable risk to specified ecosystems. SEPA requires remediation of special sites, maintain public registers for special sites and prepare a national report on the state of “contaminated land”.	See Above
56	Building a better Scotland investment plan: Investing in the future of Scotland http://www.scotland.gov.uk/Publications/2005/02/20756/53553	Sets out the delivery plan for achieving significant investment in transport, education, health, water, waste management. Sports, business, flood prevention and regeneration programme	The Local Transport strategy should consider the delivery plan when developing policies
57	Scottish Soil framework (2009) http://www.scotland.gov.uk/Publications/2009/05/20145602/0	The Scottish Soil Framework has been developed to ensure “that soils are recognised as a vital part of our economy, environment and heritage, to be safeguarded for existing and future generations.” The main aim of the Framework is to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland	The Local Transport Strategy policies should ensure the protection of soils The SEA will consider the issue of soil within the SEA topics.
Natural Heritage			

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58	<p>Scottish Executive (May 2004)</p> <p>Scotland's Biodiversity- It's In Your Hands.</p> <p>A strategy for the conservation and enhancement of biodiversity in Scotland</p> <p>http://www.scotland.gov.uk/Publications/2004/05/19366/37239</p>	<p>Vision: 'its 2030: Scotland is recognised as a world leader in biodiversity conservation. Everyone is involved; everyone benefits. The nation is enriched'</p> <p>Aim: "To conserve Biodiversity for the health, enjoyment and well being of the people of Scotland now and in the future".</p> <p>Objectives: sets out five main objectives relating to:</p> <ul style="list-style-type: none"> • Species and habitats; • People; • Landscapes and ecosystems; • Integration and Ecosystems; and • Knowledge. <p>Specifically,</p> <ul style="list-style-type: none"> • conserve what we have; • sustain healthy ecosystems; • create networks and connections not a piecemeal approach; • engage more people; • promote sustainable development. <p>The strategy also underlines the need to promote understanding and appreciation of natural heritage.</p>	<p>The Local Transport Strategy should protect and enhance, where appropriate, biodiversity.</p> <p>The SEA will highlight biodiversity impacts within its objectives.</p> <p>Adequate consideration of impacts affecting biodiversity will be encouraged, with support for more detailed assessment at detailed design where appropriate.</p>

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59	<p>Scottish Executive (2005) Scotland's Biodiversity – It's In Your Hands.</p> <p>Strategy Implementation Plans</p> <p>http://www.scotland.gov.uk/Publications/2004/05/19409/37913</p>	<p>This document outlines a series of strategies to implement the objectives of the 2004 strategy for the period 2005 – 2007.</p> <p>The plans were developed with reference to three broad sectors: Urban, Rural and Marine.</p> <p>The strategy focuses on two crosscutting issues:</p> <ul style="list-style-type: none"> • interpretation, communication and education (ICE); and • local delivery. <p>New draft plans are under development for the period 2007-2010 and are currently going through the SEA process</p>	<p>The Local Transport Strategy should consider both existing and proposed strategies when developing the core policies</p>
60	<p>Nature Conservation (Scotland) Act 2004</p> <p>http://www.opsi.gov.uk/legislation/scotland/acts2004/20040006.htm</p>	<p>The Act sets out provisions relating to biodiversity duties, Notification of SSSIs, Nature Conservation Orders to prohibit an operation, Land Management Orders for SSSIs to ensure conservation, restoration or enhancement.</p> <p>The overall aim is wildlife protection.</p> <p>Fossils are also included within the legislation.</p>	<p>The LTS should recognise the importance of designated sites and seek to ensure their protection and enhancement where possible.</p> <p>The SEA will provide mitigation measures where appropriate</p>
61	<p>The Conservation (Natural Heritage & c.) Amendment (Scotland) Regulations 1994 as amended</p> <p>http://www.opsi.gov.uk/legislation/scotland/ssi2004/20040475.htm</p>	<p>These Regulations amend the Conservation (Natural Habitats, &c.) Regulations 1994.</p> <p>The provisions in these Regulations relating to site protection bring European sites into line with the protection regime set out in Part 2 of the Nature Conservation (Scotland) Act 2004.</p> <p>Further protection is given to European protected species through amendments to Part III of the 1994 Regulations which reflect the provisions</p>	<p>The Regulations require that, where an authority concludes that a development proposal unconnected with the nature conservation management of a Natura 2000 site is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated.</p> <p>The SEA will consider the requirement for an</p>

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		relating to species protection contained in Part Me of the Wildlife and Countryside Act 1981.	Appropriate Assessment at the detailed design stage.
62	Scotland's Scenic Heritage (1978) http://www.snh.org.uk/publications/online/scotlandsscenicareas/	This report sets out the results of a review conducted to identify areas of 'unsurpassed attractiveness' which are to be conserved as part of Scotland's national heritage.	The Local Transport Strategy should minimise any impact on Scotland's National Scenic Areas. The SEA will consider this issue under the natural heritage topic.
63	Countryside (Scotland) Act 1967 http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1967/cukpga_19670086_en_1	This act requires that public bodies have a duty in respect of conserving the natural environment. The Act makes provision for the better enjoyment of the Scottish countryside, for the establishment of a Countryside Commission for Scotland and for the improvement of recreational and other facilities; to extend the powers of local planning authorities as respects land in their districts and to make financial provision for the proposals listed.	The Local Transport Strategy should consider the requirements of the Act when developing core policies.
64	Land Reform (Scotland) Act 2003 http://www.opsi.gov.uk/legislation/scotland/acts2003/pdf/asp_20030002_en.pdf	The Act places a duty on local authorities to identify and manage a core path network and to establish statutory public rights of access to land for recreational and other purposes	The Local Transport Strategy should consider the requirements of the Act when developing core policies.
65	SNH (2002) (Update 2008) Natural Heritage Futures – National http://www.snh.org.uk/futures/Data/index.htm	This us a series of documents which aim to guide the future management of the natural heritage towards 2025, within the wide context of sustainable development. The series details national objectives considers the natural heritage across 6 themes; farmlands, forests and woodlands, coast and seas, fresh waters,	The Local Transport Strategy should consider the Natural Heritage Futures objectives when developing core policies The SEA will highlight the need to ensure the protection and enhancement where possible of the natural habitats highlighted in the Natural

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		hills and moors and settlements. It presents a list of priorities which will inform SNH's input to plans and strategies for various sectors and geographical areas. It is likely that SNH input to the SEA will also be guided by this document.	Heritage Futures documents.
66	SNH (2002) (Update 2008) Natural Heritage Futures – Local http://www.snh.org.uk/futures/Data/index.htm	This is a series of documents which aim to guide the future management of the natural heritage towards 2025, within the wide context of sustainable development. It considers the natural heritage in 21 areas each of which has its own distinctive identity resulting from the interaction of geology, landforms, landscapes, wildlife and land use. It s likely that SNH input to the SEA will also be guided by this document	See above
67	Forestry Commission Scotland (FCS) & SNH (2003) Habitat Networks for Wildlife and People http://www.forestry.gov.uk/forestry/inf-d-5xjcrw	Aims to enrich the natural heritage of Scotland by the creation of woodland networks through linking woodlands old and new to form more continuous woodland cover. This benefits wildlife by providing wider and more sustainable habitats and should enhance opportunities for people who live near, work in or simply enjoy woodlands. Proposes methods by which woods and forests can be linked and suggests woodland should be viewed as an integral part of the wider landscape rather than as individual stands of trees.	The Local Transport Strategy should consider the potential enhancement of the existing woodland on site. The SEA will highlight the need to maintain and enhance woodland networks
68	Scottish Executive (2000) Natural Conservation:	This circular replaces Scottish Office Circular 6/95 and takes account of certain changes in policy.	The Regulations require that, where an authority concludes that a development proposal unconnected with the nature conservation

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	<p>Implementation in Scotland of EC Directives on the conservation of natural habitats and of wild flora and fauna and the conservation of wild birds</p> <p>(The Habitats and Birds Directives)</p>	<p>It provides guidance on the implementation of EC Directive 92/43/EEC (Habitats Directive) and 79/409/EEC (Birds Directive) in Scotland and should be read in conjunction with NPPG14 on Natural Heritage</p> <p>http://www.scotland.gov.uk/library3/nature/habd-00.asp</p>	<p>management of a Natura 2000 site is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated.</p> <p>The SEA will consider the requirement for an Appropriate Assessment at the detailed design stage.</p>
69	<p>European Protected Species, Development Sites and the Planning System (Scottish Executive, 2001)</p> <p>http://www.scotland.gov.uk/Publications/2001/10/10122/File-1</p>	<p>Issued to clarify the interim licensing arrangements which currently apply in cases where European protected species are present on any site which is the subject of a development proposal. In particular, it clarifies the role and responsibilities of planning authorities when determining planning applications in such cases and informs them of the advice and information that they will be asked to provide to the Scottish Ministers when a licence is required for a development site.</p>	
Historic Environment			
70	<p>Historic Scotland</p> <p>Scottish Historic Environment Policy</p>	<p>SHEP is the overarching policy statement for the historic environment. It is now one consolidated document replacing series of free-standing publications</p>	<p>The Local Transport Strategy should recognise the important role of the historic environment and acknowledge the need to work together with others to consider a balance between social,</p>

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	<p>(SHEP) http://www.historic-scotland.gov.uk/index/heritage/policy/shep.htm</p>	<p>It provides a framework for more detailed strategic policies and operational policies that inform the day to day work of a range of organisations that have a role and interest in managing the historic environment.</p> <p>These include the Scottish Government, local authorities and the range of bodies that are accountable to Scottish Ministers.</p> <p>SHEP is intended to sit alongside and complement the Scottish Planning Policy series and other relevant Ministerial policy documents.</p> <p>It is intended to be relevant documents in the statutory planning, Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) processes.</p>	<p>economic and environmental needs.</p> <p>The SEA will highlight cultural heritage protection and all aspects of the historic environment.</p> <p>Scheduled Ancient Monuments (SAM) require specific consents from Historic Scotland before any works that may affect the integrity of the site can be carried out.</p>
71	<p>Managing the change in the Historic Environment Guidance Notes http://www.historic-scotland.gov.uk/index/heritage/policy/memorandumofguidance.htm</p>	<p>The Memorandum of Guidance on Listed Buildings and Conservation Areas was withdrawn on 31 March 2009. Interim measures have been put in place to ensure that the operational guidance contained in the Memorandum remains available until the approval of a series of Guidance Notes during 2009/10. The guidance notes have now gone out to public consultation in August. The consultation seeks views on the form and content of the guidance notes, which are designed to support the Scottish Historic Environment Policy (SHEP) and Scottish Planning Policy 23 SPP23: Planning and the Historic Environment. The interim guidance's fall under the following headings</p> <ul style="list-style-type: none"> • Intervention by Planning Authorities • Appeals, Purchase Notices and Compensation: the rights of the applicant • Guidelines for the Detailed Consideration of Listed Building and 	See above

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		Conservation Area Consent Cases	
72	The Ancient Monument and Archaeological Areas Act 1979 http://www.historic-scotland.gov.uk/ancient_monuments_and_archaeological_areas_act_1979.pdf	Law relating to ancient monuments, making provision for the investigation, preservation and recording of matters of archaeological or historical interest and for the regulation of operations or activities affecting such sites or matters.	See above
Water			
73	Water Environment and Water Services (Scotland) Act 2003 (WEWS) http://www.opsi.gov.uk/legislation/scotland/acts2003/20030003.htm	The Act translates the EC Water Framework Directive into the Scottish context. It includes a number of key commitments relating to Scotland's water environment: <ul style="list-style-type: none"> • Establishing River Basin Management districts; • Preparing River Basin Management Plans; • Regulation of controlled activities (including those liable to cause pollution of the water environment, those involved in abstraction, and those from construction on or near to water). The Act reflects the WFD aim of ensuring that there is no further deterioration of water quality and gave Scottish Ministers powers to introduce regulatory controls over activities in order to protect and improve Scotland's water environment. Covers wetlands, rivers, lochs, transitional waters (estuaries and saline	The Local Transport Strategy should ensure that policies look to prevent any impact on the water environment. The SEA will assess any potential impact and where necessary provide mitigation measures to avoid pollution of the surrounding water environment and any wetland.

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		lagoons), coastal waters and water under the ground (groundwater).	
74	<p>The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR)</p> <p>http://www.scotland.gov.uk/Publications/2005/05/09/95747/57481</p>	<p>These regulations are made under the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act).</p> <p>They establish a framework to protect and manage our water resources, based on an assessment of the risk posed to the water environment.</p> <p>The Regulations supersede a number of previous disparate controls, including the discharge provisions of the Control of Pollution Act 1974.</p> <p>Brings into effect the requirements of section 20 of the WEWS Act and from 1 April 2006, the following activities will be controlled:</p> <ul style="list-style-type: none"> • abstractions from surface and groundwater; • impoundments of rivers, lochs, wetlands and transitional waters; • groundwater recharge; • engineering in rivers, lochs and wetlands; • engineering activities in the vicinity of rivers, lochs and wetland which are likely to have a significant adverse impact upon the water environment; • activities liable to cause pollution; • direct or indirect discharge of List I substances to groundwater; and • any other activities which directly or indirectly is liable to cause a significant adverse impact upon the water environment • artificial recharge or augmentation of groundwater. 	<p>The Regulations apply across the water environment to provide a holistic approach to pollution control and protection of the water environment.</p> <p>Any activities that may fall within the remit of the CAR regulations will require close consultation with SEPA and the receipt of appropriate licences.</p> <p>This will need to be considered at the project level.</p>
75	<p>Scottish Executive (2006)</p> <p>Better bathing waters:</p>	<p>The Strategy is the Government's national policy statement following the revision of the Bathing Water Directive. Actions included in the Strategy are:</p> <ul style="list-style-type: none"> • Continued work on improving sewerage infrastructure 	<p>SEPA indicate that compliance with the bathing water classifications is essentially assured during dry weather, but there remains a risk of pollution</p>

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	Meeting the challenges of the revised Bathing Water Directive in Scotland http://www.scotland.gov.uk/Publications/2006/03/23151924/0	<ul style="list-style-type: none"> Industrial discharges to be regulated under CAR Tackle diffuse pollution through General Binding Rules for agriculture, possible LMC measures or further measures under CAR Increase public participation, including encouraging local community groups' involvement Increase provision of information on water quality, including extended signage. 	to some beaches during or after wet weather. The Local Transport Strategy should work to maintain these efforts and limit diffuse pollution entering Scotland's water environment
76	River Basin Management Plans http://www.sepa.org.uk/water/river_basin_planning.aspx	The draft plans cover all types of water body (such as rivers, lochs, lakes, estuaries, coastal waters and groundwater) and: <ul style="list-style-type: none"> describe the current condition of our water environment and identify areas for protection and improvement identify where current or historic activities are constraining the quality of the water environment and the biodiversity it supports detail the actions required to ensure our waters of special value (e.g. for drinking, biodiversity, shellfish or bathing) are up to standard and maintain the quality where they already meet those standards set out the actions needed to deliver environmental improvements over the next 6 years, and longer to 2027. 	The Local Transport Strategy should limit diffuse pollution entering Scotland's water environment.
77	Scotland Marine Bill 2009 http://www.scottish.parliament.uk/s3/bills/25-MarineScot/b25s3-introd.pdf	The Bill introduces a framework for the sustainable management of the seas around Scotland. It introduces: <ul style="list-style-type: none"> Marine planning: a new statutory marine planning system to sustainably manage the increasing, and often conflicting, demands on our seas Marine licensing: a simpler licensing system, minimising the number of licences required for development in the marine environment to cut bureaucracy and encourage economic investment Marine conservation: improved marine nature and historic conservation with new powers to protect and manage areas of importance for marine 	

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		<p>wildlife, habitats and historic monuments</p> <ul style="list-style-type: none"> Seal conservation: much improved protection for seals and a new comprehensive licence system to ensure appropriate management when necessary Enforcement: a range of enhanced powers of marine conservation and licensing 	
Air Quality and Climate Change			
78	<p>Climate Change (Scotland) Act 2009</p> <p>http://www.scotland.gov.uk/Topics/Environment/climatechange/scotlands-action/climatechangeact</p>	<p>The Scottish Climate Change Delivery Plan indicates the contribution to greenhouse gas emission reduction targets expected from key sectors. It identifies measures which can lead to 32% reduction in transport related emissions by 2020 (when compared with 2006 levels)</p> <p>The Act sets in statute the Government Economic Strategy target to reduce Scotland's emissions of greenhouse gases by 80 per cent by 2050, one of the Sustainability Purpose Targets. This covers the basket of six greenhouse gases recognised by the United Nations Framework Convention on Climate Change (see sidebar), and includes Scotland's share of emissions from international aviation and international shipping.</p> <p>The Act also establishes an interim target for 2020 of at least 42 per cent reductions in emissions, and allows Ministers, by order, to vary the reduction figure for the interim target based on expert advice from the advisory body.</p>	<p>The Local Transport Strategy will highlight the overall impact of the policies in relation to the climate change targets and its cross cutting theme of sustainability</p> <p>The SEA will consider the impact of the strategy on emissions targets and propose mitigation measures if necessary.</p>
79	<p>Scottish Executive (2006)</p> <p>Changing our Ways: Scotland's Climate</p>	<p>This updates the Programme published in 2000 and represents a stepping up of Government action and ambition to tackle climate change.</p> <p>Provides a framework for achieving carbon savings through the</p>	See above

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	<p>Change Programme http://www.scotland.gov.uk/Publications/2006/03/30/091039/0</p>	<p>identification of the Scottish Share of UK climate change commitments and the setting of a Scottish Target to exceed this share by 1 million tonnes of carbon savings by 2010.</p> <p>Shows how the Government is promoting an appropriate adaptation response to the inevitable impacts of climate change.</p> <p>Recognises the contribution that the agriculture sector can make to tackling climate change.</p> <p>Highlights the opportunities it presents in terms of business development and the important role the LMC approach and the Scottish Rural Development Programme will make.</p> <p>Reflects on the role of biomass energy and the need to encourage it to help it become more economically viable.</p> <p>Emphasises the need for forestry based mitigation to be undertaken in relation to the wider rural development policy agenda.</p> <p>Supports the planting of woodland which delivers a range of benefits (economic, social and environment), including its role as a carbon sink.</p> <p>Highlights challenges arising from timber transportation, particularly as production levels continue to rise.</p> <p>Reflects on the role of biomass energy and the need to encourage development to become more economically viable.</p>	

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80	The Pollution Prevention and Control (Scotland) Regulations 2000 http://www.scotland.gov.uk/consultations/environment/ppcr-01.asp	These Regulations are made under section 2 of the Pollution Prevention and Control Act 1999. They set out, for Scotland, a pollution control regime for the purpose of implementing the Integrated Pollution Prevention and Control Directive (Council Directive 96/61/EC) and for regulating other environmentally polluting activities not covered by the Directive. Intensive farming and issues relating to emissions to air and water and the disposal of waste are considered in this legislation.	The Local Transport Strategy should consider the Pollution Prevention regulation in the key policies
81	The National Emissions Ceilings Regulations 2002	Offers indirect protection of land and soils through controls on mass emissions of sulphur dioxide (SO ₂), oxides of nitrogen (NO _x), ammonia and volatile organic compounds, with the aim of reducing acid deposition and eutrophication.	The Local Transport Strategy will consider the impact increase traffic generation on the emissions targets
Transport			
82	Scottish Executive (2006) National Transport Strategy http://www.scotland.gov.uk/Topics/Transport/NTS/introduction	The National Transport Strategy was published in 2006 following the conclusion of a public consultation. The NTS provides a long-term strategic framework to all Scottish transport developments across all modes of transport. It builds on the 2004 Transport White Paper, Scotland's Transport Future, by showing how transport will contribute to our five key priorities: <ul style="list-style-type: none"> • economy; • environment; • social inclusion; • safety; and 	An SEA was conducted for the National Transport Strategy which found that the Strategy would generally be beneficial for the environment by addressing more sustainable transport options and improving accessibility issues. The Local Transport Strategy should promote sustainable transport options and in particular improve accessibility. The Highland Council delivers services across an area with the lowest population density of all UK local authorities The SEA will assess the impacts on an increase in more sustainable modes of transport against

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		<ul style="list-style-type: none"> • integration - Over the medium to long term. 	the SEA objectives.
83	Regional Transport Strategy	<p>The Regional Transport Strategy is part of a suite of strategies including National Transport Strategy, National Planning Framework. The primary objective of the Strategy is to improve the interconnectivity if the whole region to strategic services and destinations in order to enable to region to compete and support growth. Additional objectives are as follows;</p> <ul style="list-style-type: none"> • enable people to participate in everyday life • to improve the safety and security of travel • to improve people's health, and • to manage impacts on our environmental options. 	<p>An SEA was conducted for the Regional Transport Strategy which corroborated the findings of the National Transport Strategy.</p> <p>The Local Transport Strategy should promote sustainable transport options and in particular improve accessibility. The Highland Council delivers services across an area with the lowest population density of all UK local authorities</p> <p>The SEA will assess the impacts on an increase in more sustainable modes of transport against the SEA objectives.</p>
	<p>Building a Better Scotland Infrastructure Investment Plan: Investing in the Future of Scotland (2005)</p> <p>http://www.scotland.gov.uk/Publications/2005/02/20756/53553</p>	<p>Sets out the delivery plan for achieving significant investment in transport, education, health, waste management, sports, business, flood prevention and regeneration programmes in Scotland. This plan outlines the detail of our investment plans by Ministerial portfolio and confirms that Scotland now has major investment opportunities. We welcome the chance to work with partners across the private and public sectors to realise these plans and we wish to secure a mixed programme of investment, using all available investment methods to ensure that our resources match our ambitions.</p> <p>This plan describes how:</p> <ul style="list-style-type: none"> • long term investment in Scotland's physical infrastructure will build new facilities for our universities and colleges; • investment in the rail and road links that our businesses will need to get 	

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		<p>goods to markets and people to work;</p> <ul style="list-style-type: none"> • increased investment in modern schools will improve the teaching and learning environment and strengthen the opportunities for our children and young people; • long term investment in Scotland's physical infrastructure will support the regeneration of our towns and cities and increase the level of investment in new, affordable, secure and warm homes; • direct investment will build safer communities and strengthen our sports and cultural facilities; • we will increase our investment in safe health facilities for the sick and in ensuring that our water supplies meet European standards. 	
Renewable Energy			
84	<p>Scottish Executive (2007) Energy Efficiency and Microgeneration Strategy Consultation. http://www.scotland.gov.uk/Publications/2007/03/09/144516/0</p>	<p>The Government have finished consulting on this report and are to issue a final report. The strategy aims to improve energy efficiency and encourage a greater uptake of microgeneration</p>	<p>The Local Transport Strategy will consider the use of renewable energy technologies in the core policies.</p>
85	<p>Forum for Renewable Energy Development in Scotland (2005) Promoting and Accelerating the Market Penetration of Biomass</p>	<p>The Government has set a target that 18% of the electricity generated in Scotland by 2010 should be from renewable sources, rising to 40% by 2020. The Government is committed to meeting these targets by promoting a range of technologies, and believes that biomass has the potential to play an important role.</p>	<p>See above</p>

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	<p>Technology in Scotland http://www.scotland.gov.uk/Publications/2005/01/20616/51406</p>	<p>Report concluded that a biomass industry in Scotland has the potential to supply as much as 450 MW of electricity from the wood fuel resource while employing over 2,000 people and stimulating other sectors of the Scottish economy.</p> <p>Report states that this is a conservative estimate.</p> <p>The successful development of biomass technology in Scotland using energy crops as the fuel source would further boost electrical output and employment.</p> <p>However, it could take 5 years to lay the foundations for this industry.</p> <p>This report looks at the establishment of the basic infrastructure needed and the partnership between Government and industry that will be required to deliver this potential.</p>	
Waste			
86	<p>SEPA (2003) National Waste Strategy & National Waste Plan http://www.sepa.org.uk/news/index.htm</p>	<p>Strategy sets out a framework within which Scotland can reduce the amount of waste it produces and deal with the waste that is produced in a more sustainable way.</p> <p>It covers all household, commercial and industrial waste.</p> <p>More than 85% of the waste produced in Scotland is sent directly to landfill – a massive misuse of resources and a major source of greenhouse and other gases.</p> <p>The National Waste Plan aims to reduce this practice and outlines how we can work towards a culture of reducing, reusing and recycling our rubbish.</p>	<p>The Local Transport Strategy should recommend safe disposal and recycling of waste materials.</p> <p>The SEA will assess the impact of waste generation and provide mitigation measures where appropriate.</p>

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		<p>It sets out the best practicable environmental option (BPEO) for municipal waste for each of 11 Waste Strategy Areas and describes actions at a national level to improve the management of non-municipal solid waste.</p> <p>The National Waste Plan brings together Area Waste Plans for the different Waste Strategy Areas.</p> <p>The Scottish Government has allocated over £350 million to the Strategic Waste Fund to help local authorities develop the infrastructure needed to implement these plans.</p>	
87	<p>Scottish Executive(1996) National Planning Policy Guideline No. 10 – Planning and Waste Management http://www.scotland.gov.uk/Publications/1996/06/npg10</p>	<p>Priority is now being given to the reduction of waste at source, its re-use, its recovery by recycling and to the use of waste as a source of energy.</p> <p>Treatment and disposal of that which remains should be carried out in a safe and environmentally acceptable manner.</p> <p>All these activities need to be carried out in a manner consistent with the principle of sustainable development and without imposing an unnecessary burden on industry.</p> <p>The government's policy is to ensure that the planning system plays its part in implementing these goals. In recognition of all these changing circumstances this NPPG:</p> <ul style="list-style-type: none"> • sets out the Government's planning policies for development involving the management of waste; • defines the content of structure and local plans in respect of waste; • explains how the planning system should operate in relation to other pollution controls. 	See above

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88	Zero Waste Scotland: Consultation Draft (2009) http://www.scotland.gov.uk/Publications/2009/08/19141153/0	This document provides policy guidance and sets targets on waste management. The key targets are as follows <ul style="list-style-type: none"> • 70% recycling of municipal waste by 2025. • No more than 25% of municipal waste going to energy from waste facilities. • No more than 5% of waste being landfilled by 2025. • Savings of around 1.5 million tonnes of CO 2 equivalent in relation to municipal waste alone. [Scotland's total CO 2 equivalent emissions in 2006 were 59 million tonnes.] • No growth in the amount of municipal waste produced. • Detailed and accurate data being available for all wastes regardless of source, including construction and demolition and commercial and industrial. • An effective and responsive land-use planning system for waste management. • All businesses being aware of and taking part in work to improve their resource efficiency and to prevent waste. • The public sector supporting waste prevention, re-use and recycling through green procurement. 	The Local Transport Strategy should ensure that the core policies help address the national waste targets.
89	SEPA (2003) The Highland Area Waste Plan http://www.sepa.org.uk/waste/waste_publications/area_waste_plans/highlands.aspx	The Plan outlines the best practicable environmental option (BPEO) to waste management in the Highlands over 20 year period. The plan primarily focuses on municipal waste produced by households and commercial premises. Key focus is to prevent the generation of waste at the source and encouraging household recycling. For waste that cannot be recycled the aim is reduce the reliance on landfill.	The Local Transport Strategy should recommend safe disposal and recycling of waste materials. The SEA will assess the impact of waste generation and provide mitigation measures where appropriate.

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Health			
90	Lets Make Scotland More Active (2003) http://www.scotland.gov.uk/Publications/2003/02/16324/17895	This document sets out policy guidance and targets to enable people in Scotland to enjoy the benefits of having a physically active life The key target is to achieve 50% of all adults aged over 16 and 80% of all children aged 16 and under meeting the minimum recommended levels of physical activity by 2022	The Local Transport Strategy should promote and facilitate more physically active travel i.e. cycling, walking. The SEA will assess the impact of the LTS on human health
91	Improving Health in Scotland – The Challenge (2003) http://www.scotland.gov.uk/Publications/2003/03/16747/19929	This documents sets out policy guidance and targets to enable people in Scotland to be successful, healthy, active and with good mental health.	See above
92	SUSTRANS - Safe Routes to Schools http://www.sustrans.org.uk/assets/files/Safe%20Routes/resources/toolkit/SRS_School_Travel_Introduction.pdf	This document sets out an approach to ensure that every child has a safe route to school. The aim is to increase the number of children travelling in ways which benefit their health.	The Local Transport Strategy should promote safe route to school within the core policies
THE HIGHLAND COUNCIL – LOCAL TIER			
93	Highland Structure Plan 2001-2011 http://www.highland.gov.uk/yourenvironment/planning/developmentplans/stru	The Structure Plan provides a long term vision (approx 10 yrs) for the strategic development of the highlands to meet the economic social and environmental requirements of the area. Environmental objectives are proposed under three topic headings	The Local Transport Strategy should consider all the environmental objects highlighted in the Plan when generating policies. The SEA will consider the key objectives under the SEA topic headings and assess potential

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	ctureplan/thehighlandstructureplan.htm?wbc_purpose=Basic %3ci%3eElecti ons%3c	<ul style="list-style-type: none"> • Nature Conservation • Landscape • Built and Cultural Heritage <p>Within Nature Conservation the council highlight the importance of the protection and enhancement of the natural environment. The Council are required to produce Local Biodiversity Action Plans</p> <p>Within Landscape the Council are required to review and update international, national and local areas of landscape value.</p> <p>Within Built and Cultural Heritage the Council highlights the importance of the protection and conservation of archaeological significant sites, listed buildings, designed landscapes and conservation areas.</p>	<p>impact of the policies.</p>
<p>94</p>	<p>The Highland Council Single Outcome Agreement 2</p>	<p>The purpose of the Single Outcome Agreement is to identify areas for improvement and to deliver better outcomes for the people of the Highlands and Scotland, through specific commitments made by the Council, its community planning partners and the Scottish Government.</p> <p>15 local outcomes have been agreed by the Community Planning Partnership based on the needs and issues identified in the Area profile. These are cast against the 15 national outcomes.</p>	<p>The Local Transport Strategy core policies should reflect the appropriate SOA outcomes</p>
<p>95</p>	<p>Local Plans: Inverness, Lochaber, Ross and Cromarty East, Wester Ross, Sutherland, North-west Sutherland, Golspie</p>	<p>The Local Plans follow the Structure plan and provide guidance for the determination of planning applications.</p> <p>They set the strategy and land use framework for the development of land and protection of the environment in the relevant area</p>	<p>The Local Transport Strategy should provide policies which sits alongside the Local plan designations while considering the key environmental objectives of the plans.</p>

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	and Lairg, Caithness, West highlands and Islands; Nairnshire and Badenoch and Strathspey and Cairngorms		
96	Designing for Sustainability in the Highlands (2006) http://www.highland.gov.uk/NR/rdonlyres/32586135-70EC-40E3-8F7B-DE45B158B501/0/designingforsustainabilityinthehighlandsnov2006.pdf	The Plan is designed to support and guide the preparation of Sustainable Design Statements (SDS). These will be carried out by developers to be submitted with planning applications. It focuses on the principles of sustainable design rather than the technicalities providing checklists and guidance notes to help inform the scope of the SDS.	Sustainable design will underpin the Local Transport Strategy policies SDS will be required at the detailed design stage
97	Highland Renewable Energy Strategy http://www.highland.gov.uk/yourenvironment/planning/energyplanning/renewableenergy/highlandrenewableenergystrategy.htm	The Strategy provides guidance on the opportunities in the Highlands for Renewable Energy Development. It analyses the key economic, social and environmental factors and advises on the key processes and planning requirements and possible locations for renewable energy development. It is currently under to review to reflect objectives outline in SPP6: Renewable Energy.	The Local Transport Strategy will consider its role in the delivery of Renewable Energy development. In particular with regards to accessibility.
98	Highland Climate Change Strategy http://www.highland.gov.uk/yourenvironment/sustainabledevelopment/climatechange	The Highland Council is currently developing a Climate Change Strategy. This includes action by Council Services to adapt to the impact of global warming, and increased activity to reduce the Councils carbon footprint.	The Local Transport Strategy will highlight the overall impact of the policies in relation to the climate change targets and its cross cutting theme of sustainability The SEA will consider the impact of the strategy

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	hange/		on emissions targets and propose mitigation measures if necessary.
99	Local Transport Strategy http://www.highland.gov.uk/yourenvironment/roadsandtransport/transportplanning/localtransportstrategy.htm	The Highland Council Local Transport Strategy provides a framework and development options for a 3 year period 2009-2012. The Local Transport Strategy sits within the framework of both the National and Regional Transport Strategies	The new Local Transport Strategy should build on the objectives and promote sustainable transport options and in particular improve accessibility. The Highland Council delivers services across an area with the lowest population density of all UK local authorities The SEA will assess the impacts on an increase in more sustainable modes of transport against the SEA objectives.
100	Highland Access Strategy 2008-2011 http://www.highland.gov.uk/NR/rdonlyres/888880BB-63EF-48EF-ADC2-86407AD1C8A3/0/Access_Strategy.pdf	The strategy's aim is top provide good access to land and the appropriate management of this. It has the following objectives: <ul style="list-style-type: none"> • To provide access opportunities which reflect local character and provide clear economic, environmental and social benefits compatible with the themes of the Community Plan. • To encourage local communities and access user groups to work with land managers and occupiers in the development of better facilities to support and sustain the rural economy. • To develop a comprehensive access network for a wider range of user abilities and interests. • To remove barriers and build links so that everyone is able to enjoy and explore the Highlands to the best of their ability. 	The Local Transport Strategy should improve accessibility in the Highland Region and utilise existing networks highlighted in the Access Strategy where possible.
101	Local Biodiversity Action Plans http://www.highlandbiodiversity.com/html/biodiversity.htm	Local Biodiversity Action plans have been developed in the Highland Region to deliver the national priority habitat and species objectives. A plan has been produced for each area of Highland, focusing on the areas of Caithness, Sutherland, Ross & Cromarty East, Wester Ross, Skye &	The Local Transport Strategy should protect and enhance, where appropriate, biodiversity. The SEA will highlight biodiversity impacts within its objectives.

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	y/actionplan.php	Lochalsh, Lochaber and Inverness & Nairn. Badenoch & Strathspey is already covered by the Cairngorms LBAP.	
102	Landscape Character Assessments http://www.snh.gov.uk/	<p>SNH has published a number of Landscape Character Assessments undertaken for the Highland region, including:</p> <ul style="list-style-type: none"> • Cairngorms (1996); • Inner Moray Firth (1998); • Ben Alder, Ardverikie and Creag Meagaidh (1999); • Inverness District (1998); • Moray and Nairn (1998); • Caithness and Sutherland (1998); • Skye and Lochalsh (1998); • Lochaber (1998); and • Ross and Cromarty (1999). <p>These assessments describe the significant and distinct local landscape features within the study area and set out recommendations for consideration in new development</p>	The Local Transport Strategy should consider the Landscape Character Assessments in developing the core policies
103	Core Path Plans http://www.highland.gov.uk/leisureandtourism/what-to-see/countrysideaccess/corepathplans.htm	Under the Land Reform (Scotland) Act 2003, Highland Council, as the Access Authority, has a statutory requirement to produce a Core Path Plan to cover its area	The Local Transport Strategy should consider the Core Paths Plan in developing the core policies
104	A96 Corridor Framework	A Development framework was drafted to accommodate the predicted	The Local Transport Strategy should consider the

	Name of plan / programme / legislation/guidance	Main requirements and environmental objectives of plan / programme / legislation/ guidance	How it affects or is affected by the Local Transport Strategy in terms of SEA Issues at Schedule 3 of the Environmental Assessment (Scotland) Act 2005
	Plan http://www.highland.gov.uk/NR/rdonlyres/7297B608-64F3-478C-AC10-4CEABF3595C1/0/A96DevelopmentFramework.pdf	levels of growth along the A96 corridor over the next 35 years. A number of proposals were developed. These included providing accommodation for around 30,000 people in 16,500 homes.	A96 Development framework in developing the core policies

Appendix B

Environmental Baseline

Introduction

Background

Part 2 of Schedule 3 (in relation to Section 14) of the Environmental Assessment (Scotland) Act 2005 establishes that environmental reports should record:

“The relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the plan or programme.”

This section summarises the key environmental issues which have been identified from a review of plans and programmes and the analysis of the baseline environmental conditions.

Baseline data has been identified and collated for the region to be assessed – the Highland Council Local Authority Area. A desk-based data search was undertaken to establish the presence or otherwise of any critical environmental features that could potentially have an influence on the strategy. The Baseline data will also provide a benchmark against which the forecast and monitored levels of environmental effects will be evaluated.

The following aspects of the environment are examined in turn:

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

Study Area

The Highland region comprises an area of 26,484 square kilometres (sq km) (Figure B3).

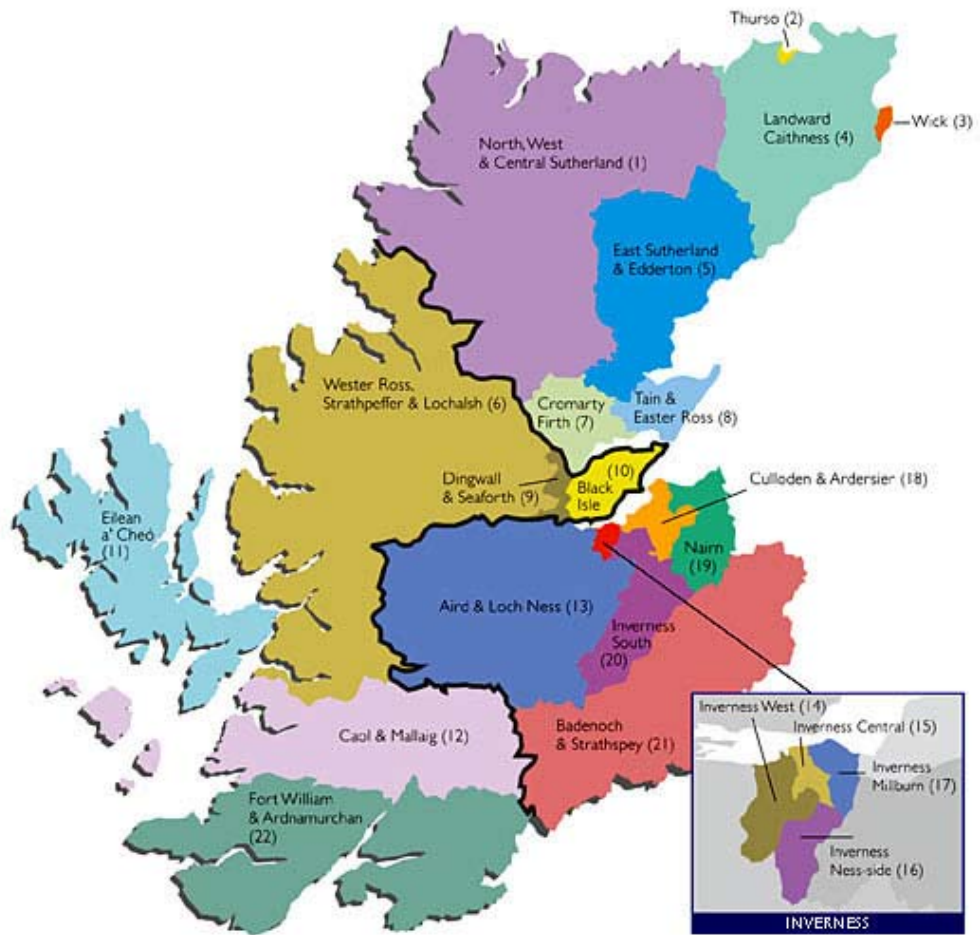


Figure B3: Highland region Study Area (Corporate Plan)

Biodiversity, Flora and Fauna

SEA Objective

To protect and, where possible enhance the natural environment including designated sites and species (on a local, national and international level), and to conserve and enhance the existing environment where possible.

Baseline Situation

The Highland region is considered to be an area of environmental value with a wide range of sites designated for nature conservation under European, national and local legislation.

Designated Sites

Table B1 and Figure B4 below summarise the designated sites in the Highland region.

Designation	Description	Total no. of Sites	Total Area (km²)
RAMSAR	Internationally important wetland site protecting wildfowl habitat.	11	1,648
Special Area of Conservation (SAC)	Area of European importance for wild flora and fauna.	85	4,094
Special Protection Area (SPA)	Area of European importance for wild birds.	42	2,912
Sites of Special Scientific Interest (SSSI)	Legal designation for exemplary places for nature conservation.	363	5,397
National Nature Reserve (NNR)	Area of national importance for nature. These are also designated as SSSIs.	24	885
National Parks	Nationally designated areas of natural beauty and ecological, archaeological, geological and recreational value.	1	1,660
Local Nature Reserve (LNR)	Area of local natural interest.	1	0.5
Biosphere Reserves	Area of terrestrial and coastal ecosystems promoting the conservation of biodiversity.	1	48
Marine Consultation Areas	Area designated the quality and sensitivity of the marine environment within it.	8	209

Table B1: Biodiversity, Flora and Fauna – Relevant Designations

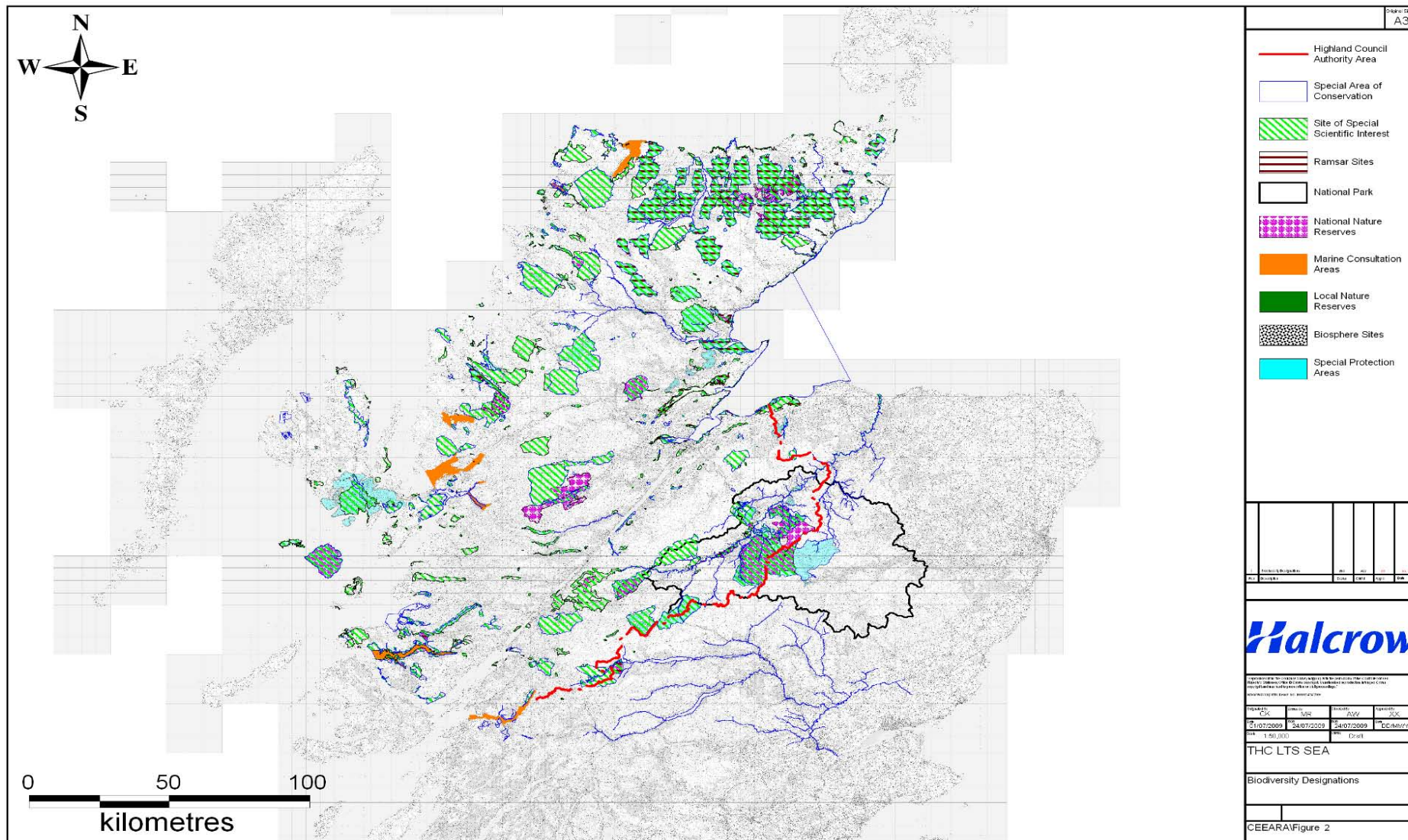


Figure B4: Biodiversity, Flora and Fauna – Relevant Designations

It is recognised that proposals to increase capacity along existing routes and to introduce new routes will potentially impact on existing designated areas, specific habitat environments and wildlife corridors, particularly where significant land take is required. However, given the extensive scope of the study area and the number of designated areas therein, a comprehensive list of the site conditions for each area is not provided. The impacts of specific proposals on designated areas should be considered in more detail through individual transport appraisals and an associated environmental assessment.

Cairngorms National Park

The Cairngorms National Park extends into Badenoch and Strathspey within the Highland Council Area. The park area was designated in 2003 under the National Parks (Scotland) Act 2000.

The Cairngorms National Park Plan 2007 outlines key features of the park, notably:

- The park extends to 3,800 sq km (5% of Scotland's land area);
- 39% of the park is designated for nature conservation;
- 25% is designated as being of European importance for nature conservation;
- The park is home to 25% of the UK's rare and threatened species;
- The park includes the UK's largest area of arctic-alpine habitat; and
- The park includes 25% of Scotland's native, semi-natural woodland.

The conservation requirements of these features should be considered in the context of increased travel demand from residents and visitors to the park.

Habitats and Species

Schedules 2 and 4 of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended, list certain species of animals and plants in need of strict protection. There is a duty on Member States under Article 12.4 of the Habitats Directive to establish monitoring of incidental or accidental capture and killing of EU protected species. Those occurring in Scotland include:

Animals

- Bats, Horseshoe (all species) (Rhinolophidae)
- Bats, Typical (all species) (Vespertilionidae)
- Cat, Wild (Felis silvestris)
- Dolphins, porpoises and whales (all species) (Cetacea)
- Newt, Great Crested (or Warty) (Triturus cristatus)
- Otter, Common (Lutra lutra)
- Sturgeon (Acipenser sturio)
- Toad, (Natterjack Bufo calamita)
- Turtles, Marine (Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricate, Dermochelys coriacea)

Plants

- Fern, Killarney (Trichomanes speciosum)
- Naiad, slender Najas flexilis
- Saxifrage, Yellow Marsh Saxifraga hirculu

The UK Biodiversity Action Plan (UKBAP) identifies the priority species and habitats nationally. It also sets out the comprehensive list of species of conservation importance for consideration under biodiversity action plans. Table B2 demonstrates the high occurrence of important species and habitats within the Highland region.

Classification	Total no. in Scotland	Total no. in Highland	% total in Highland
Priority Species	238	192	80.6%
Priority Habitats	42	40	95.2%
UKBAP species	532	455	85.5%

Table B2: Comparative analysis of species and habitats in the Highland region

The key habitats for the Highland region, as identified by the Highland Biodiversity Partnership, are considered to be:

- Native pine woodland;
- Arable farmland;
- Montane habitats; and
- Rivers and associated habitats.

Each Local Authority in the Highland region has developed a Local Biodiversity Action Plan (LBAP), including:

- Caithness;
- Sutherland;
- Wester Ross;
- Ross and Cromarty East Local;
- Skye and Lochalsh;
- Lochaber;
- Inverness and Nairn; and
- Badenoch and Strathspey (Cairngorms).

These list the priority habitats and species for each Local Authority Area. An exhaustive list of the species and habitats covered by each action plan is considered to be too detailed for inclusion within this study, and these should be considered in the context of specific travel appraisals and environmental assessments at a site specific level.

Key Issues

A significant proportion of The Highland Council area is covered by international, European, national and/or local environmental designations for the protection of important species or habitats. This includes the Cairngorms National Park which extends into the study area.

A significant proportion of the priority species and habitats in Scotland are found in the Highland region, and an extensive list of species and habitats are covered by local biodiversity action plans.

Protected species such as otter and badger are known to be vulnerable to road traffic collisions, where these occur it should be noted by the Highland Council's road maintenance crews to help inform the design of road improvements, contribute to Scotland's duty to undertake surveillance, and to inform the Scottish Badgers database of Road Traffic Accidents (RTAs). If there are found to be development areas which potentially affect protected species, or are in the vicinity of a known badger RTA site then site specific survey work should be undertaken to determine the need for a detailed mitigation strategy to be developed during further detailed site specific environmental assessments.

Data Sources

Scottish Natural Heritage – <http://gateway.snh.gov.uk>

UK Biodiversity Action Plan – www.ukbap.org.uk

Highland Biodiversity Partnership – www.highlandbiodiversity.com

National Biodiversity Network – www.nbn.org.uk

The Conservation (Natural Habitats, &c.) Regulations 1994 -
http://www.opsi.gov.uk/si/si1994/uksi_19942716_en_1.htm

Cairngorms Park Plan 2007 – www.cairngorms.co.uk

Population and Human Health

SEA Objective

To promote accessibility, health and quality of life through the integration of the LTS.

Baseline Data

Population

The Highland region population was 211,340 in 2004. Population projections published by The Highland Council show an expected 3.6 % increase in the overall population of the region to 2024. This figure is dynamic across the region.

The highest growth is expected to be directed to existing and new settlements within the Nairn – Inverness (A96) corridor. In the last 30 years the population of the Inverness city region has grown by almost 32,000. This pattern is likely to continue as further land is identified for development and promoted through the development plan process.

The Highlands has an average population density of 8 persons per sq km, compared with 66 persons per sq km in Scotland as a whole; this demonstrates the largely rural nature of the region. It is noted that in some parts of the region, this figure drops to 2 persons per sq km. Low population densities combined with pressures stemming from unemployment, relative inaccessibility and population decline are putting some local communities at risk of sustained socio-economic decline. These areas are identified by The Highland Council as “Fragile Areas” (Figure B5). The indicators used to define “Fragile Areas” also serve as an accessibility index as they include calculations of the proximity of the population to key services, Post Office, School, Food Shop, GP surgery and Petrol Station, measuring the proportion more than 20 minutes drive away; and the numbers more than 1.5 hrs from the main town/city.

Settlements within Sutherland, Caithness and Lochaber council areas may be under particular duress as they are expected to experience population decline to 2024.

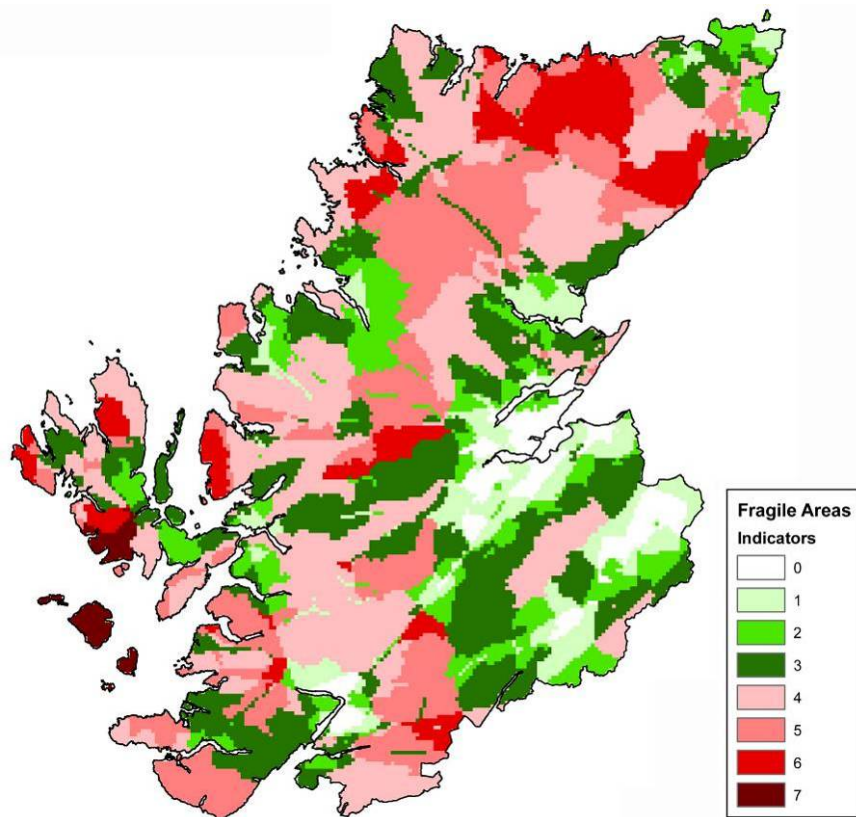


Figure B5: Fragile Areas (2003) (The Highland Council)

The Scottish Index of Multiple Deprivation (SIMD) (2006) summarises key area deprivation information for the Highland region. Notably, three data zones within the region fall within the 5% most deprived areas across Scotland (Figure B6). The most extreme cases of employment deprivation are largely concentrated within settlement areas, with two data zones falling into the 5% most deprived areas across Scotland. Income deprivation presents a similar outlook, with four data zones falling into the 5% most deprived across Scotland. Three data zones fall within the 5% most deprived in Scotland with regards to health; nine with regards to crime.

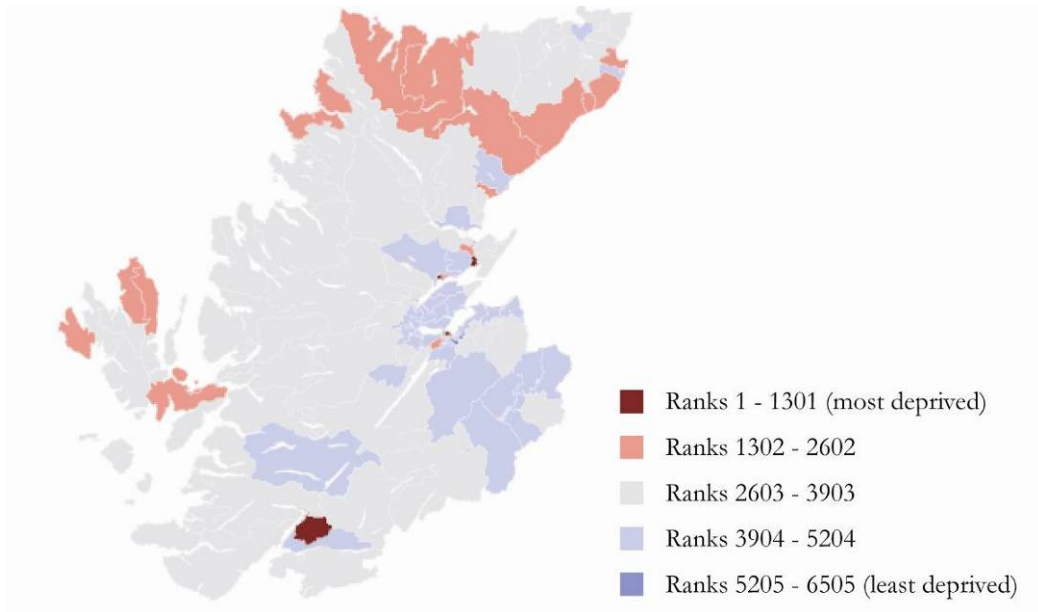


Figure B6: SIMD Rank, Highland, 2006

Outwith the largest settlements, the Highland region experiences significant deprivation with regard to geographic access to key services and employment, emphasising the rural nature of the majority of this region (Figure B7).

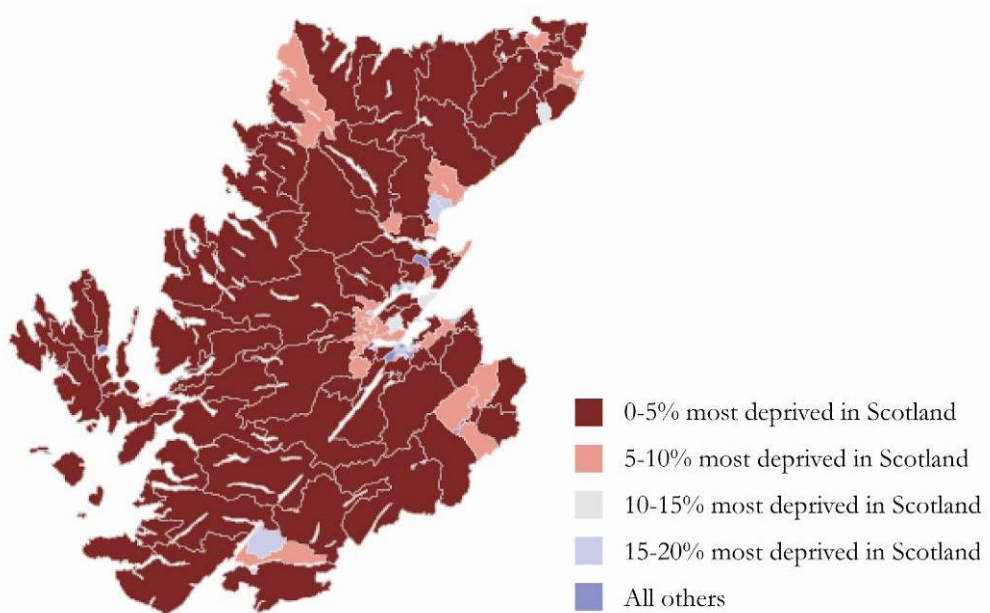


Figure B7: SIMD Geographic Access Rank, Highland, 2006 (Scottish Government)

Health and Wellbeing

The 2001 census data indicates that 71% of residents in the Highland region reported being in 'good health'; this above the Scottish average of 68%.

Physical inactivity is considered one of the most wide spread health issues in Scotland. The Health Education Population Survey reports generally low levels of physical activity nationally. The Scottish Household Survey (SHS) *Transport Across Scotland 2005/2006* also reports on national levels of walking and cycling. Comparative rates for the Highland region are presented in Table B3. Overall walking and, particularly, cycling activity levels in the Highland region compare favourably with the rest of the country.

Comparator	The Highland region	Scotland average
Residents who walked at least one day in the past week as a mode of transport	50%	53%
Residents who walked at least one day in the past week for pleasure or to keep fit	64%	46%
Households with bicycles which can be used by adults	51%	35%
Residents who cycled at least one day in the past week as a mode of transport	9%	3%
Residents who cycled at least one day in the past week for pleasure or to keep fit	10%	4%

Table B3: Comparative walking and cycling statistics (2005/6) (SHS)

Road safety is a key concern for any local transport strategy. Scotland-wide road safety statistics report that in 2008, 272 people were killed, 2,535 were seriously injured and 12,756 suffered slight injury due to accidents on Scotland's roads. In general, casualty numbers have fallen considerably; the numbers of people killed or injured in 2008 were the second lowest level recorded since records began over 50 years ago. Comparative statistics for the Highland region are shown in Table B4 and Table B5. Reported casualties for 2003-07 represent a 12.8% decrease on 1994-98 figures. This is significantly less than the 20.6% decrease in reported casualties for the same period nationally.

	Accidents				Casualties			
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total
Highland	30	119	477	626	34	153	742	929
Northern Scotland	34	135	569	738	39	172	865	1,076
All Scotland	255	1,135	6,558	7,764	71	1,219	8,138	9,428

Table B4: Reported Injury (Road) Accidents and Casualties, 2007 (Scottish Government)

	1994-98 average	2003	2004	2005	2006	2007	2003-07 average
Highland	1,125	1,035	1,058	996	881	929	980
Scotland	22,316	18,755	18,501	17,884	17,266	16,213	17,724

Table B5: Reported casualties, 1994 – 2007 (Scottish Government)

Key Issues

A large proportion of Highland region is classified as “fragile” due to compounding pressures including population decline, unemployment and access by private car or public transport to key services.

Health concerns relating to physical inactivity remain a key concern nationally. Walking and cycling statistics for the Highland region compare favourably to the rest of Scotland, however there is limited region-specific information regarding physical activity in general.

The most recent road accident statistics available indicate that there were 626 reported injury accidents and 929 casualties in the Highland region in 2007. The long-term trend for reported casualties is significantly less in the Highland region than is being experienced nationally.

Data Sources

The Highland Council *Policy and Information Briefing Note No. 8: Population Projections (2004-2024)* – www.highland.gov.uk

Health Education Population Survey (HEPS) *Update from 2005 survey Report* – <http://www.healthscotland.com/uploads/documents/2655-RE033Final%20Report.pdf>

Scottish Government *Scottish Household Survey (SHS) Transport Across Scotland 2005/2006* – <http://www.scotland.gov.uk/Publications/2007/11/29142052/46>

Scottish Index of Multiple Deprivation – www.scotland.gov.uk/Topics/Statistics/SIMD/map.aspx

Scottish Government *Statistical Bulletin: Transport Series: Key 2008 Road Casualty Statistics* - <http://www.scotland.gov.uk/Publications/2009/06/19135601/12>

Scottish Government *Road Casualties Scotland, 2007* – <http://www.scotland.gov.uk/Publications/2009/03/20124132/72>

Water

SEA Objective

To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.

Baseline Data

Water Quality

The Highland region benefits from a diverse water environment, including a range of inland and coastal water bodies as well as a number of important water-dependent habitats such as intertidal mud and sandflats, salt marshes, etc. The quality of this environment is reflected through a number of protected areas under international, European and local directives. These include sites designated for economically significant species and bathing waters (Figure B8), drinking waters (Figure B9), nutrient sensitive areas (Figure B10) and water dependant conservation (Figure B11).

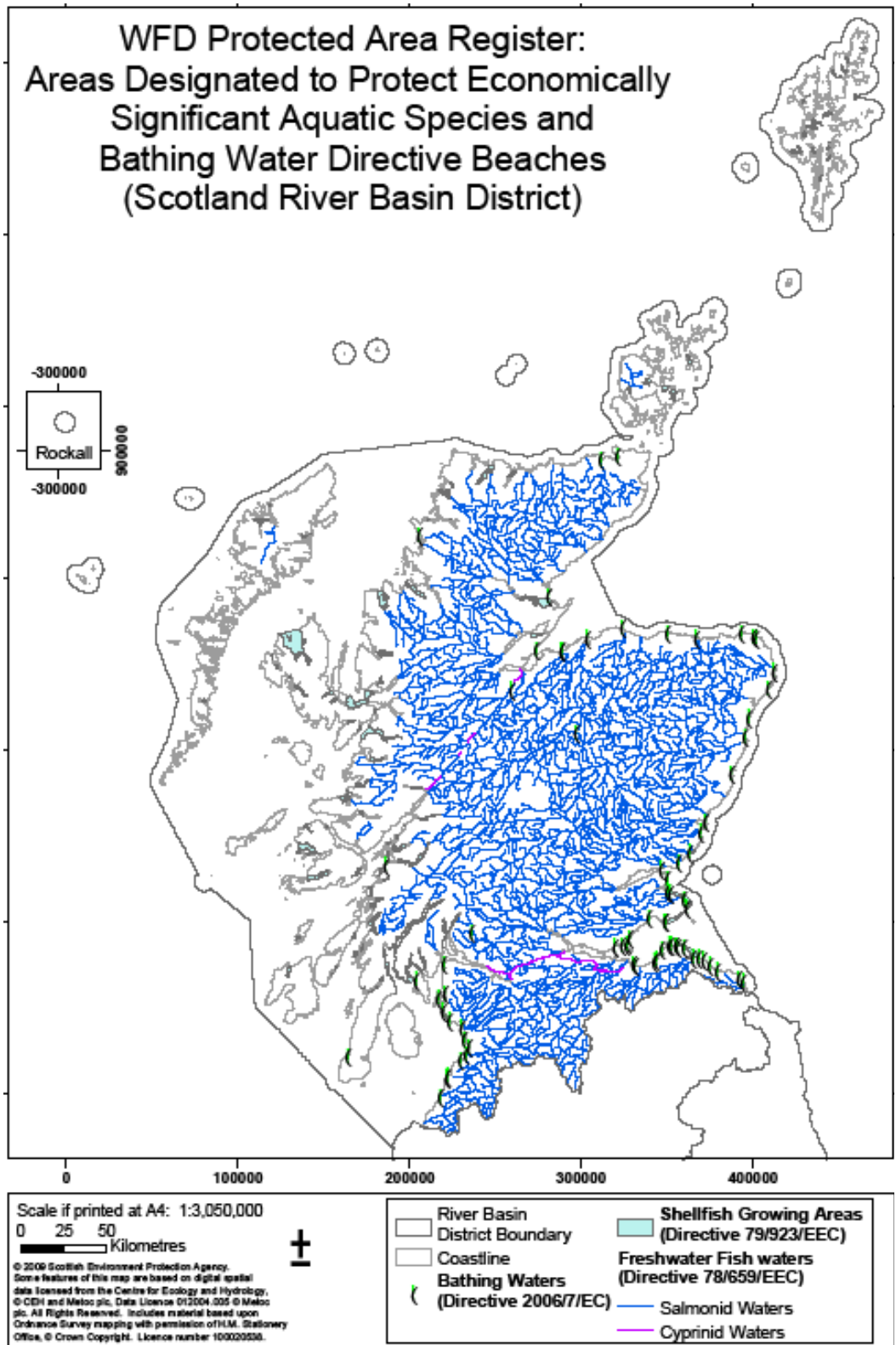


Figure B8: Economically significant aquatic species and bathing water protected areas (SEPA)

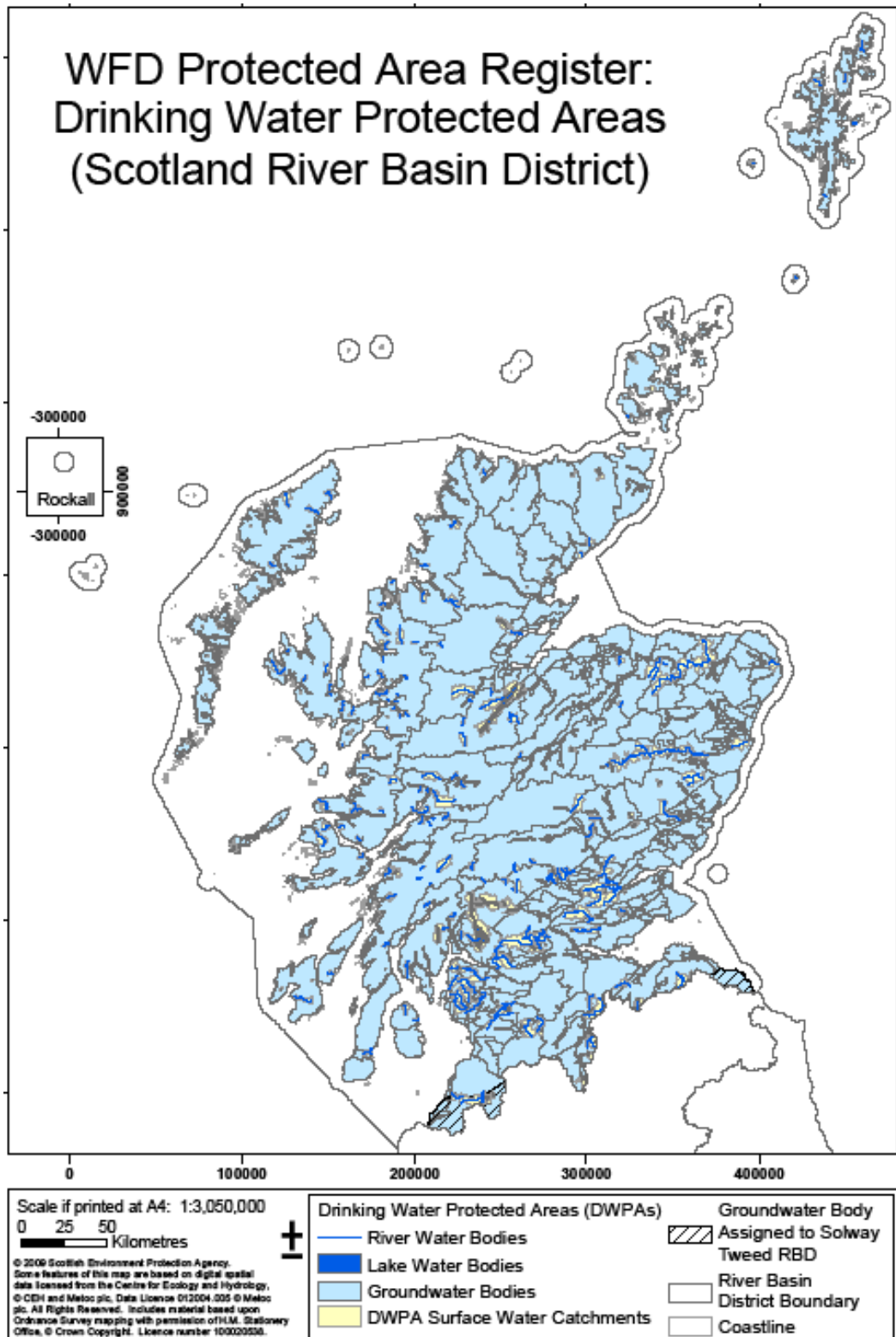


Figure B9: Drinking water protected areas (SEPA)

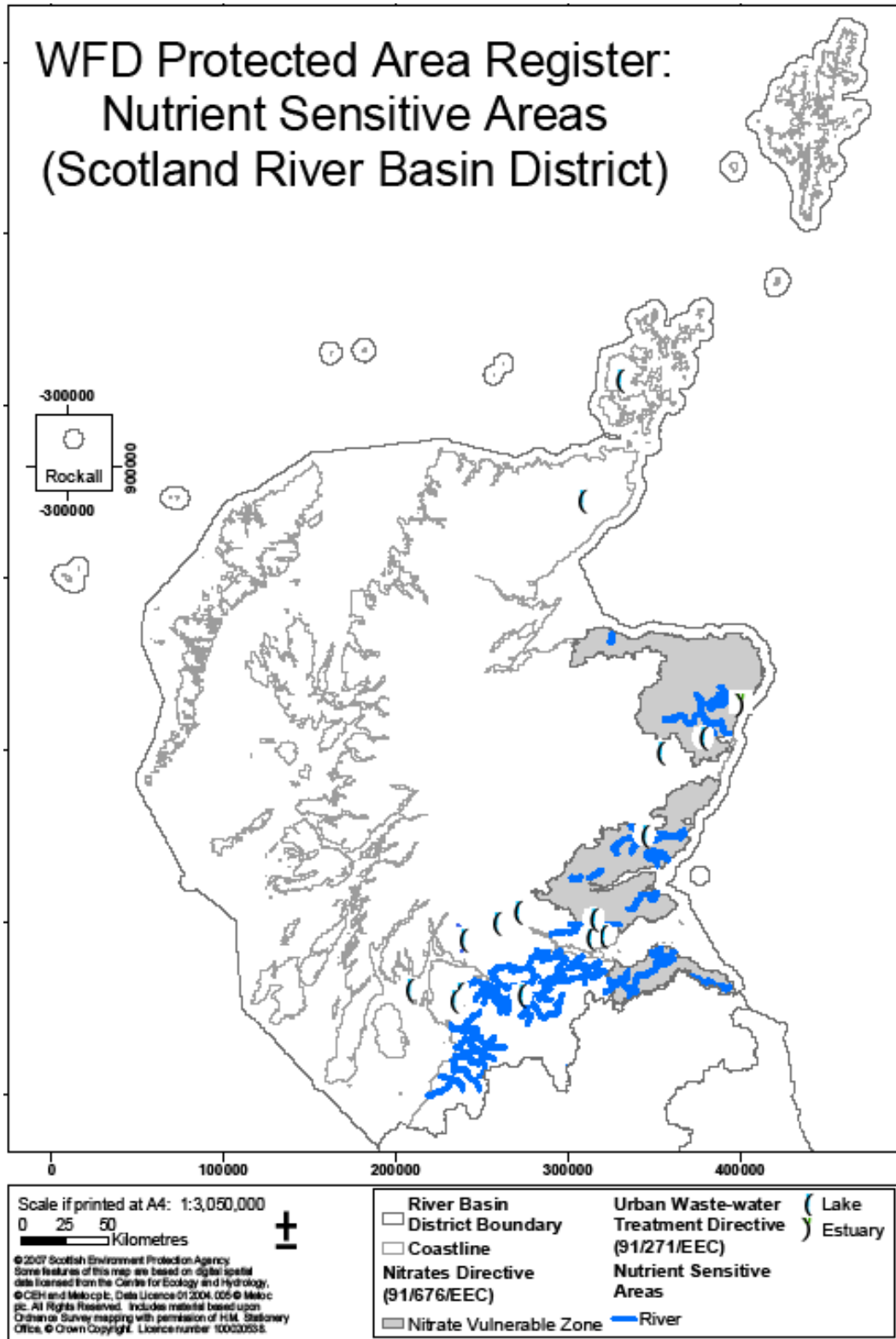


Figure B10: Nutrient sensitive areas (SEPA)

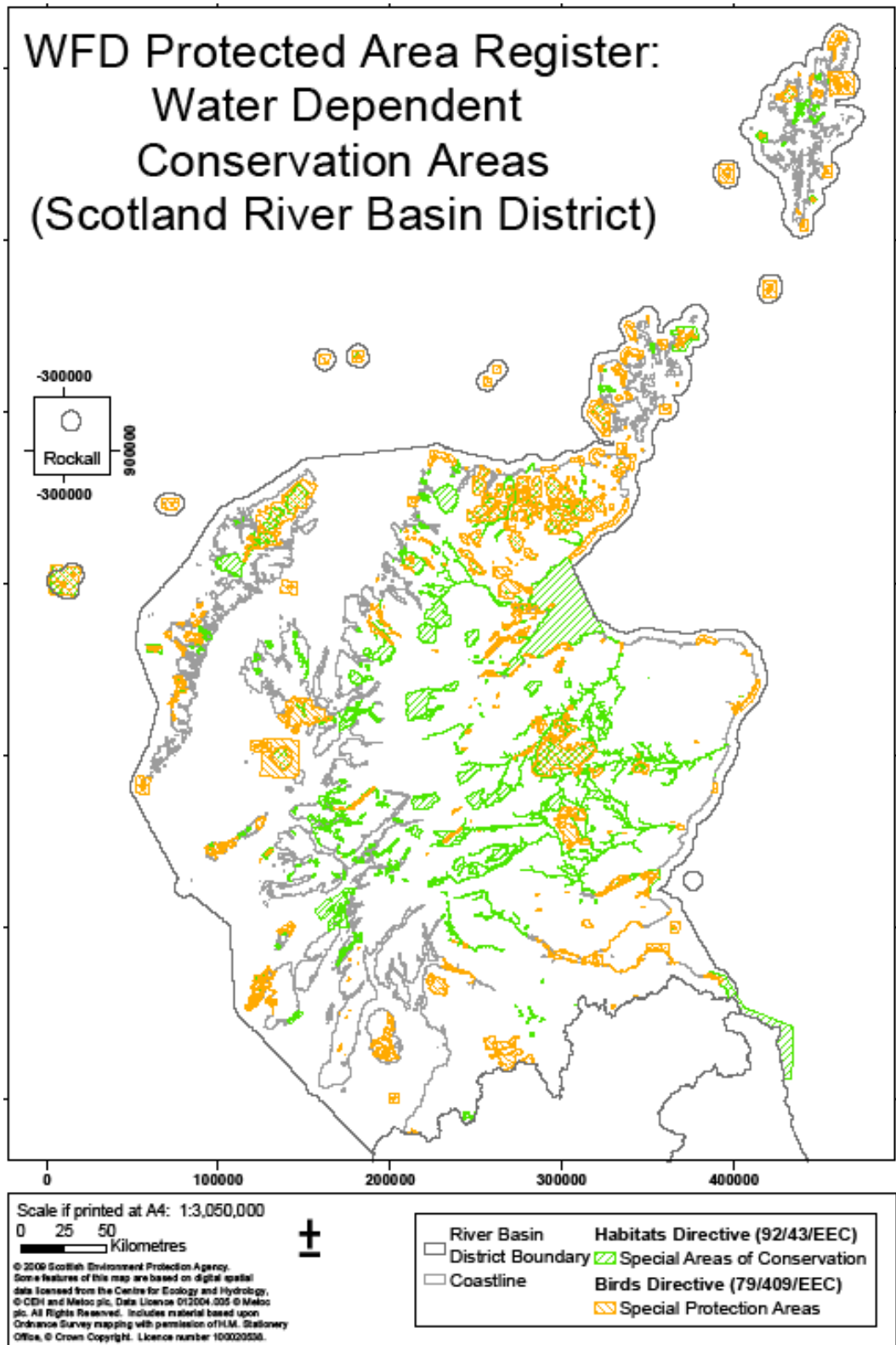


Figure B11: Water dependent conservation areas (SEPA)

Under the Water Framework Directive, SEPA has produced draft Area Management Plans for the whole of Scotland. These provide a regional overview of the current state of rivers, lochs, estuaries, coastal water and ground water. For the purpose of this reporting methodology, the Highland region is divided into four areas: Argyll (Figure B12); North East Scotland (Figure B13); North Highland (Figure B14); and West Highland (Figure B15).

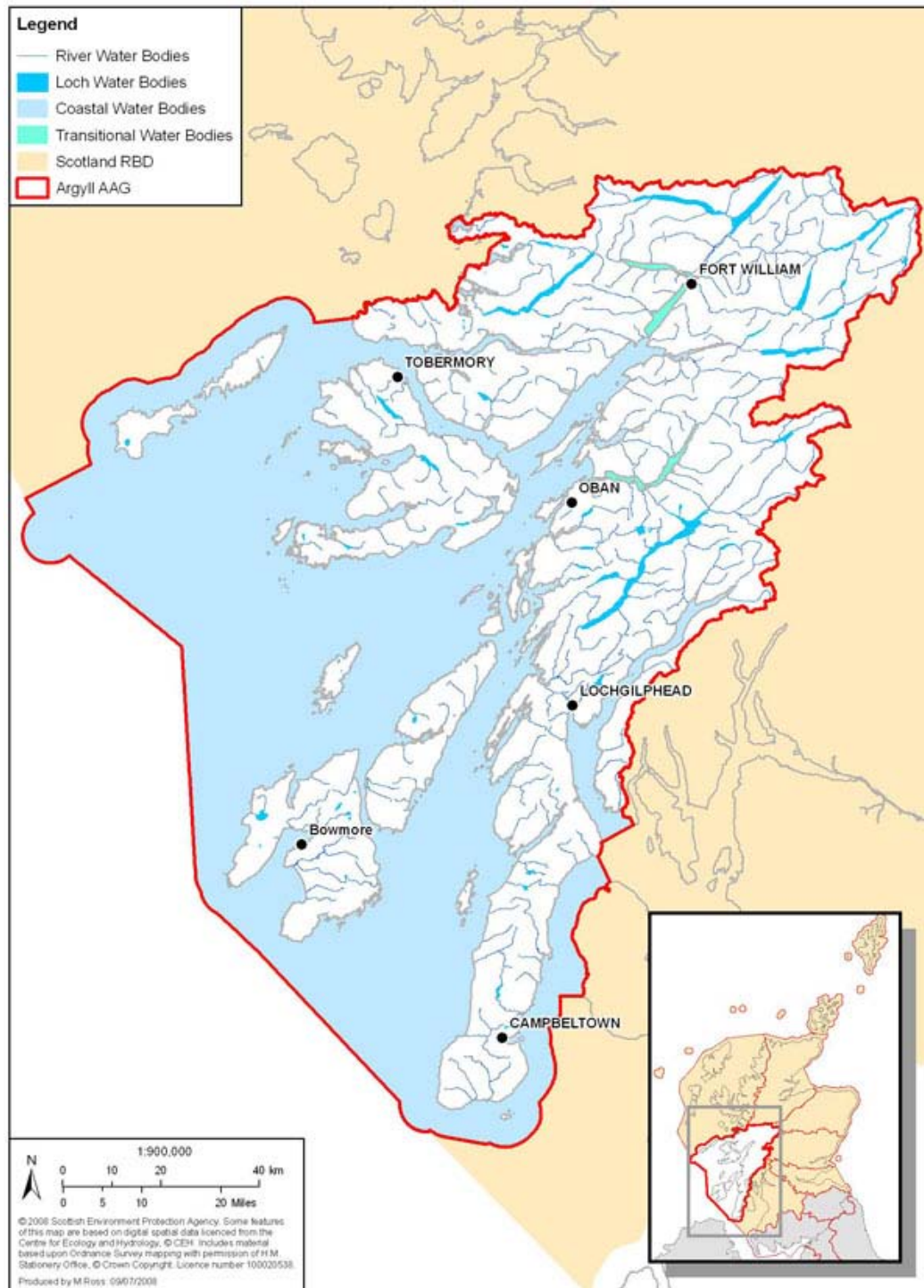


Figure B12: Argyll Draft Area Management Plan Boundary

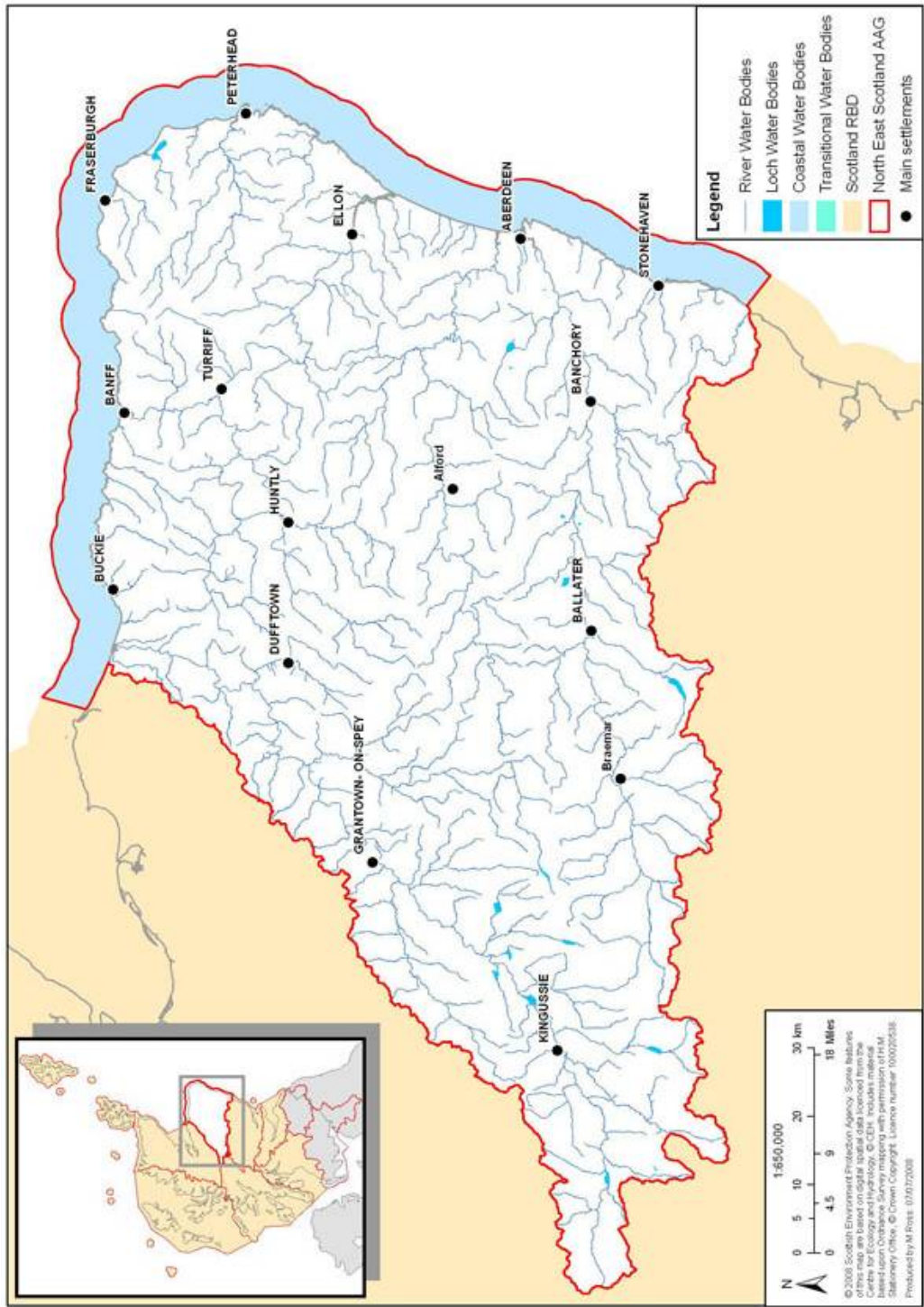


Figure B13: North East Scotland Draft Area Management Plan Boundary

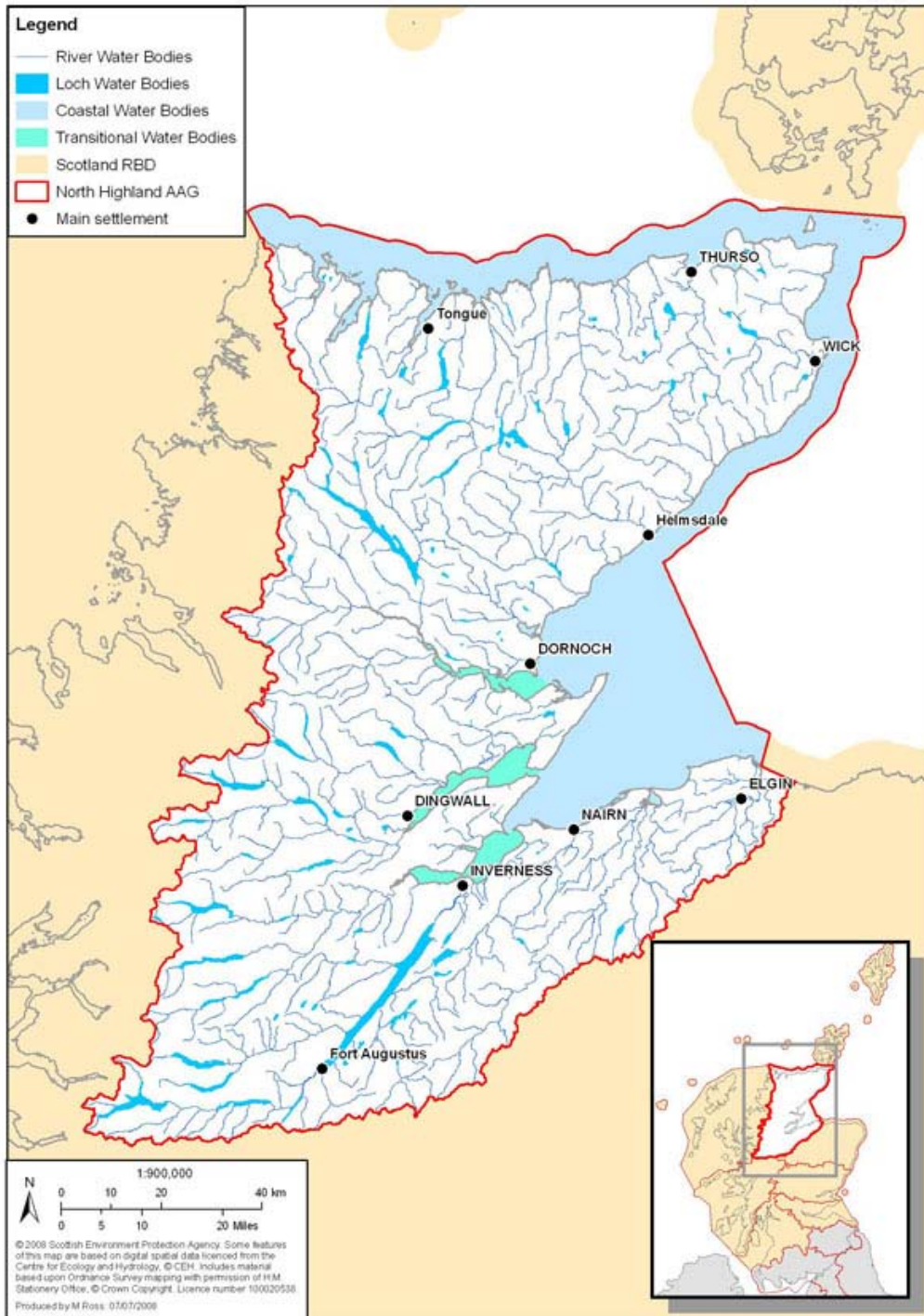


Figure B14: North Highland Draft Area Management Plan Boundary

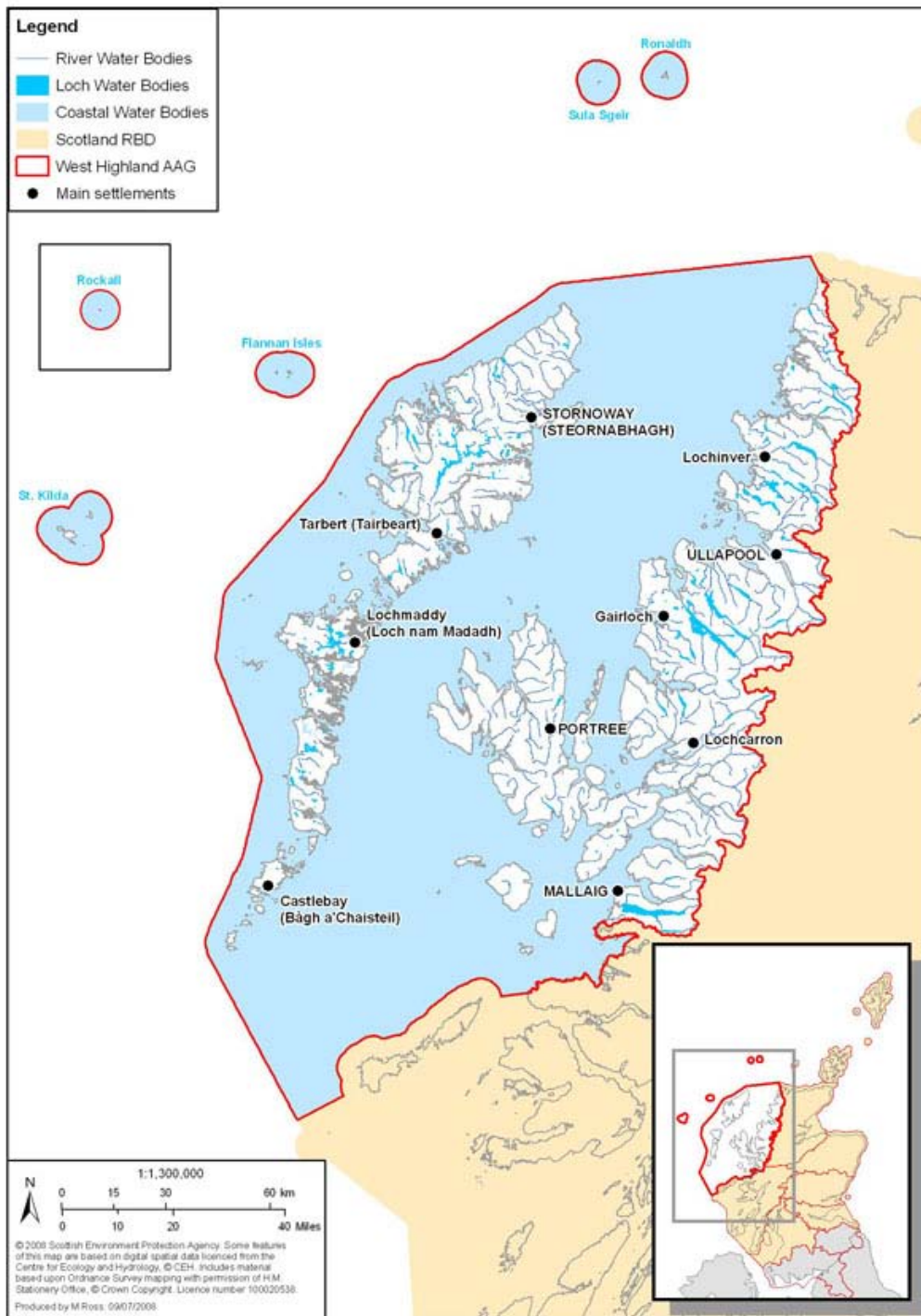


Figure B15: West Highland Draft Area Management Plan Boundary

The assessment of unmodified surface water bodies reported in the draft Area Management Plans show that the majority are of generally of good and high status (Table B6, Table B7, Table B8 and Table B9). While there are some areas of concern within the North East Scotland and North Highland regions, the Argyll and, particularly, West Highland regions presents some of the highest water quality in Scotland.

Water body category	Totals Length/area (no.)	High status	Good status	Moderate status	Poor status	Bad status
Rivers	1805 km (203)	244 km (35)	914 km (95)	554 km (60)	93 km (13)	0 (0)
Lochs	108 km ² (26)	54 km ² (11)	8 km ² (7)	37 km ² (6)	9 km ² (2)	0 (0)
Estuaries	66 km ² (3)	37 km ² (2)	29 km ² (1)	0 (0)	0 (0)	0 (0)
Coastal waters	8987 km ² (65)	1810 (5)	6171 (47)	1006 (13)	0 (0)	0 (0)
Total No.	297	53	150	79	15	0
%	100%	18%	50%	27%	5%	0%

Table B6: Summary of the ecological status of the unmodified water bodies in Argyll, 2007 (SEPA)

Water body category	Totals Length/area (no.)	High status	Good status	Moderate status	Poor status	Bad status
Rivers	3526 km (269)	46 km (7)	1419 km (108)	1570 km (103)	398 km (42)	93 km (9)
Lochs	11 km ² (10)	0 (0)	2 km ² (3)	4 km ² (3)	5 km ² (4)	0 (0)
Estuaries	3 km ² (6)	<1 km ² (1)	0 (0)	3 km ² (5)	0 (0)	0 (0)
Coastal waters	1115 km ² (14)	783 km ² (8)	203 km ² (4)	129 km ² (2)	0 (0)	0 (0)
Total No.	299	16	115	113	46	9
%	100%	5%	39%	38%	15%	3%

Table B7: Summary of the ecological status of the unmodified water bodies in North East Scotland, 2007 (SEPA)

Water body category	Totals Length/area (no.)	High status	Good status	Moderate status	Poor status	Bad status
Rivers	3,946 km (358)	107 km (22)	2257 km (186)	1218 km (104)	268 km (34)	96km (12)
Lochs	136 km ² (51)	34 km ² (22)	75 km ² (14)	13 km ² (9)	11 km ² (3)	3 km ² (3)
Estuaries	241 km ² (10)	214 km ² (6)	26 km ² (3)	1 km ² (1)	0 (0)	0 (0)
Coastal waters	2,991 km ² (23)	2931 km ² (18)	60 km ² (5)	0 (0)	0 (0)	0 (0)
Total No.	442	68	208	114	37	15
%	100%	15%	47%	26%	9%	3%

Table B8: Summary of the ecological status of the unmodified water bodies in North Highland, 2007 (SEPA)

Water body category	Totals Length/area (no.)	High status	Good status	Moderate status	Poor status	Bad status
Rivers	2,044 km (272)	356 km (79)	1,323 km (139)	282 km (39)	73 km (14)	10 km (1)
Lochs	181 km ² (80)	73 km ² (44)	98 km ² (29)	7 km ² (4)	3 km ² (3)	0 (0)
Estuaries	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Coastal waters	20,825 km ² (202)	20,111 km ² (163)	714 km ² (39)	0 (0)	0 (0)	0 (0)
Total No.	554	286	207	43	17	0
%	100%	52%	37%	8%	3%	<1%

Table B9: Summary of the ecological status of the unmodified water bodies in West Highland, 2007 (SEPA)

Similarly, the quality and quantity of the groundwater is reported to be very good for all regions (Table B10, Table B11, Table B12 and Table B13).

	Total	Quality		Quantity	
		Good	Poor	Good	Poor
Total number	20	20	0	20	0
Area (km ²)	8,864	8,864	0	8,864	0
Percentage		100%	0%	100%	0%

Table B10: Summary of the quality of groundwaters in Argyll (SEPA)

	Total	Quality		Quantity	
		Good	Poor	Good	Poor
Total number	43	21	22	41	2
Area (km ²)	9,950	4674	5272	8726	1220
Percentage		47%	53%	88%	12%

Table B11: Summary of the quality of groundwaters in North East Scotland (SEPA)

	Total	Quality		Quantity	
		Good	Poor	Good	Poor
Total number	45	42	3	44	1
Area (km ²)	13,907	13,638	269	13,683	223
Percentage		98%	2%	98%	2%

Table B12: Summary of the quality of groundwaters in North Highland (SEPA)

	Total	Quality		Quantity	
		Good	Poor	Good	Poor
Total number	21	21	0	21	0
Area (km ²)	9,741 km ²	9,741	0	9,741	0
Percentage		100%	0%	100%	0%

Table B13: Summary of the quality of groundwaters in West Highland (SEPA)

SEPA has set the following objectives for water quality management in the Highland region to 2015 –

With regard to Argyll, to:

- Increase the overall proportion of water bodies at good or high status from 64% in 2007 to 71% by the end of the first planning cycle in 2015.

With regard to North East Scotland, to:

- Ensure there is no deterioration of ecological status; and
- Increase the overall proportion of the water bodies at high status by 2.7% and at good status by 2.0% by the end of the first planning cycle in 2015.

With regard to North Highland, to:

- Ensure there is no deterioration of ecological status; and
- Increase the overall proportion of the water bodies at good or high status from 64% in 2007 to 71% by the end of the first planning cycle in 2015.

With regard to West Highland, to:

- Increase the unmodified surface water bodies reaching high status by 1% and the number of water bodies achieving good status by 3%; and
- Reduce the number of water bodies at less than a good status by 22%.

Flood Risk

SEPA operate a flood map tool which can provide guidance on areas which have the potential to be affected by flooding from either rivers or the sea (1:200 risk) as well as the location of existing flood defence schemes. Given the extensive scope of the study area, the specific instance of flood risk has not been considered here. This should be considered in individual travel appraisals.

Key Issues

The Highland region presents a diverse water environment, with a number of protected areas designated for their water quality, ecological potential or commercial outputs.

The overall water quality in the Argyll (Lochaber) and West Highland Regions is very high. The overall water quality in the North East Scotland and North Highland region is lower with some areas of particular concern.

There is a flood risk associated with coastal areas and waterbodies across the Highland region.

Data Sources

SEPA *Draft Argyll Area management Plan (2009 – 2015)* – http://www.sepa.org.uk/water/river_basin_planning/idoc.ashx?docid=bd8ff862-0c4a-43c6-9008-404eb2e7d19a&version=-1

SEPA *Draft North East Scotland Area management Plan (2009 – 2015)* – http://www.sepa.org.uk/water/river_basin_planning/idoc.ashx?docid=49859165-7e2b-4d38-83f9-cfba6e4e6715&version=-1

SEPA *Draft North Highland Area management Plan (2009 – 2015)* – <http://www.sepa.org.uk/water/idoc.ashx?docid=ccb46b5f-db98-4585-b35a-038080461559&version=-1>

SEPA *Draft West Highland Area Management Plan (2009 – 2015)* – <http://www.sepa.org.uk/water/idoc.ashx?docid=9d6dfbf0-06dd-4b0e-ab4d-2190849e9642&version=-1>

SEPA protected areas register (water) – http://www.sepa.org.uk/water/protected_areas.aspx

SEPA flood map – http://www.sepa.org.uk/flooding/flood_map.aspx

Soil

SEA Objectives

To promote the use of Brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.

Baseline Data

There is a diverse variety of soil types across Scotland, which is distinct from that found elsewhere in the UK (Figure B16). Soil quality is highly dependent on the type of land cover (Figure B17) and land management. Localised threats to soil quality across Scotland are considered to be:

- erosion;
- compaction; and
- contamination.

National threats are considered to be:

- sealing;
- loss of biodiversity; and
- acidification.

Also of consideration with regard to transportation is the impact of road gritting and salting on soil salinisation.

Based on information outlined in Scottish Government *Scotland's Soil Resource – Current State and Threats, 2006*, soils are generally of good quality nationally.

The Highland region is primarily dominated by highly organic peaty soils (peat, peaty gleys and peaty podzols). These soils are thought to contain some of the highest concentrations of carbon in the UK. There is no region-specific data with regard to soil quality available for the Highlands.

Soils of Scotland

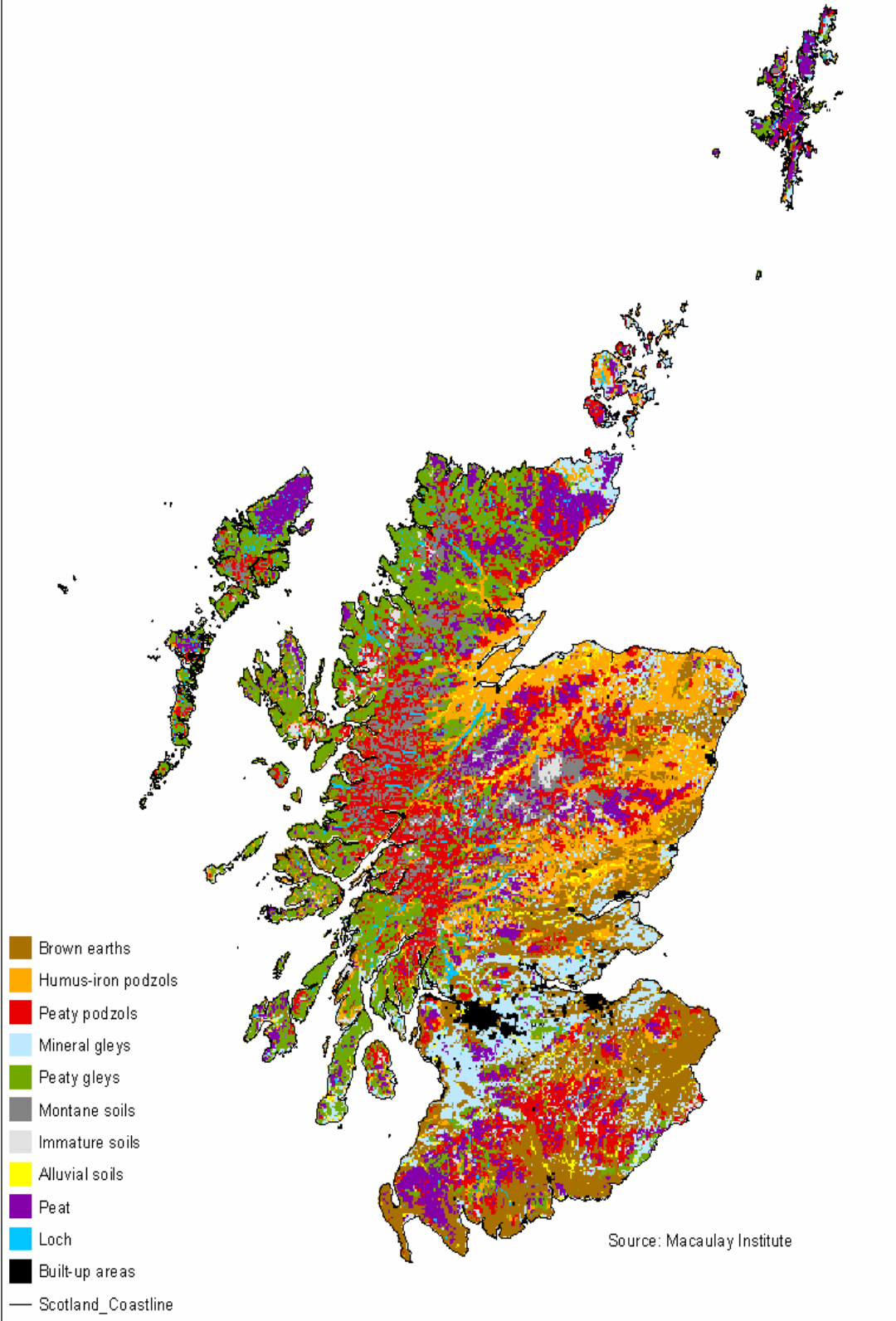


Figure B16: Soils of Scotland, 1988 (The Scottish Soil Framework, Scottish Government 2009)

Land cover of Scotland 1988

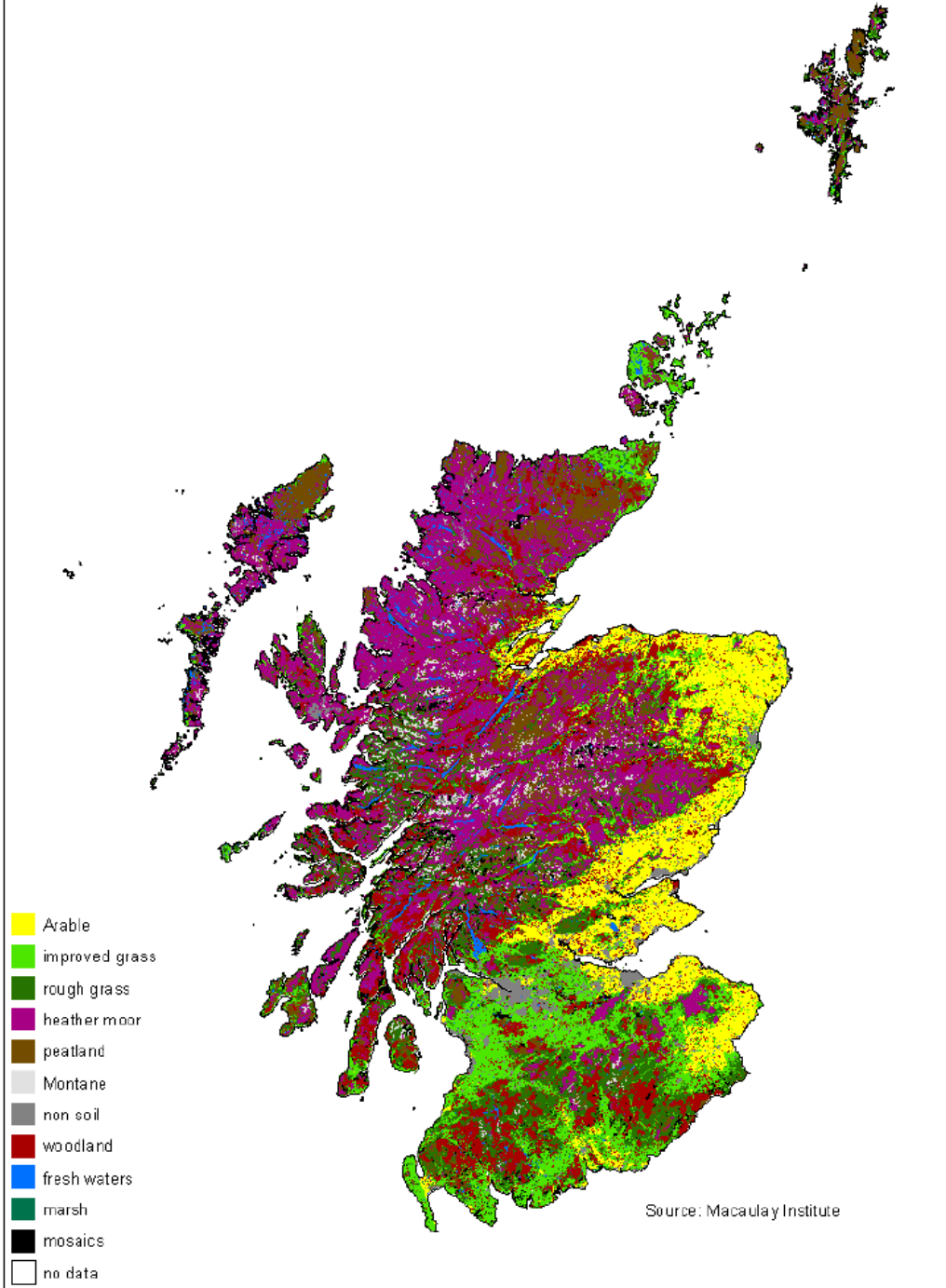


Figure B17: Land cover of Scotland, 1988 (The Scottish Soil Framework, Scottish Government 2009)

Land Re-Use

The re-use of derelict and urban vacant sites is a key government policy objective. This promotes environmental stewardship with regard to remediating contaminated land and relieving development pressures on Greenfield land and the countryside.

Figure B18 and Table B14 demonstrate a 3.3% decrease in derelict and urban vacant land in Scotland from 2002 to 2007.

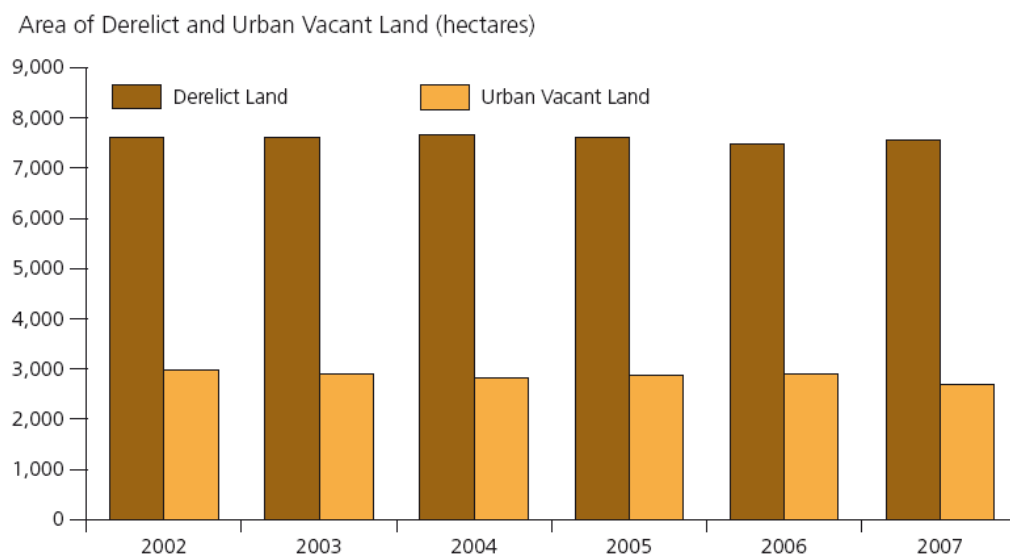


Figure B18: Derelict and Urban Vacant Land, Scotland, 2002 – 2007 (Scottish Government)

	Area (ha)				
	2002	2004	2005	2006	2007
Derelict Land	7,614	7,658	7,615	7,480	7,580
Urban Vacant Land	2,982	2,819	2,874	2,905	2,660
Total	10,596	10,477	10,489	10,386	10,240

Table B14: Derelict and Urban Vacant Land, Scotland, 2002 – 2007 (Scottish Government)

Figure B19, Table B15 and Table B16 summarise how the Highland region compares nationally and over time with regard to derelict and urban vacant land. Although the total derelict and urban vacant land area only represents 0.04% of the total local authority area, the Highland region has the third highest rate of derelict land in Scotland.

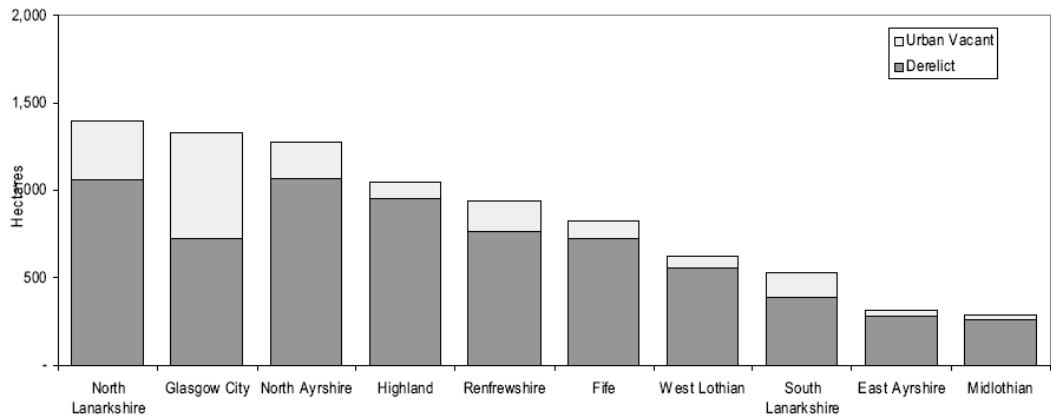


Figure B19: Derelict and Urban Vacant Land by Local Authority, 2008 (Scottish Government)

	Derelict Land			Urban Vacant Land		
	Area (ha)	% of land (by Area)	No. of sites	Area (ha)	% of land (by Area)	No. of sites
Highland	949	12	136	99	4	105
Scotland	8,203	100	1,899	2,630	100	2,031

Table B15: Derelict and Urban Vacant Land, Highland, 2008 (Scottish Government)

	Area (ha)					
	1996	1997	1998	1999	2000	2001
Highland	813	813	813	813	813	813
Scotland	12,933	12,296	12,037	11,432	11,044	10,411

Table B16: Derelict and Urban Vacant Land, Highland, 1996-2001 (Scottish Government)

One of the key drivers for this brownfield policy is to protect against land-take from the countryside, particularly commercially productive agricultural land. Figure B20 and Table B17 set out the long-term trend for the availability of agricultural land uses for Scotland. These figures indicate a 3.1% decrease in the availability of agricultural land between 1982 and 2007 nationally. Comparative data for the Highland region over the same time period is not available.



Figure B20: Agricultural land use, Scotland, 1982 – 2007 (Scottish Government)

Use	Area (thousand hectares)					
	1982	1990	2000	2005	2006	2007
Rough grazing	4,533	4,286	3,983	3,941	4,036	3,996
Grass	1,104	1,130	1,187	1,235	1,244	1,235
Crop, fallow and set-aside	641	644	652	614	600	606
Woodland and other	114	153	262	319	330	354
Total land	6,392	6,213	6,083	6,108	6,210	6,192
Set-aside land	-	-	78	69	68	68

Table B17: Agricultural land use, Scotland, 1982 – 2007 (Scottish Government)

Scottish Government reports a total of 2,147,628.59ha of agricultural land in the Highlands (June 2007). This comprises 34.7% of the total agricultural land in Scotland. It is not known how much of this is considered to be prime agricultural land.

Key Issues

The Highland region is primarily dominated by highly organic peaty soils (peat, peaty gleys and peaty podzols). This type of soil stores significant concentrations of carbon which could result in the soils becoming significant sources of greenhouse gases.

There is no region-specific data with regard to soil quality available for the Highlands, however soil quality in Scotland is considered by be generally good.

Erosion, compaction, contamination and salinisation are considered to be the key localised threats with regard to soil quality.

The Highland region has experienced an increase in the availability of derelict and urban vacant land in recent years. It has the third highest rate of derelict land in the Scotland.

The Highland region includes 34.7% of the agricultural land in Scotland. The percentage of prime agricultural land is not known and is seen as a data gap at this stage.

Data Sources

Scottish Government *Key Scottish Environment Statistics 2008* - <http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/KSES08presentationpdf>

Scottish Government *Statistical Bulletin Planning Series 2009* – <http://www.scotland.gov.uk/Publications/2009/01/29155655/10>

Scottish Government *Scottish Agricultural Census Summary Sheets by Geographic Area: June 2007* - <http://www.scotland.gov.uk/Publications/2008/03/11093631/0>

Scottish Government *The Scottish Soil Framework, May 2009* – <http://www.scotland.gov.uk/Publications/2009/05/20145602/0>

Scottish Government *Scotland's Soil Resource – Current State and Threats, 2006* - <http://www.scotland.gov.uk/Resource/Doc/149337/0039742.pdf>

Air

SEA Objective

To protect and enhance the current air quality of the Highland region.

Baseline Data

Air quality objectives for Scotland are set out in The Air Quality Strategy (DEFRA, 2007). Each local authority in the UK is responsible for reviewing and assessing air quality in their area. This involves measuring current levels of air pollution and forecasting how it will likely change in future years. If through this process, a local authority finds any places where air quality objectives are not likely to be achieved, it must declare an Air Quality Management Area. There are currently no Air Quality Management Areas in the Highland region.

The Scottish Government *Scottish Air Quality Database Report 2008* summarises the key findings regarding air quality for 2007. This includes roadside air quality monitoring of particulate matter (PM) which includes impacts from road traffic (Figure B21 and Figure B22). The Highland region does experiences some relatively low levels of PM pollution in the Inverness area.

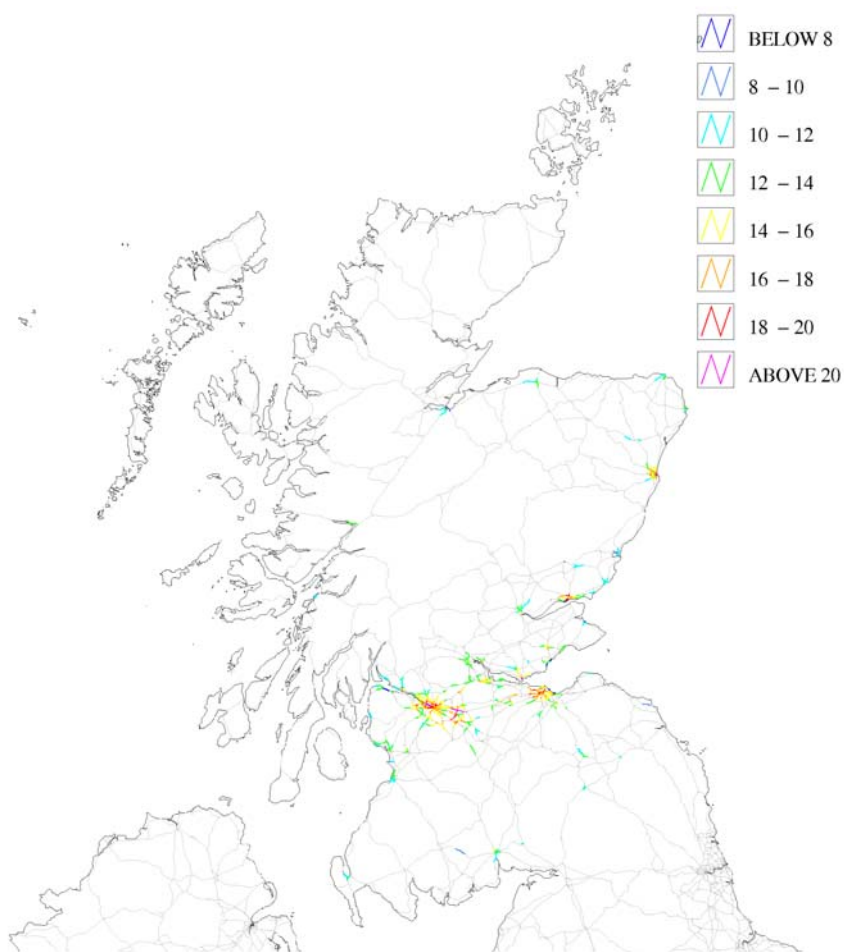


Figure B21: Gravimetric PM₁₀ map for 2007 µg m⁻³ (roadside) (Scottish Government)

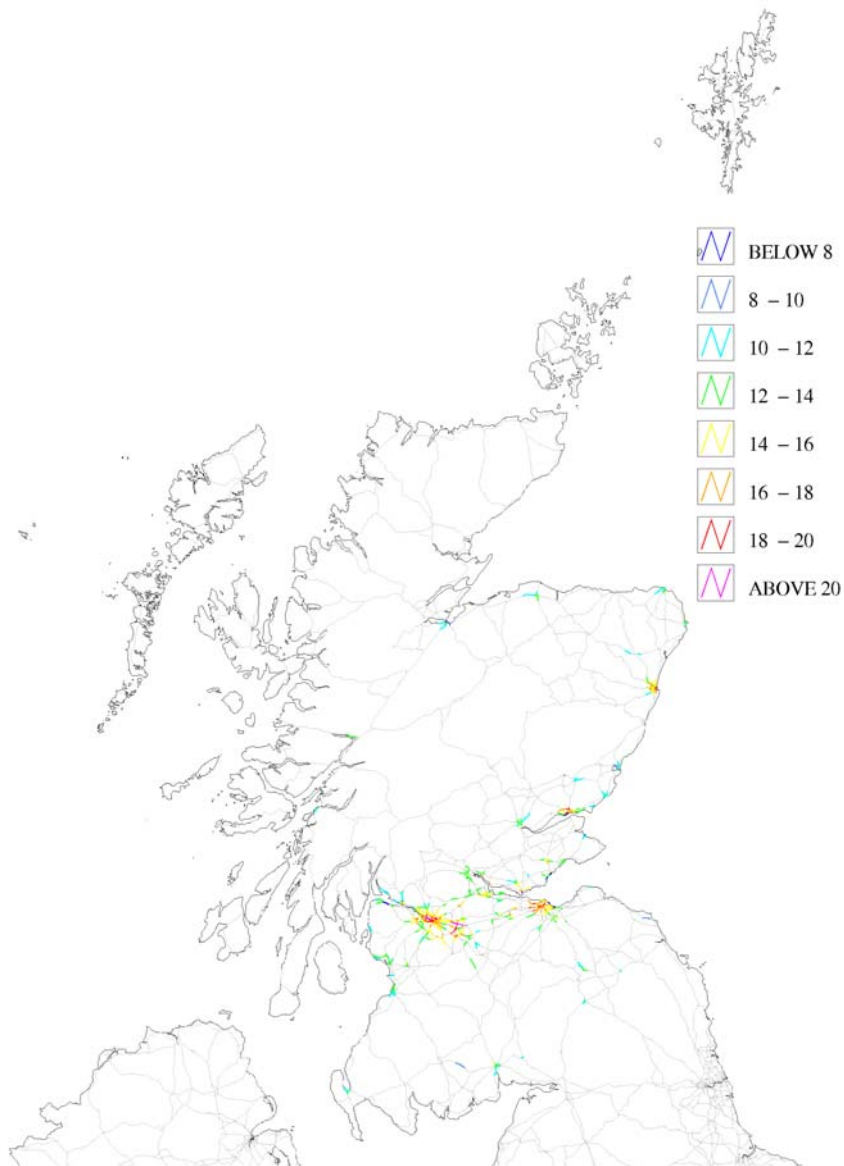


Figure B22: Gravimetric $PM_{2.5}$ map for 2007 $\mu g m^{-3}$ (roadside) (Scottish Government)

Inverness Airport is the largest airport in the Highland Region. The Inverness Airport Master Plan (2007) outlines the potential future expansion options for the airport. Air quality assessments undertaken for the master plan concluded that, although emissions were likely to increase as a result of increased air traffic (an estimated increase of $0.2 h g m^{-3}$ of NO_2); it is unlikely that these sources will have a significant impact on air quality generally.

In addition to the impacts of air pollution on human health and climate change the Air Pollution Information Service also details the impacts on habitats and species. These are not assessed under the current scope of the SEA, but should be considered in the context of individual travel appraisals and proposals.

Key Issues

Air quality in the Highland region is generally very good. However, increased traffic flows, particularly within existing built up areas, could potentially lead to a deterioration of air quality to levels below national targets.

Any increase in air travel could potentially impact on air quality and should be carefully monitored.

Data Sources

Highlands & Islands Airports (2007) *Inverness Airport Master Plan* - <http://www.hial.co.uk/Downloads/Inverness/HIA%20Inverness%20Airport%20MP%20Aug%202007.pdf>

Air Quality Scotland – <http://www.scottishairquality.co.uk>

Scottish Government *Scottish Air Quality Database Report 2008* – http://www.scottishairquality.co.uk/documents/reports2/244090615_Scottish_Government_Annual_Air_Quality_Report_2008_Issue_1.pdf

Air Pollution Information Service (APIS) – <http://www.apis.ac.uk>

Climatic Factors

SEA Objectives

To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.

Baseline Data

Greenhouse Gas Emissions

The UK is currently seeking to reduce Carbon Dioxide (CO₂) emissions by 12.5% in the period to 2008-12 under commitments made in the 1997 Kyoto Protocol (based on 1990 levels). Further to this, the Government has set an ambitious domestic target of a 20% reduction to 2010, and a 60% reduction by 2050 as outlined in the 2003 energy White Paper.

Greenhouse gas (GHG) emissions are closely monitored at national and UK-wide levels. CO₂ in particular is the main contributor to greenhouse gas emissions. National and UK monitoring information is reproduced below (Figure B23, Table B18, Figure B24 and Table B19). There is no known Highland-specific information.

In general, GHG emissions are falling each year. The UK is set to reach its Kyoto commitment, though the more ambitious domestic targets may prove to be unattainable. The transport sector is often identified as a key contributor to CO₂ emissions. Road traffic volumes and frequency of aircraft movements are forecast to increase across Scotland, including the Highland region, into the future. The LTS is unlikely to significantly reduce these levels; however, its recommendations will have an impact on wider government targets with regards to GHG emissions.

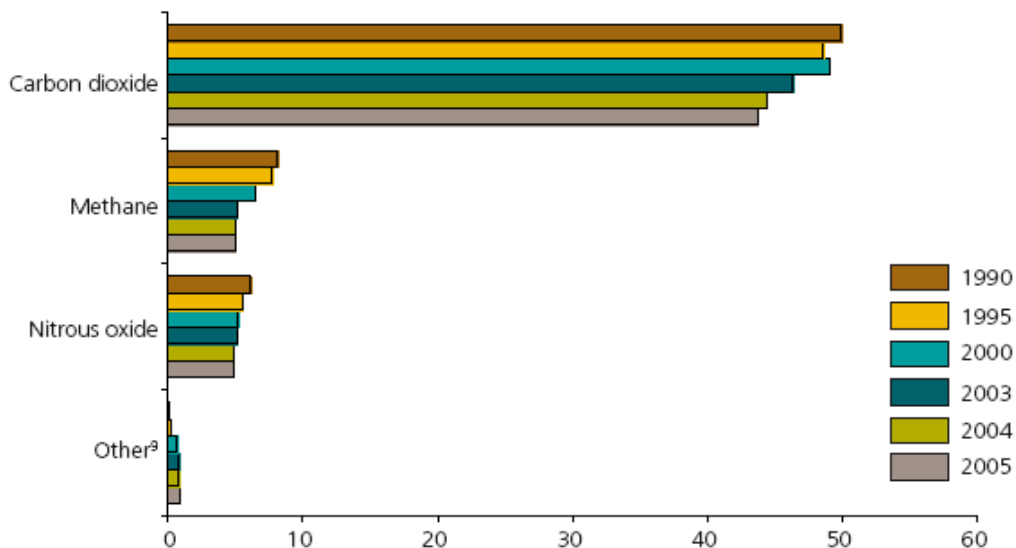


Figure B23: Net greenhouse gas emissions: 1990 – 2005 (Scottish Government)

'Basket' of GHGs	Million tonnes of carbon dioxide equivalent					
	1990	1995	2000	2003	2004	2005
Carbon Dioxide (CO ₂)	50.0	48.6	49.0	46.4	44.4	43.8
Methane (CH ₄)	8.2	7.8	6.5	5.1	5.1	5.1
Nitrous Oxide (N ₂ O)	6.2	5.6	5.2	5.1	5.0	4.9
Hydrofluorocarbons (HFCs)	0.00	0.13	0.53	0.70	0.72	0.73
Pefluorocarbons (PFCs)	0.11	0.09	0.11	0.08	0.08	0.07
Sulfur Hexafluoride (SF ₆)	0.02	0.03	0.05	0.05	0.06	0.07
Net Scottish emissions	64.4	62.2	61.4	57.5	55.3	54.6
Net UK emissions	773.0	709.7	672.0	660.0	657.0	653.8

Table B18: Net greenhouse gas emissions: 1990 – 2005 (Scottish Government)

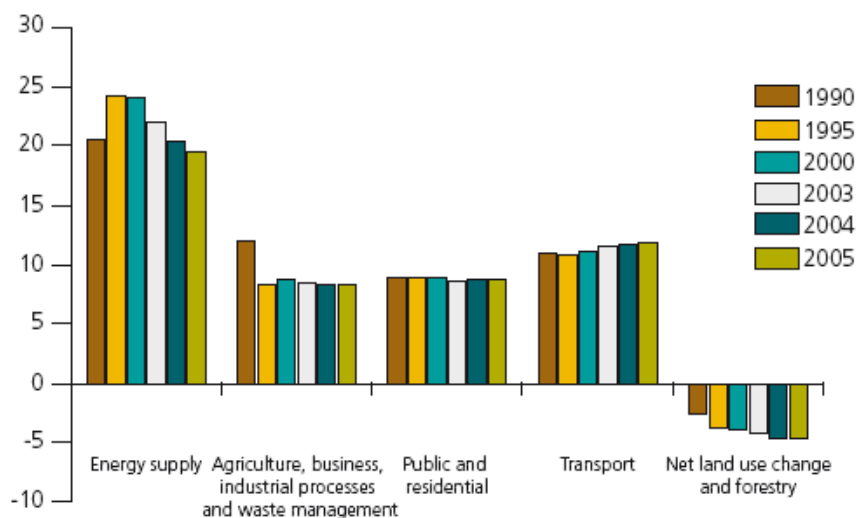


Figure B24: Net carbon dioxide emissions by source: 1990 – 2005 (Scottish Government)

Sector	Million tonnes of carbon dioxide equivalent					
	1990	1995	2000	2003	2004	2005
Energy supply	20.57	24.27	24.02	22.04	20.34	19.50
Agricultural, business, industrial processes and waste management	11.92	8.28	8.85	8.43	8.22	8.28
Public and residential	9.00	8.91	8.91	8.59	8.78	8.69
Transport	10.99	10.88	11.20	11.56	11.70	11.89
Net land use change and forestry	-2.54	-3.72	-3.94	-4.24	-4.65	-4.58
Total net emissions	49.95	48.62	49.04	46.38	44.40	43.79

Table B19: Net carbon dioxide emissions by source: 1990 – 2005 (Scottish Government)

Climate Trends

The data in Figure B25, Figure B26 and Table B20 shows current climatic trends for the UK North and the UK generally as reported by the UK Climate Impacts Programme (UKCIP). The impacts of climate change on average temperatures and precipitation levels are of key concern, particularly as these trends will have knock-on impacts for economic development, ecological stability and human wellbeing. Notably, the effects of climate change are expected to increase flood risk in future years beyond that currently predicted by SEPA.

The MONARCH Project (Modelling Natural Resource Responses to Climate Change) has undertaken some investigations into the impact of climate change on biodiversity nationally, including a case study in the Central Highlands. This data concluded that there will likely be significant changes in suitable habitat conditions for the selected flora and fauna as a result of climate change. This will need to be effectively managed through conservation and related policies and programmes at a local level, and should be considered in the context of individual travel masterplans and proposals.

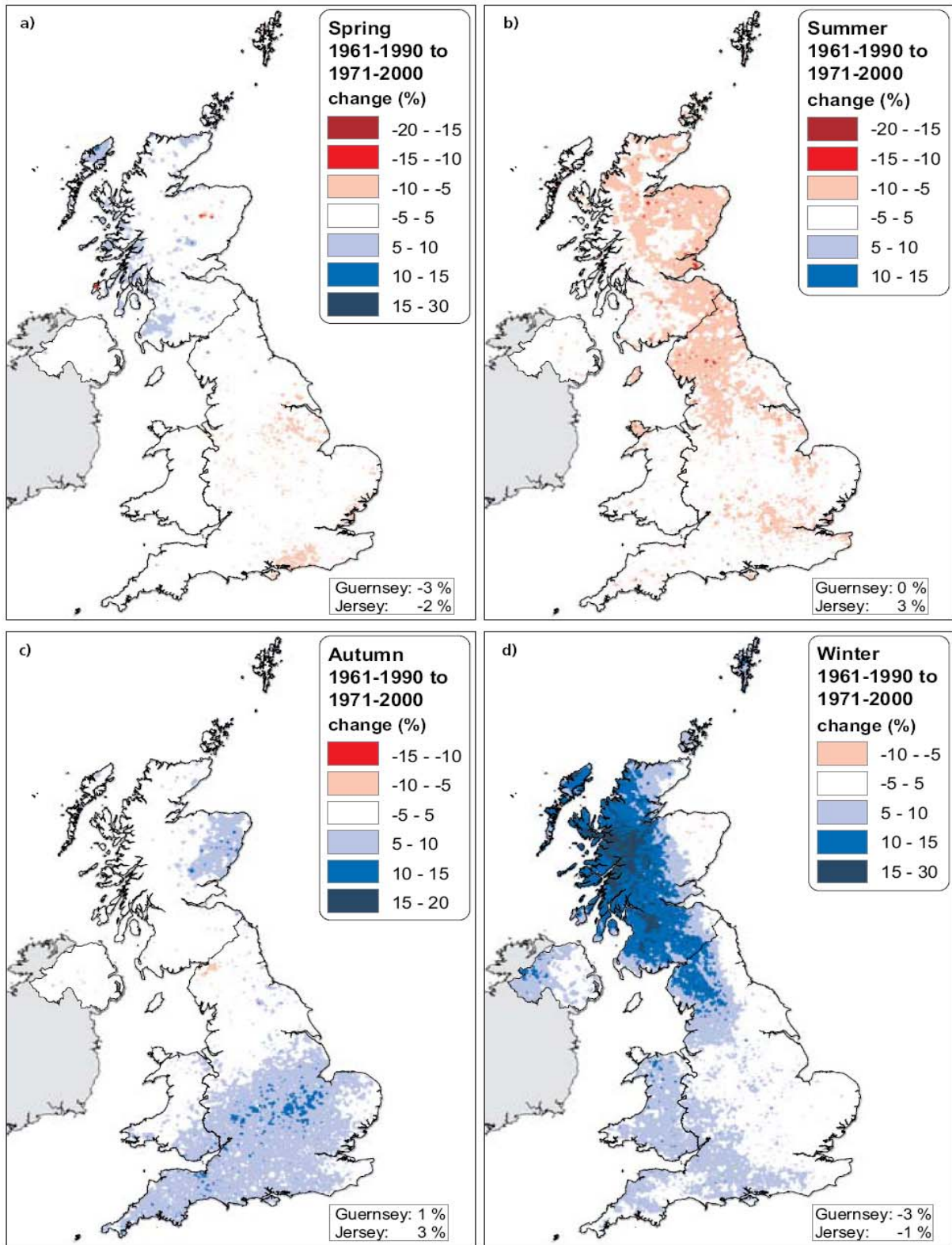


Figure B25: Precipitation levels (UKCIP 08)

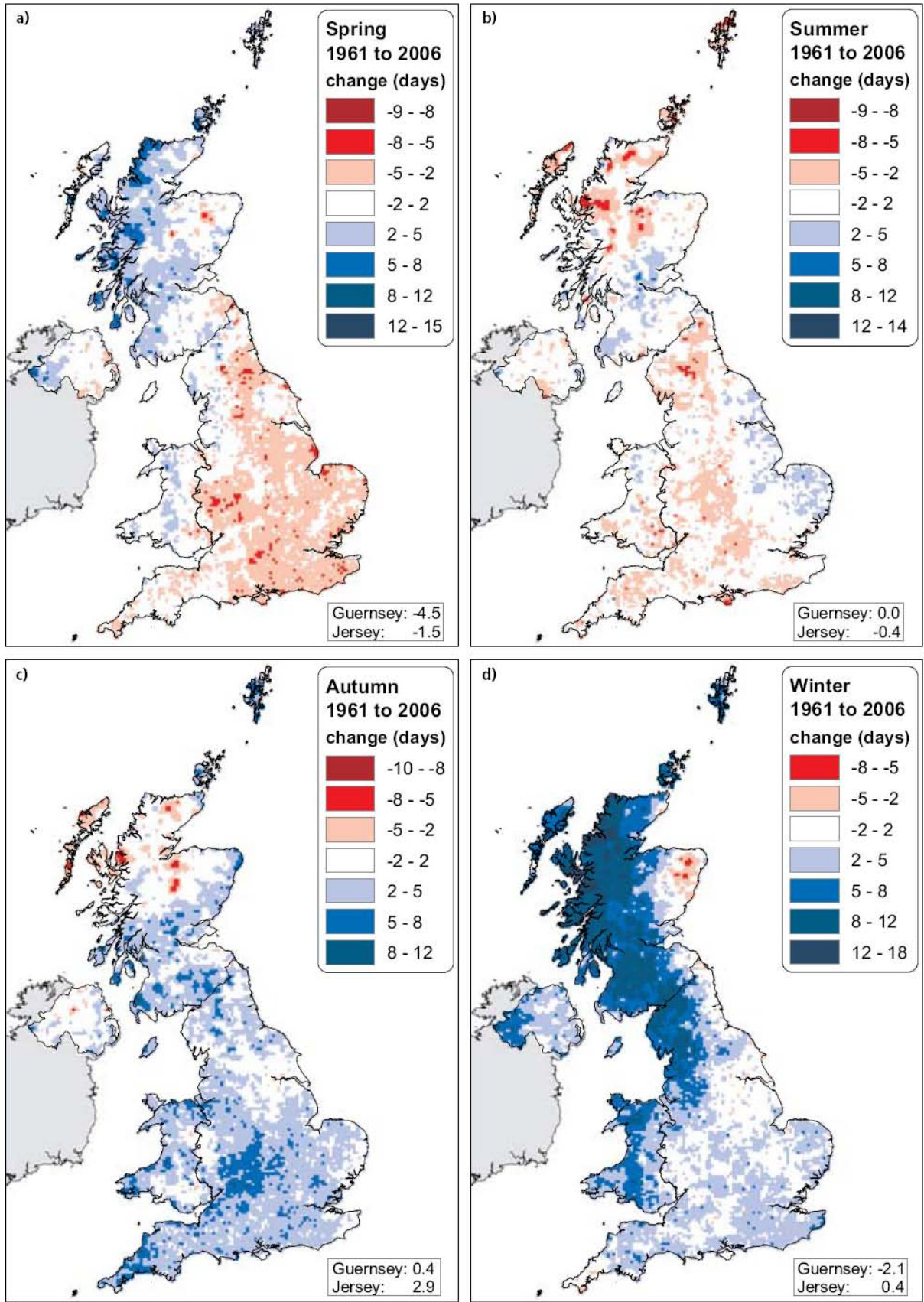


Figure B26: Annual days of rainfall (UKCIP 08)

Variable	Season	Trend	Expected Future Trend (from UKCIPO2 scenarios)
Annual Average Temperature	Spring	↑	Possible increase in all seasons, greater in south than north. This matches the trends already seen.
	Summer	↑	
	Autumn	↑	
	Winter		
	Annual	↑	
24-hour maximum temperature	Spring	↑	Maximum temperatures may increase in all seasons. The range of possible increases is smallest in winter and greatest in autumn. This matches trends we have already seen.
	Summer	↑	
	Autumn	↑	
	Winter	↑	
	Annual	↑	
24-hour minimum temperature	Spring	↑	The minimum temperature may increase more in winter than summer. This generally matches the trends already seen.
	Summer	↑	
	Autumn		
	Winter		
	Annual	↑	
Daily temperature range	Spring		This range may increase most in summer. We cannot find a trend in the information we have for summer, but some regions are showing an increasing trend in other seasons.
	Summer		
	Autumn	↑	
	Winter	↑	
	Annual	↑	
Heating degree days	Annual	↓	This may reduce in the future, which is in line with the trend already seen, but the possible reduction by the 2080s is 50% to 300% greater than that experienced so far.
Growing degree days	Annual	↑	No estimates have been made in the UKCIPO2 scenarios for this measure.
Length of the growing season	Annual	↑	A possible increase in the length of the growing season of 20 to 60 days by the 2080s. We have seen a similar trend but the spatial pattern is different.
Growing season start and end dates	Start	↓	Estimates for the start of the growing season are similar to those we have already seen, but suggest a later end to the growing season than has been seen already.
	End	↑	
Extreme temperature range	Annual		No estimates have been made in the UKCIPO2 scenarios for this measure.
Length of summer heat waves and winter cold spells	Summer		No estimates have been made in the UKCIPO2 scenarios for this measure.
	Winter		
Air frost	Spring	↓	No estimates have been made in the UKCIPO2

Variable	Season	Trend	Expected Future Trend (from UKCIPO2 scenarios)
	Summer	↓	scenarios for this measure, but the reductions in minimum temperatures expected should mean some reduction in the number of air frosts. This matches the trend already seen.
	Autumn	↓	
	Winter		
	Annual	↓	
Ground frost	Spring	↓	No estimates have been made in the UKCIPO2 scenarios for this measure, but the reductions in minimum temperatures expected should mean some reduction in the number of ground frosts. This matches the trend already seen.
	Summer	↓	
	Autumn	↓	
	Winter	↓	
	Annual	↓	
Early and late season frosts (based on individual weather stations)	Early		No estimates have been made in the UKCIPO2 scenarios for this measure, but the reductions in minimum temperatures expected should mean some reduction in the number of early and late season frosts. This matches the trend already seen.
	Late	↓	
	Frost-free period		
Average precipitation total	Spring		Winter months may become wetter while summer months may be drier than at present. The spatial pattern of change expected is the opposite of the trend that has already been seen.
	Summer		
	Autumn		
	Winter	↑	
	Annual	↑	
Snow cover	Spring		The UKCIPO2 scenarios present a different measure but winter snowfall may reduce by 50% or more across Scotland by the 2080s Medium High scenario. The spatial pattern of possible change is again different from the trend already seen.
	Autumn	↓	
	Winter		
	Annual	↓	
Days of heavy rain each year	Spring		No estimates have been made in the UKCIPO2 scenarios for this measure.
	Summer		
	Autumn		
	Winter	↑	
	Annual	↑	
Number of consecutive dry days	Annual		No estimates have been made in the UKCIPO2 scenarios for this measure.
Average rainfall intensity	Annual		The intensity of rainfall may increase in winter months. A contrasting change between the east and west, with most extreme changes taking place in eastern Scotland, is expected.
Maximum five-day rainfall	Annual	↑	No estimates have been made in the UKCIPO2 scenarios for this measure.

Table B20: Climate Trends Across Scotland, UK North (SNIFFER Handbook)

There is no comprehensive region-specific climatic trend data for the Highland region. SNH has advised that THC climatic data is currently being collated. This information is currently unavailable for assessment under this SEA. Consideration should be given to this data as it becomes available and as travel appraisals are being developed.

Key Issues

Increase traffic generation may contribute to greenhouse gas (GHG) emissions and therefore impact upon the government's targets to reduce GHG emissions by 60% by 2050.

Climate induced sea level rise will increase risk of flooding above that outlined in SEPA's flood risk maps which outline a 1 in 200 year event, but do not incorporate estimates of increased risk due to climatic factors.

The impacts of climate change as related to bioclimate will likely have a significant effect on the distribution of species and habitats over time, with implications for local conservation management.

SNH has advised that Highland Council climatic data is currently being collated. This information is currently unavailable for assessment under this SEA. Consideration should be given to this data as it becomes available and as travel masterplans are being developed.

Consideration should be given to the potential for landslips and/or flooding where interventions are proposed in coastal areas, areas of known flood risk, and areas of the Highlands where interventions would be bounded by steep sided slopes.

Data Sources

SNIFFER Handbook of Climate Trends across Scotland – http://www.sniffer.org.uk/Resources/CC03/Layout_ClimateChange/12.aspx?backurl=http%3A%2F%2Fwww.sniffer.org.uk%3A80%2Fthemes%2Fclimate-change.aspx&selectedtab=completed

UKCIP 08 Report on The Climate of the UK and Recent Trends – http://www.ukcip.org.uk/index.php?id=469&option=com_content&task=view

Scottish Government *Key Scottish Environment Statistics 2008* - <http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/KSES08presentationpdf>

Cultural Heritage

SEA Objective

To promote, conserve, and where possible enhance the historic environment of the Highlands.

Baseline Data

The Highland region benefits from a vast and diverse cultural heritage. This is evidenced by the number of designated sites and structures which represent to the region's historic environment (Table B21 and Figure B27).

Designation	Description	Total No. of Sites	Total Area (km²)
Listed Buildings	Built structure protected for its historical or architectural quality.	Unknown	-
Scheduled Monuments	An archaeological or historical site protected under the Ancient Monuments and Archaeological Areas Act 1979.	1,237	-
Archaeological Sites	Known sites of archaeological remains or significance.	52,605	-
Historic Gardens and Designed Landscape areas	Area designated for its importance and contribution to natural and cultural heritage.	51	71
Conservation Areas	Area of architectural or historic interest.	30	-

Table B21: Summary of cultural heritage designations

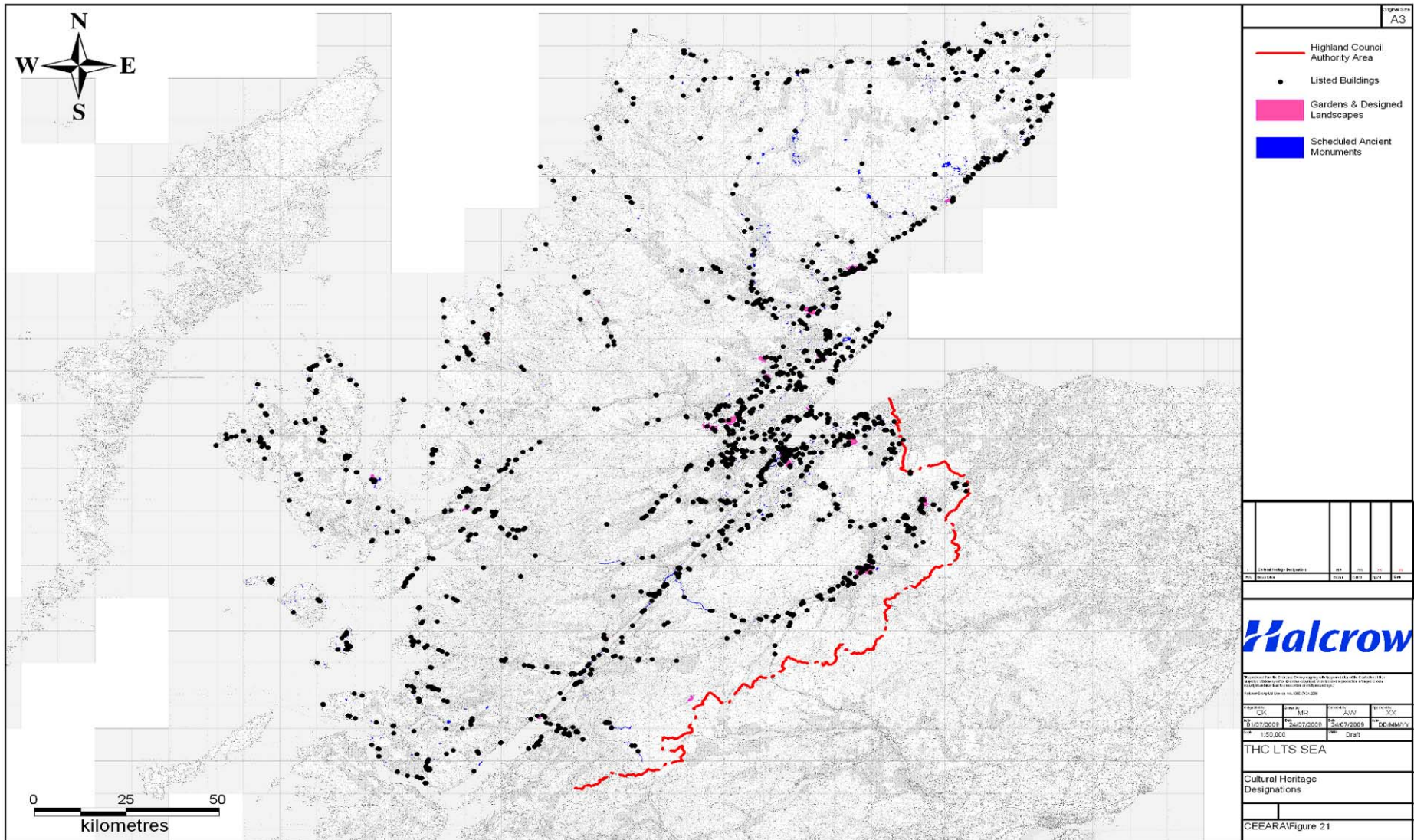


Figure B27: Summary of cultural heritage designations

The dispersal of archaeological sites across the Highland region is of key concern. Historic Scotland aims to avoid conflict between the alignment of new transport infrastructure, particularly trunk roads, and archaeological sites. Given the extensive scope of the study area, issues relating to specific archaeological sites are not considered here. This should be considered through individual transport appraisals.

The Highland Council Historic Monument Record contains information of historic buildings and archaeological sites and is updated on a monthly basis. This should be referred to at the transport appraisal stage.

Key Issues

A significant number of sites and structures across the Highland region are protected for their significance to the cultural heritage and historic environment. Conflict with archaeological sites is of particular concern in selecting sites and aligning transport infrastructure.

Data Sources

Historic Scotland – <http://www.historic-scotland.gov.uk>

Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS) – <http://www.rcahms.gov.uk/>

The Highland Council Historic Environment Record – <http://her.highland.gov.uk/>

Landscape

SEA Objective

To protect and, where appropriate enhance the landscape and visual amenity of the highlands.

Landscape Designations

The landscape quality of the Highland region is world renown and well documented. A number of sites are protected for their contribution to the locally distinct landscape environment (Table B22).

Designation	Description	Total No. of Sites	Total Area (km ²)
National Scenic Areas	Nationally designated landscape areas.	16	5,398
Historic Gardens and Designed Landscape areas	Area designated for its importance and contribution to natural and cultural heritage.	51	71
National Parks	Nationally designated areas of natural beauty and ecological, archaeological, geological and recreational value.	1	1,660
Area of Great Landscape Value (AGLV)	Locally designated areas of particular ecological or visual value or continuity to the local landscape.	29	N/A

Table B22: Summary of landscape designations

Figure B26 shows the location of the AGLVs within the Highland Council boundaries as set out in the Highland Council Structure Plan. Proposal L3 within the Structure Plan states that '*Local Plans will identify Areas of Great Landscape Value in general accordance with the areas indicatively identified in Figure B26. Existing Areas of Great Landscape Value and other designations will be reviewed by The Council and brought forward for inclusion in the Structure Plan*'.

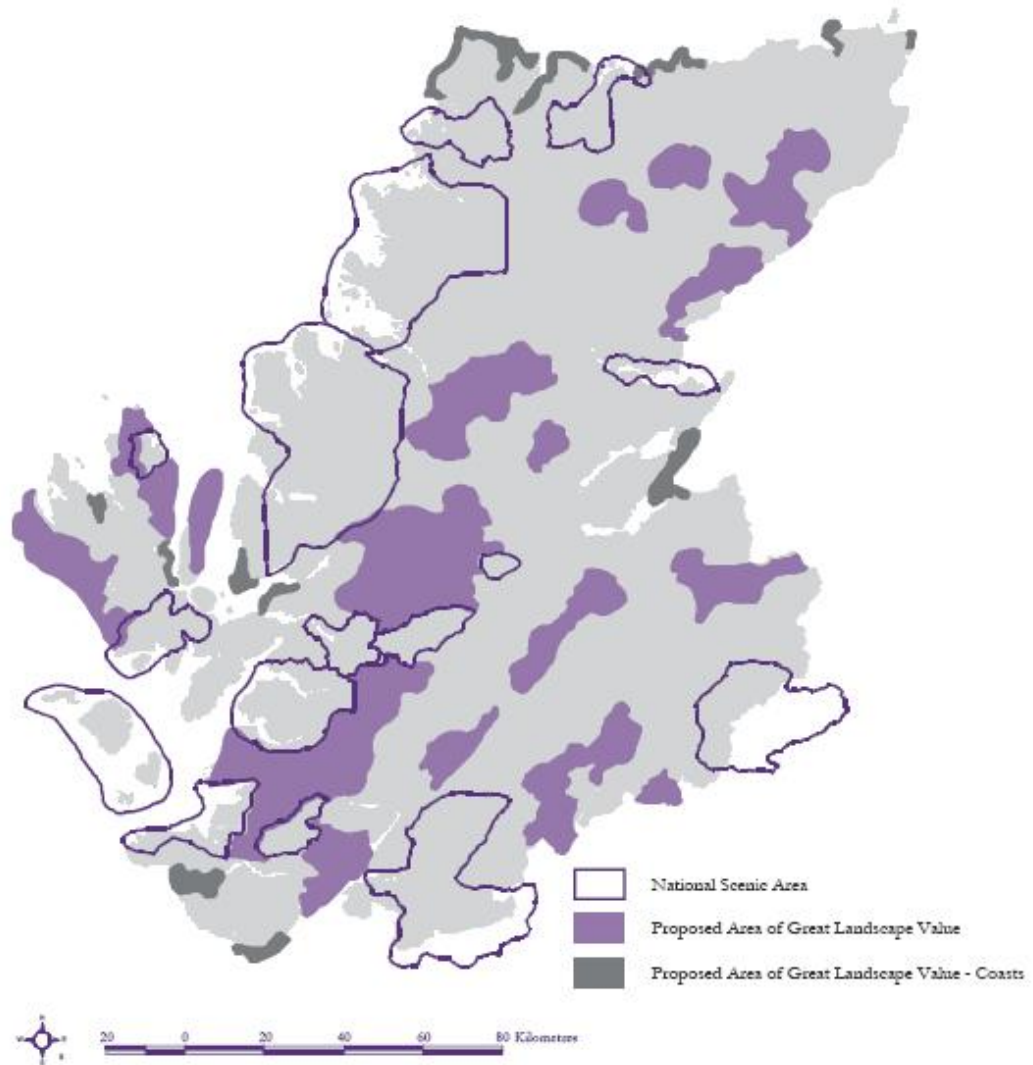


Figure B28: Areas of Great landscape Value (The Highland Council Structure Plan, 2001)

The following excerpt from *Natural Heritage Zones: A National Assessment of Scotland's Landscapes* (SNH, 2002) provides an overview of the landscape character of the Highland region:

“The sense of vertical scale provided by mountains, and the degree of enclosure they can create characterises much of the Highland landscape. The mountains created structure and form, reveal and frame views, offer a sense of mystery, provide the backdrop for more intimate landscapes, and reinforce a sense of height, distance and grandeur within sweeping panoramas. In areas of high relief such as Torridon and the far north west, the mountains dominate the landscape in terms of both form and vertical scale, and contrast sharply with the horizontal expanse of both sea and low lying plateau. In the central and southern Highlands, relief is lower and the landscape is more enclosed, with long glens winding into the interior of the mountain massifs, or fjord-like lochs reaching out to the rocky western coastline.”

“These northern landscapes are perceived to be relatively natural. This perception is based on the lack of obvious human presence and intervention in the landscape as well as on the sense of exposure and openness. The landscape has, however, at least in part been created by human action, most notably through the removal of natural woodland and the modification of heath and bog vegetation by burning and grazing. The sense of wilderness associated with the more remote mountain and coastal areas and islands is further emphasised by the inaccessibility, due to relatively long travelling times, from the main areas of population, and is much valued today.”

SNH has also published a number of Landscape Character Assessments undertaken for the Highland region, including:

- Cairngorms (1996);
- Inner Moray Firth (1998);
- Ben Alder, Ardverikie and Creag Meagaidh (1999);
- Inverness District (1998);
- Moray and Nairn (1998);
- Caithness and Sutherland (1998);
- Skye and Lochalsh (1998);
- Lochaber (1998); and
- Ross and Cromarty (1999).

These assessments describe the significant and distinct local landscape features within the study area and set out recommendations for consideration in new development. These should be considered through individual transport appraisals.

Key Issues

There are a significant number of sites designated for their contribution to the landscape character and quality of the region.

The landscape character of the Highlands is distinct. This is shaped by the local land form and the historic lack of human activity and development to form an overall sense of ‘remoteness’ through the region.

Data Sources

Scottish Natural Heritage – <http://gateway.snh.gov.uk>

SNH *Natural Heritage Zones: A National Assessment of Scotland's Landscapes (2002)* – <http://www.snh.org.uk/futures/Data/pdfdocs/LANDSCAPES.pdf>

The Highland Council Structure Plan, Written Statement, March 2001.

Material Assets

SEA Objectives

To improve, integrate and enhance the existing transport infrastructure of the Highlands and to further benefit the economy of the region.

Baseline Data

Pedestrian / Cycle Infrastructure

Sustrans, the sustainable transport charity, manages the National Cycle Network (NCN) in the UK. This network includes over 2,900 km of cycle paths in Scotland.

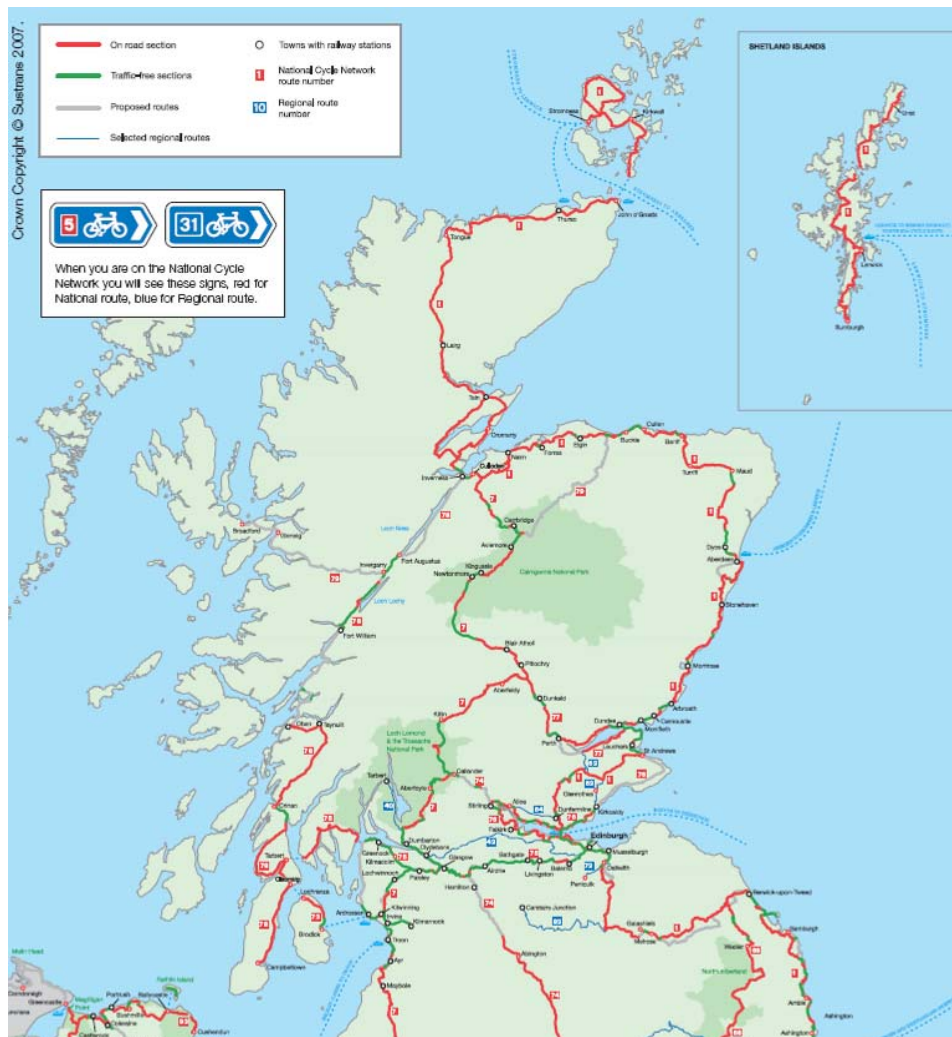


Figure B27: National Cycle Network in Scotland (Sustrans 2007)

Existing NCN routes in the Highland region include:

- Route 1: Aberdeen to John o' Groats, Orkneys & Shetland (806 km)
- Route 7: Lochs and Glens South (343 km)

- Route 7: Lochs and Glens North (349 km)
- Route 78: Oban to Campbeltown (193 km)

A number of NCN routes are also planned or currently in development within the Highland region, including:

- Route 78: Oban to Fort William (857 km)
- Route 78: Fort William to Inverness (103 km)
- Route 79: Speyside Way (84 km)
- Route 79: Invergarry to Skye (93 km)

Some of these routes also coincide with Long Distance Routes (LDR's), designated under the Countryside (Scotland) Act 1967. Three of these occur in the Highland region, including:

- The West Highland Way (152 km)
- The Great Glen Way (117 km)
- The Speyside Way (84 km)

Regionally, THC has a statutory requirement under the Land Reform (Scotland) Act 2003 to produce Core Path Plans for its area. Draft Consultative Plans are available for the Highland region, presented in six access areas, including:

- Ross and Cromarty;
- Inverness and Nairn;
- Skye and Lochalsh;
- Sutherland;
- Caithness; and
- Lochaber.

These outline the preferred network of key routes and links at a local level and are not assessed under the scope of this SEA. The integration of new routes to Core Paths should be considered in the context of individual travel appraisals and proposals.

Consultation with SNH highlighted the need to include information relating to Upland Paths across the Highland region, however no comprehensive information has been obtained and this is therefore seen as a data gap.

Road Infrastructure

The Scottish Government reports that there was 54,858 km of public road in Scotland (April 2006). Over a quarter (932 km) of the total trunk road network, and about one-seventh of the Scottish road network (7,606 km), is within the area of the Highland Council. This is higher than any other local authority area.

The condition of the road network in Scotland was assessed in 2006. The condition of the roads were classified as green (no repairs needed), amber (further investigation required to determine if treatment is required) or red (repairs likely required to prolong the road's future life). It was determined that roughly 34% of the A-road network and 47% of the local authority road networks in Scotland required some form of maintenance. These figures were somewhat less for The Highland Council area (Table B23).

	A-roads		All roads	
	Red	Amber or Red	Red	Amber or Red
Highland (%)	4	28	11	39
Scotland (%)	6	34	13	47

Table B23: Road network condition, 2006 (Scottish Government)

Information regarding investment in the Scottish road network in the form of new trunk roads and maintenance to existing trunk roads is set out in Table B24 and Table B25. There is no local authority-specific data for The Highland Council area.

	Estimated lane-kilometre							
	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8
New Roads	32	5	9	24	89	108	7	-
Reconstructed	31	53	58	86	105	142	114	63
Strengthened	133	209	304	319	256	280	324	151
Surface dressed	191	59	178	34	121	66	88	79
Total	387	326	549	463	571	596	533	293

Table B24: Trunk road construction and maintenance, Scotland (Scottish Government)

	New road	Re-constructed	Strengthened	Surface dressed	Total
NW	-	14%	35%	73%	28%
NE	6%	13%	13%	18%	12%
SW	94%	27%	40%	5%	43%
SE	-	46%	12%	5%	17%

Table B25: Trunk road construction and maintenance by region, 2005-6 (Scottish Government)

Water, Wastewater and Drainage Infrastructure

Scottish Water is currently investing in hundreds of major improvements to water-related infrastructure across the Highlands in line with their Highlands 2010 vision. These improvements include upgrades to existing wastewater treatment facilities and new sewers.

Upgrades to existing roads and the introduction of new roads will need to take account of water and drainage infrastructure. This should be considered under individual travel assessments.

Waste

The amount of municipal waste generated in Scotland generally increases each year (Figure B28).

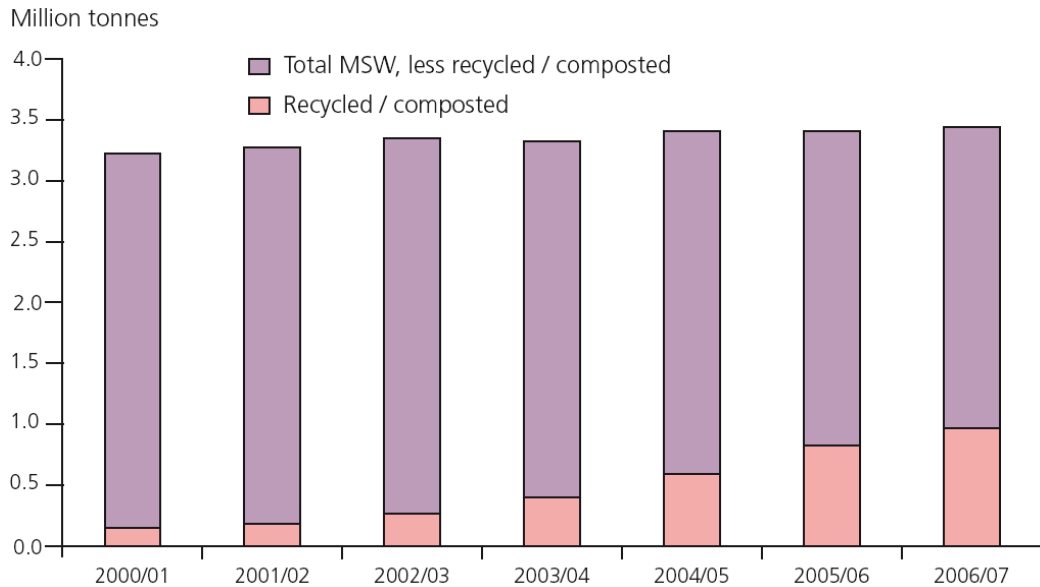


Figure B28: Municipal solid waste (MSW) 2000/01 – 2006/07, Scotland (Scottish Government)

National policy targets set out in the National Waste Strategy seek to reduce the amount of waste going to landfill through recycling, composting and other recovery initiatives. Data released by the Scottish Government indicate that these types of initiatives have had an impact, decreasing the amount of waste going to landfill by 35% from 2000 – 2006 (Figure B29).

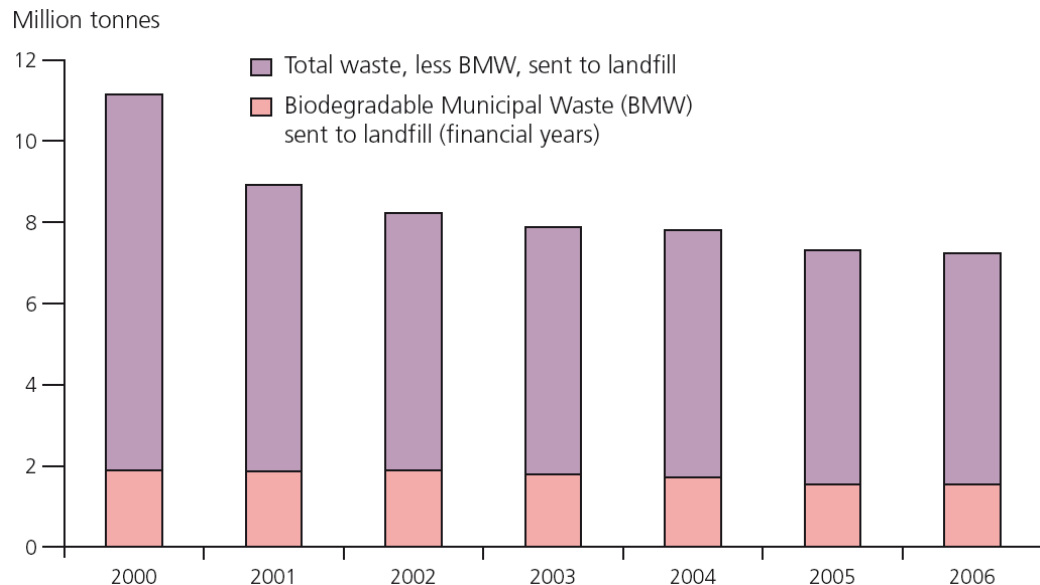


Figure B29: Waste sent to landfill 2000 – 2006, Scotland (Scottish Government)

The Highland Council managed 164,315 tonnes of municipal waste in 2007/8. Of this, 113,910 (69.3%) tonnes was sent to landfill. This represents a 30.3% decrease in waste sent to landfill from 2000/1 figures (Table B26).

	2000/1	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8
Waste to landfill (tonnes)	163,412	135,035	137,258	140,418	144,095	128,997	121,052	113,910

Table B26: Waste sent to landfill 2000/1 – 2007/8, The Highland Council (SEPA)

Recycling rates for The Highland Council area are relatively low compared with the rest of Scotland (Figure B30).

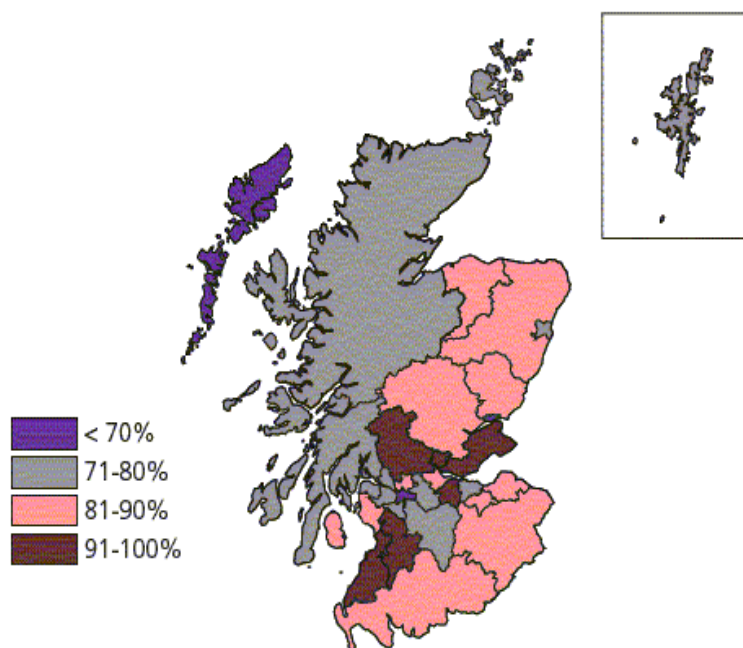


Figure B30: Percentage of households surveyed who had recycled certain waste items in the past month (2005/6) (Scottish Government)

The recycling and composting rate for The Highland Council area for 2007/8 was 30.7%. 68,572 (64.9% households and 77 (1.7%) commercial premises received kerbside recycling collection. In addition to this, The Highland Council operated 190 recycling points and 21 recycling centres.

The National Waste Strategy sets a 2010 target recycling rate of 40% for all Local Authorities in Scotland. In order to achieve this, it will be important to increase residents' access to recycling services, either through kerbside pickup or to local recycling points and centres. This should be considered through individual transport assessments.

Core Paths Network

Under the Land Reform (Scotland) Act 2003, Highland Council, as the Access Authority, has a statutory requirement to produce a Core Path Plan. The aim of the plan is to identify a path network for recreation and provide linkages to the wider transport network. Often these paths will already be in use and can range from tracks worn into natural ground to high-specification constructed paths.

Plans have been drafted to cover the following area;

- Ross and Cromarty -
- Inverness and Nairn
- Skye and Lochalsh
- Sutherland
- Caithness
- Lochaber

The SEA team will carry out a review at the Environmental Report stage of the extent of the core path plan and its linkages with Sustran routes and upland tracks.

Key Issues

The Highland Council area includes over a quarter of the total trunk road network and about one-seventh of the Scottish road network, more than any other local authority. Roughly 28% of all trunk roads and 39% of the roads network in The Highland Council area were estimated to be in need of repair in 2006.

Scottish Water is currently making significant improvements to the water, wastewater and drainage infrastructure in the Highlands. These need to be considered in line with individual transport assessments.

The Highland Council does not compare well to other local authority areas with regard to recycling. It had a recycling and composting rate of 30.7% for 2007/8. In order to achieve the 2010 target of 40%, it will be important to increase residents' access to recycling services, either through kerbside pickup or to local recycling points and centres. This should be considered through individual transport assessments.

There are a number of pedestrian and cycle networks throughout the Highland region. LTS policy should link to existing routes and use existing infrastructure where possible.

Data Sources

Sustrans Annual Review (2008) - http://www.sustrans.org.uk/assets/files/Publications/sustrans_annual_review_08_scotland.pdf

Sustrans in Scotland (2007) - <http://www.sustrans.org.uk/assets/files/leaflets/ncn-scotland.pdf>

The Highland Council Draft Consultative Core Paths Plans - <http://www.highland.gov.uk/leisureandtourism/what-to-see/countrysideaccess/corepathplans.htm>

Scottish Government *Scottish Transport Statistics No. 26: 2008 edition* - <http://www.scotland.gov.uk/Publications/2008/12/22091243/0>

- Scottish Water *Highlands* 2010 *Vision* –
http://www.scottishwater.co.uk/portal/page/portal/SWE_PGP_INVESTMENT/SWE_PGE_INVESTMENT/SWE_INV_HIGH_2010
- Scottish Government *Key Scottish Environment Statistics* 2008 –
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/KSES08presentationpdf>
- Scottish Government *Trend – Households Recycling Selected Items* –
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/TrendWasteRecycling>
- SEPA *Waste Data Flow Annual Report 2007/2008: Results for Highland Council* –
http://www.sepa.org.uk/waste/waste_data/waste_data_reports/idoc.ashx?docid=83ff4575-adf8-43fb-8946-037a3078d4ab&version=-1

Noise

Objective

To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.

Baseline Data

Due to the rural nature of the Highlands Region noise disturbance is not considered to be a significant issue however it should be considered in certain urban locations as road traffic is one of the main sources of noise pollution.

The World Health Organisation noise guidance states 'general daytime outdoor noise levels of less than 55dB(A) L_{eq} are desirable to prevent significant community annoyance

Inverness Airport is the largest airport in the Highland Region. The Inverness Airport Master Plan (2007) outlines the potential future expansion options for the airport. This presents noise assessments undertaken in 2005 showing the extent of noise related to air traffic. At present there is a low level of community noise disturbance (Figure B31 and B32)

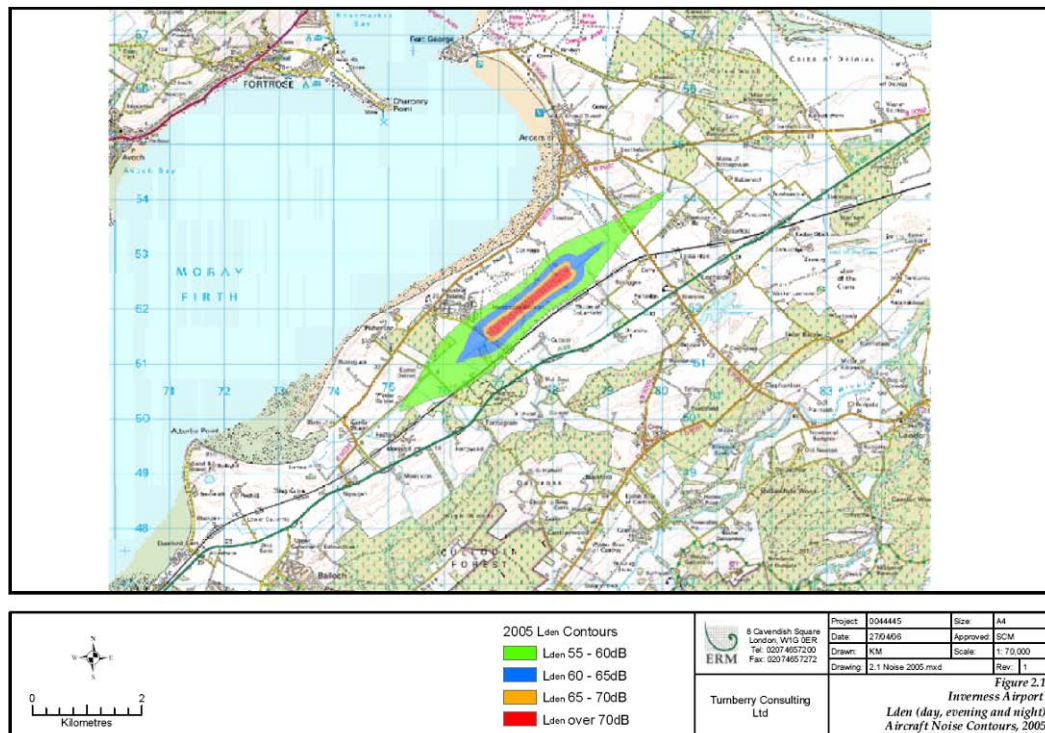


Figure B31: 2005 L_{den} noise contours (day-evening-night), Inverness Airport (HIAL 2007)

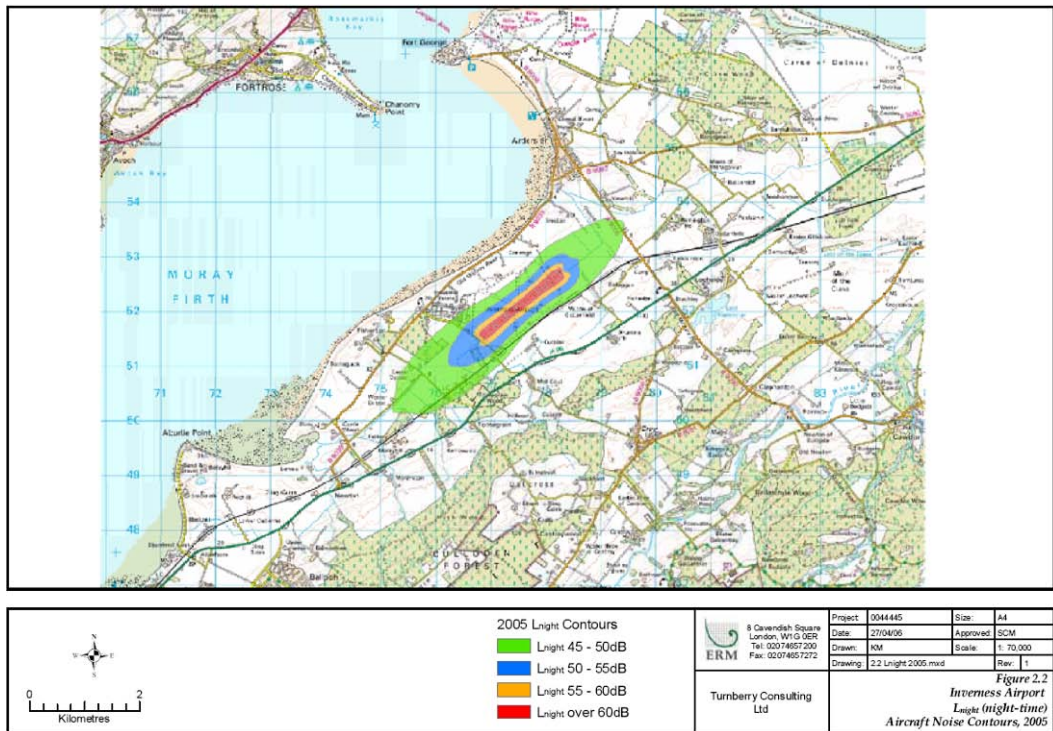


Figure B32: 2005 L_{den} noise contours (night), Inverness Airport (HIAL 2007)

Future growth models are also presented for levels of growth to 2015 and 2030. As expected, the extent of the noise disturbance contour lines expands with increased air traffic over time. Notably, the expected impact of noise disturbance does not, at present, conflict with any major existing or proposed housing development.

Key Issues

There is currently no readily available data to current baseline noise levels in the Highland region.

Consideration should be given to the impact of noise and vibration on the marine environment and on Listed Buildings.

Consideration should be given to impact of noise and vibration if there is an increase in air travel

Data Source

World Health Organisation Health Criteria Document 12 'Noise' Geneva, 1980 – <http://www.inchem.org/documents/ehc/ehc/ehc012.htm>

Highlands & Islands Airports (2007) *Inverness Airport Master Plan* - <http://www.hial.co.uk/Downloads/Inverness/HIA%20Inverness%20Airport%20MP%20Aug%2007.pdf>

Highlands & Islands Airports (2007) *Inverness Airport Master Plan Appendix IV* - <http://www.hial.co.uk/Downloads/Inverness/Master%20Plan%20Appendix%20IV.pdf>

Appendix C

Appraisal Tables – Vision and Objectives

Table C1: Guide to assessment criteria used in assessment of vision and objectives

Compatibility		Significance	
✓	Compatible	++	<i>Significant positive impact</i>
✘	Not Compatible	+	<i>No or minimal positive impact</i>
-	No or negligible relationship	?	<i>Neutral or unknown impact</i>
		-	<i>No or minimal negative impact</i>
		--	<i>Significant negative impact</i>

SEA Objectives

1	Biodiversity	To protect and, where possible enhance the natural environment including designated sites and protected species (on a local, national and international level), and to conserve and enhance the existing environment where possible.
2	Population and Human Health	To promote accessibility, health and quality of life through the integration of the LTS.
3	Soil	To promote the use of brownfield sites and the sustainable use of local sites and resources. The local ground environment and any high quality agricultural land will be protected and enhanced where possible.
4	Water	To prevent the deterioration of the water environment (including ground and surface waters) and any associated protected sites and flood plain areas.
5	Air Quality	To protect and enhance the current air quality of the highland area.
6	Climatic Factors	To reduce energy consumption and contribute towards a more sustainable transport infrastructure through a reduction in greenhouse gas emissions.
7	Material Assets	To protect and enhance existing infrastructure and promote more sustainable transport.
8	Cultural Heritage	To protect and, where appropriate, enhance the historic environment of the highlands.
9	Landscape and Visual Amenity	To protect and, where possible enhance the landscape and visual amenity of the highlands.
10	Noise	To minimise noise and vibration related to the transport network, and to protect sensitive receptors from excessive noise and vibration levels.

COMPATIBILITY ASSESSMENT

LTS Vision	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
Through its Local Transport Strategy, the Highland Council seeks to enable and facilitate development and economic growth; support, include and empower communities, and create sustainable environments in which people can live, work and travel.	✓	✓	-	-	✓	✓	✓	-	✓	-	The LTS can help create improvements to the environment through the incorporation of habitat enhancements and sensitive designs. The creation of more sustainable environments will also help to encourage a modal shift to sustainable forms of travel.	Recommend re-wording to clarify that the Council will seek “to enable and facilitate <i>sustainable</i> development and economic growth; support, include and empower communities <i>through transparent decision-making</i> ; and <i>establish a transport network which supports</i> sustainable environments in which people can live, work and travel” through this strategy.

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
<p>Economy: Provide a transport network to enable sustainable economic growth, noting the very different conditions between urban and rural locations.</p> <ul style="list-style-type: none"> • Tackle congestion at key points to provide a more efficient transport system. • For larger urban areas, providing for and creating the conditions to encourage a shift to more sustainable modes; and discourage the dependence on private car for travel. • For rural and remote areas, facilitating transport / travel to enable economic involvement. 	-	✓	-	-	✓	✓	✓	-	✓	-	<p>The promotion of a transport network to fulfil the highlighted points will result in beneficial impacts to the environment through providing benefits to local populations and their associated health, as well as encouraging a modal shift to sustainable transport modes resulting in benefits to air quality and climate change. The incorporation of new design will also provide the scope to improve the landscape/streetscape of the area through sensitive designs.</p>	<p>Recommended rewording: <i>“For rural and remote areas, facilitating improvements to public transport / travel services to enable continued economic involvement”</i>.</p> <p>Rewording the objective helps to emphasise the modal shift away from private vehicles.</p>

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
<p>Social Inclusion: Facilitate travel to enable economic / social involvement and improve access / travel choices to essential services for those without access to a private car.</p> <ul style="list-style-type: none"> • Improve and maintain road conditions (maintenance) particularly for routes which are lifeline connections. • Improve / maintain connections to islands (within Highland Council Area). • Improve accessibility in larger / growing urban areas for non car modes, particularly in areas of social deprivation. • Promote the conditions through new design / implement changes to existing residential areas which enable efficient public transport. 	-	✓	-	-	✓	✓	✓	-	✓	-	<p>Policies to improve social inclusion will benefit population and human health as well as leading to improvements to air quality and climate change.</p>	<p>Objective should be reworded to state the methods of transport to be used to increase connectivity to the islands to enable an accurate assessment of the objective to be undertaken.</p>

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
<p>Environment: manage / reduce the impacts of transport on the natural and built environment.</p> <ul style="list-style-type: none"> • Reduce visual impact of new roads / road improvements particularly in open / rural areas. • Improve the quality of the built environment through best practice design in new transport schemes. • As a minimum maintain air quality within National Air Quality Strategy (NAQS) national standards for transport related pollution. • Safeguard the natural and built environment by minimising the impact of transport. 	x	✓	x	x	✓	✓	✓	x	✓	x	<p>With the exception of air quality and visual impact, this objective does not explicitly respond to those environmental issues within the Highlands which are particularly at risk through the provision and upkeep of transport infrastructure. It also promotes the provision of new infrastructure without considering re-use or re-development of brownfield sites. This would potentially result in negative impacts to biodiversity, soil and water quality, cultural heritage, landscape and visual amenity and noise related outcomes, particularly in rural and remote areas of the Highlands.</p>	<p>Consider revising sub-objective text to explicitly respond to the risks associated with the provision of new transport infrastructure. The objectives set within the SEA should be considered to be integrated within the LTS vision.</p>

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
<p>Health: Increase levels of cycling walking to promote health improvement and modal shift.</p> <ul style="list-style-type: none"> Promote the development of walkable neighbourhoods, through the promotion of travel awareness and the appropriate location and internal design of new and existing developments. Promote higher levels of cycling through travel awareness and the provision and maintenance of appropriate infrastructure. 	-	✓	-	-	✓	✓	✓	-	✓	✓	<p>This objective ultimately promotes a more compact urban form, thereby reducing land-take for new development / infrastructure provision. The promotion of sustainable travel methods will benefit both local air quality and climate whilst also resulting in associated benefits to both noise and landscape/visual amenity.</p>	<p>Consider replacing “appropriate location” with text that more clearly promotes siting new development within existing settlement networks and, specifically, to prioritise brownfield development wherever possible to continually safeguard greenfield sites where possible.</p>
<p>Road Safety: Improve road safety addressing locations where road accidents are above average levels.</p>	-	✓	-	-	-	-	-	-	-	-	<p>Improving road safety on the network will result in benefits to human health.</p>	<p>Consider extending the scope of road safety to include wildlife, particularly along the trunk road network where wildlife fatalities arise as a result of road traffic accidents</p>

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
Personal Safety: Address issues of perceived safety and personal security particularly where they are a barrier to walking, cycling and public transport.	-	✓	-	-	✓	✓	✓	-	-	-	Through improving personal safety and security a modal shift to more sustainable modes of transport will be encouraged.	Consider re-wording to <i>“Address real and perceived issues relating to safety and personal security, particularly where they are a barrier to walking, cycling and public transport.”</i>
Policy Integration: Identify policy overlap across Council services, and with other public bodies (e.g. NHS), maximise benefits and minimise contradiction.	-	✓	-	-	-	-	-	-	-	-	Clarifying areas of policy overlap could streamline the implementation of service and infrastructure improvements. Where this is the case, it will benefit local populations.	Consider re-wording to <i>“Identify and clarify areas of policy overlap across Council and public body services (e.g. NHS) to minimise contradiction, maximise benefits and streamline policy implementation.”</i>
Investment Integration: Identify benefits and opportunities of combined transport procurement for all Council services.	-	-	-	-	-	-	✓	-	-	-	Vision will result in benefits to the material asset value.	No mitigation proposed

LTS Objectives	SEA Objectives										Comments on compatibility	Mitigation / Recommendations
	1	2	3	4	5	6	7	8	9	10		
Traffic reduction: Where appropriate consider targets for reducing traffic, although noting the variation in conditions and requirements between urban and rural areas.	-	✓	-	-	✓	✓	✓	-	-	✓	Traffic reductions will help to contribute towards improvements to air quality and climate change whilst also reducing noise emissions.	Recommended that the vision is re-worded “ <i>where appropriate consider targets for reducing traffic and associated congestion</i> ”. Objective should also include the provision of public transport to further encourage a modal shift.

SIGNIFICANCE ASSESSMENT

	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy	
	1	2	3	4	5	6	7	8	9	10		
LTS Vision												
Through its Local Transport Strategy, the Highland Council seeks to enable and facilitate development and economic growth; support, include and empower communities, and create and sustainable environments in which people can live, work and travel.	+	++	?	?	+	+	+	?	+	?	Promoting the development of sustainable environment in which people can live will likely result in benefits to air quality, climate change, landscape and biodiversity through a modal shift to sustainable forms of transport which will also lead to a significant benefit to population and human health. It is likely that these improvements will be experienced in the long-term with significant cumulative benefits being created if continued sustainable development takes place across the Highlands region.	

LTS Objectives	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy
	1	2	3	4	5	6	7	8	9	10	
<p>Economy: Provide a transport network to enable sustainable economic growth, noting the very different conditions between urban and rural locations.</p> <ul style="list-style-type: none"> Tackle congestion at key points to provide a more efficient transport system. For larger urban areas, providing for and creating the conditions to encourage a shift to more sustainable modes; and discourage the dependence on private car for travel. For rural and remote areas, facilitating transport / travel to enable economic involvement. 	?	+	?	?	++	++	+	?	+	?	<p>The tackling of congestion and the continued promotion of sustainable transport modes will help to encourage a modal shift away from private transport resulting in long-term benefits to air quality, climate change, noise and population and human health. The implementation of this objective across the Highlands will see cumulative benefits in the above areas.</p> <p>Recommended that an emphasis is placed upon the provision of public transport in the wording of the objective to further highlight the need for a modal shift away from private vehicles.</p>

LTS Objectives	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy
	1	2	3	4	5	6	7	8	9	10	
<p>Social Inclusion: Facilitate travel to enable economic / social involvement and improve access / travel choices to essential services for those without access to a private car.</p> <ul style="list-style-type: none"> • Improve and maintain road conditions (maintenance) particularly for routes which are lifeline connections. • Improve / maintain connections to islands (within Highland Council Area). • Improve accessibility in larger / growing urban areas for non car modes, particularly in areas of social deprivation. • Promote the conditions through new design / implement changes to existing residential areas which enable efficient public transport. 	?	++	?	?	+	+	+	?	+	?	<p>Improvements to social inclusion will result in long-term benefits to population and human health, and any improvements to accessibility through non car modes will aide in improving air quality.</p> <p>Improving connections to the islands will result in benefits to population and human health, however depending upon the methods used there may be associated adverse impacts to air quality, noise and climate change (in respect to air travel), water and biodiversity (with respect to ferry travel). It is recommended that this section of the vision be re-worded to reflect the modes of transport to be used to increase connectivity to enable an accurate environmental assessment of the objective to be carried out.</p>

LTS Objectives	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy
	1	2	3	4	5	6	7	8	9	10	
<p>Environment: manage / reduce the impacts of transport on the natural and built environment.</p> <ul style="list-style-type: none"> Reduce visual impact of new roads / road improvements particularly in open / rural areas. Improve the quality of the built environment through best practice design in new transport schemes. As a minimum maintain air quality within National Air Quality Strategy (NAQS) national standards for transport related pollution. Safeguard the natural and built environment by minimising the impact of transport. 	?	+	?	?	+	+	+	?	+	?	<p>This vision does lead to some benefits to the environment in the long-term however it is recommended that the sub-objectives be altered and integrated with the objectives set out within the SEA for the 10 identified SEA Environmental topics.</p>
<p>Health: Increase levels of cycling and walking to promote health improvement and modal shift.</p> <ul style="list-style-type: none"> Promote the development of walkable neighbourhoods, through the promotion of travel awareness and the appropriate location and internal design of new and existing developments. Promote higher levels of cycling through travel awareness and the provision and maintenance of appropriate infrastructure. 	?	++	?	?	+	+	+	?	+	+	<p>Long term benefits will be seen to human health and population which will have associated benefits to air quality, climate change and noise through a modal shift away from private vehicles. However the objective should be re-worded to focus upon the development of brownfield sites which will then help to bring about associated benefits to the soil of the area. Through the appropriate location and design of the areas maximum benefits can be achieved to the landscape and visual amenity of the surrounding areas.</p>

LTS Objectives	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy	
	1	2	3	4	5	6	7	8	9	10		
Road Safety: Improve road safety addressing locations where road accidents are above average levels.	?	++	?	?	?	?	?	?	?	?	?	The improvement of road safety will result in significant long-term benefits to population and human health; if improvements are seen across the network then a wider cumulative beneficial impact across the Highlands will be seen.
Personal Safety: Address issues of perceived safety and personal security particularly where they are a barrier to walking, cycling and public transport.	?	++	?	?	+	+	+	?	?	?	?	Likely that a long-term modal shift away from private vehicles will be seen which will result in cumulative benefits to air quality, climate change and noise in the long-term.
Policy Integration: Identify policy overlap across Council services, and with other public bodies (e.g. NHS), maximise benefits and minimise contradiction.	?	+	?	?	?	?	?	?	?	?	?	Where common priorities are identified long-term benefits can be provided by combining resources to ensure a more efficient public transport provision and therefore reducing the reliance upon the private vehicle trips. Initially this objective will benefit the local population through identifying priorities, in the long-term more environmental benefits may be identified if a modal shift is achieved.
Investment Integration: Identify benefits and opportunities of combined transport procurement for all Council services.	?	?	?	?	?	?	+	?	?	?	?	Benefits to population and human health will be seen however, it is recommended that the objective is re-worded to specify that procurement should be obtained from local suppliers which will further benefit the local economy and its associated population.

LTS Objectives	SEA Objectives										Comments and overall assessment (including information on short, medium, long term, permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy
	1	2	3	4	5	6	7	8	9	10	
Traffic reduction: Where appropriate consider targets for reducing traffic, although noting the variation in conditions and requirements between urban and rural areas.	?	+	?	?	+	+	+	?	?	+	Long-term benefits will be seen through making traffic flows more efficient and thus reducing impacts upon local air quality and contributing towards reducing greenhouse gas emissions. Long-term benefits will be achieved however it is recommended that the objective is reworded to include an associated increase in public transport provision to encourage a further modal shift.

Appendix D

Appraisal Tables – Core Policies

Guide to assessment criteria used in detailed assessment matrices

The assessment of significant effects of the Highland Local Transport Strategy has explored the likely effects of the Core Policies on each of the SEA objectives. Effects have been investigated in terms of

Duration: The duration of potential effects are presented in terms of timescale over which they are anticipated

- Short term (ST) – effects expected in the next 1-5 years
- Medium term (MT) – effects expected in the next 6-20 years
- Long term (LT) - effects expected in the next 20+ years

Permanence and reversibility:

- Permanent (P) – a permanent effect is one which results from a physical change that is anticipated to last beyond the life of Strategy
- Temporary (T) – a temporary effect which results from an operation change or a short term construction related impact

Spatial Scale

- Local - effect is restricted to a specific location
- Regional – Effect is anticipated to cover a significant proportion of the Highlands
- National – Effect covers the whole of Scotland and the UK

Significance Assessment

++	Major Positive	The policy would significantly benefit the SEA objective by resolving an existing environmental issue and/or maximising opportunities for environmental enhancement
+	Minor Positive	The policy would be partially beneficial to the SEA objective by contributing to resolving an existing environmental issue and/or offering opportunity for some environmental enhancement
N	Neutral	The policy would not significantly affect the SEA objective
?	Uncertain	There is insufficient detail available on the policy in order to assess how significantly the SEA objective would be affected by the option
-	Minor Negative	The policy would partly undermine the SEA objective by contributing to an environmental problem and/or partially undermine opportunities for environmental enhancement
--	Major Negative	The policy would severely undermine the SEA objective by creating an environmental problem and/or undermine opportunities for environmental enhancement

Table D1: Significance Assessment

The spatial scale on which the impacts occur have been assessed against the identified magnitude of the impact following mitigation producing the residual effect. These effects are set out in Table D2.

		Spatial Scale			
		International	National	Regional	Local
Magnitude	Major negative	Major Adverse	Moderate Adverse	Minor Adverse	Minor Adverse
	Moderate negative	Moderate Adverse	Moderate Adverse	Minor Adverse	Negligible
	Minor negative	Minor Adverse	Minor Adverse	No Significant Effect	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible
	Minor positive	Minor Beneficial	Minor Beneficial	Negligible	Negligible
	Moderate positive	Moderate Beneficial	Moderate beneficial	Minor Beneficial	Negligible
	Major positive	Major Beneficial	Moderate Beneficial	Minor Beneficial	Minor Beneficial

Table D2: Matrix of impact magnitude vs. spatial scale

Policy Heading	CP1: Development Management Contribution to Transport													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
All developments should make an appropriate contribution towards transport infrastructure and/or services related to the development.	?	?	?	?	?	?	+	?	?	?	T	ST	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
Improvements to the transport network shall be sought in accordance with government guidance, the Structure Plan, the various Local Plans, Development Briefs, and as established through Transport Assessment.	?	?	?	?	?	?	+	?	?	?	T	ST	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. Methods for environmental enhancement can be established through the transport appraisal process. The cumulative impact of this policy will be minor positive.
The Council will require to agree the scope of transport improvements with the applicant prior to determination of applications.	?	?	?	?	?	?	?	?	?	?	?	?	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
In the first instance the Council will consider whether necessary improvements can be achieved through the use of conditions attached to the grant of planning permission.	?	?	?	?	?	?	+	?	?	?	T	ST	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
Contributions shall be used to provide improvements to public transport, the road network, traffic management, pedestrian and cycle facilities, accessibility infrastructure or any other such improvements required as a result of development.	?	?	?	?	?	?	+	?	?	?	?	LT	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
Individual development sites have differing transport requirements and it is therefore necessary to assess whether a contribution is required on a site-by-site basis.	?	?	?	?	?	?	+	?	?	?	T	ST	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
Developers should take into account the likely requirement for a contribution when preparing and costing proposals.	?	?	?	?	?	?	?	?	?	?	?	?	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
Where a development proposal requires a Transport Assessment, or is subject to a masterplanning exercise, this should provide a basis for addressing transport impacts and be used to inform the type and level of contribution required.	?	?	?	?	?	?	+	?	?	?	T	ST	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. Methods for environmental enhancement can be established through the transport appraisal process. The cumulative impact of this policy will be minor positive.
Synergistic Impacts	The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the material asset the policy delivers.													
Recommendations/ Mitigation	Environmental assessment should be undertaken on a scheme-by-scheme basis to determine the specific impacts of each proposal and recommend appropriate mitigation measures. The scope and detail of any assessment should directly relate to the scale of the development proposal. The significance of impacts to many environment topics will vary according to requirements for development under individual planning applications. Impacts relating to biodiversity, soil													

	<p>quality, water quality and cultural heritage sites can be expected where land-take is required for new transport infrastructure to support new development, particularly for greenfield sites. Impacts to air quality, climate factors and population and human health relating to road safety can be expected where new development alters existing traffic flows and / or congestion problems. These will need to be assessed through subsequent EIAs where appropriate.</p>
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Policy Heading	CP2: Part 1 road Improvement Scheme													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The Council will seek to improve the operational quality of the road network for which it is responsible.	?	?	?	?	?	?	+	?	?	?	T	MT	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
The Council will look to develop schemes which meet the objectives it has set out.	?	?	?	?	?	?	?	?	?	?	?	?	?	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown as the specific objectives referred to here are unclear. Setting or referring to specific environmental objectives (such as those set out in this SEA) would result in significant benefits to the environment.
The Council will seek to make improvements through its own capital budget allocation, through developer contributions (S75) and through any other funding opportunities which come forward during the LTS.	?	?	?	?	?	?	+	?	?	?	T	MT	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
Schemes developed are likely to tackle congestion, address road safety problems and reduce the impacts of traffic on local communities and the environment.	?	+	?	?	+	+	+	?	?	+	P	LT	L	This assessment assumes that this statement seeks to prioritise development schemes which meet the listed objectives. Reducing congestion would lead to improvements in local air quality, reduced greenhouse gas emissions and reduced noise emissions. Associated benefits would also extend to population and human health, particularly where road safety issues are addressed. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.
New scheme development will usually have some overlap with work proposed to benefit pedestrian/cycle and public transport networks.	?	+	?	?	?	?	?	?	?	?	?	?	L	The policy wording is confusing and does not recommend a specific action. Consider re-wording to clarify whether the Council will prioritise development schemes which meet the listed objectives. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
The Council will support and jointly lobby for improvements for the strategic and regional trunk road network with its regional partners.	?	?	?	?	?	?	+	?	?	?	P	LT	L	This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown. The cumulative impact of this policy will be minor positive.

<p>Trunk Road priorities are the A82, A9, A96 and the proposed Inverness Link Road.</p>	-	?	-	-	?	?	+	-	?	?	P	LT	R	<p>This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown; these will depend on the specific interventions or route alignments proposed.</p> <p>It is likely that new route options will require land-take for the provision of transport infrastructure. This will likely have adverse impacts on biodiversity, soil quality, water quality and cultural heritage sites. The extent of impacts and appropriate mitigations measures should be identified through the transport appraisal process.</p> <p>The cumulative impact of this policy will be minor negative.</p>
<p>Provision for road improvements will be considered in all planning applications and new developments through the Transport Assessment process, assessing the impact of the development on the existing transport infrastructure.</p>	?	?	?	?	?	?	+	?	?	?	T	LT	L	<p>This action will likely result in benefits to the material asset value. Impacts to remaining environmental themes are currently unknown; these will depend on the specific requirements identified for each planning application. The extent of impacts and appropriate mitigations measures should be identified through the transport appraisal process.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to improve the operational quality of the existing road network. Implementing measures to address congestion issues, in particular, would lead to improvements in local air quality, reduced greenhouse gas emissions and reduced noise emissions. Associated benefits would also extend to population and human health, particularly where road safety issues are addressed. At the same time, it is likely that new route options will require land-take, particularly for the provision of new trunk roads. This will likely have adverse impacts on biodiversity, soil quality, water quality and cultural heritage sites.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment that the actions are expected to deliver.</p>													
<p>Recommendations/ Mitigation</p>	<p>Environmental assessment should be undertaken on a scheme-by-scheme basis to determine the specific impacts of each proposal and recommend appropriate mitigation measures, particularly where new roads or significant road alterations are proposed. The scope and detail of any assessment should directly relate to the scale of the development proposal.</p>													

Policy Heading	CP3: Part 2 road Maintenance													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The Council will maintain the quality of the road network for all roads except trunk roads.	?	+	?	?	?	?	+	?	?	-	T	MT	R	This action will likely result in benefits to the material asset value. Associated benefits will also extend to population and human health where maintenance works improve road safety issues. The scope of maintenance works and improvements required to this effect and, therefore, the related impacts to environmental themes are currently unknown. It is likely that such interventions will be local in nature and include construction works; this could have adverse impacts on noise emissions. It is unclear from this statement why the Council is excluding trunk roads from its maintenance policy. This should be clarified. The cumulative impact of this policy will be minor positive.
A combination of the “fragile area” index, a comprehensive inventory of road infrastructure assets and an assessment of the lifeline Rural Roads will be used to establish priorities for road maintenance expenditure.	?	+	?	?	?	?	+	?	?	-	?	MT	R	This action will likely result in benefits to the material asset value. Associated benefits will also extend to populations affected by transport improvements, particularly in rural areas suffering from access or service deprivation. The scope of maintenance works and improvements required to this effect and, therefore, the related impacts to environmental themes are currently unknown. It is likely that such interventions will be local in nature and include construction works; this could have adverse impacts on noise emissions. The cumulative impact of this policy will be minor positive.
The Council will set minimum standards for routine maintenance on roads and bridges.	?	?	?	?	?	?	?	?	?	?	?	MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown
An element of emergency response will be determined on an annual basis.	?	?	?	?	?	?	?	?	?	?	?	MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown
Synergistic Impacts	<p>This policy seeks to maintain the quality of the existing road network. In general, the scope of maintenance works and improvements required to this effect and, therefore, the related impacts to environmental themes are currently unknown. It is likely that such interventions will be local in nature and include construction works; this could have adverse impacts on noise emissions. However, the actions proposed will likely result in benefits to the material asset value. Associated benefits will also extend to population and human health where maintenance works address existing road safety and accessibility issues.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
Recommendations/ Mitigation	<p>It is unclear from the policy statement why the Council is excluding trunk roads from its maintenance policy. This should be clarified.</p> <p>Noise related to construction works should be monitored by the Council and work should be carried out in such a way to minimise noise pollution. Where necessary, this may require the Council to restrict working hours or provide other mitigation recommendations under the Control of Pollution Act 1974.</p>													

Policy Heading	CP4: Pedestrian and Cycle Network													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The Council will provide a good quality network to encourage people to walk and cycle more, and do so confidently, focussing on facilitating trips to work and education.	?	+	?	?	+	+	+	?	?	?	P	LT	R	Improving the quality of and local access to the pedestrian and cycle network will bring positive benefits to population and human health and the value of material assets. Regional increases in active travel for even short trips will help to reduce emissions, maintaining or improving air quality and reducing impacts to climate change. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
The Council will seek to improve pedestrian and cycle facilities where possible through a number of strands of work:														
<ul style="list-style-type: none"> Safer Routes to School – the Council is committed to supporting schools in delivering School Travel Plans which will be part of a framework for providing Safe Routes to school. 	?	+	?	?	+	+	?	?	?	?	T	ST	L	Safer routes to school and the implementation of school travel plans will encourage the use of sustainable travel modes resulting in benefits to air quality and climate change as well as population and human health. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
<ul style="list-style-type: none"> Core paths network access strategy – this will provide access opportunities which reflect the local character and provide clear economic, environmental and social benefits 	?	+	?	?	+	+	+	?	+	+	P	MT	L	Improving the core path network will encourage a modal shift to sustainable transport modes as well as helping to reduce impacts to climate change, air quality and noise emissions. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
<ul style="list-style-type: none"> Design requirements/standards for new development – the Council will support active travel by promoting new design guidance and actively promoting training opportunities. 	?	?	?	?	?	?	?	+	+	?	P	ST	L	Through the use of design requirements benefits can be seen through improving the landscape/streetscape/townscape and the associated visual amenity, as well as associated benefits to conservation areas and the setting of historical features. The cumulative impact of this policy will be minor positive.
<ul style="list-style-type: none"> Improvement schemes in town/city centres to include good pedestrian/cycle design. 	?	+	?	?	?	?	?	+	+	?	P	MT	L	Landscape/streetscape/townscape and the associated visual amenity, as well as associated benefits to conservation areas and the setting of historical features will be seen through the implementation of town centre improvement schemes. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.

Policy Heading	CP4: Pedestrian and Cycle Network													
<ul style="list-style-type: none"> Sustrans cycle routes. 	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>Extensions or improvements to the national cycle network could contribute to a modal shift by promoting active travel modes, particularly for short local trips. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
The Council's Core Path Access Strategy aims to:														
<ul style="list-style-type: none"> Provide access opportunities which reflect the local character and provide clear economic, environmental and social benefits compatible with the themes of the Community Plan. 	?	+	?	?	?	?	+	+	+	?	P	LT	L	<p>Landscape/streetscape/townscape and the associated visual amenity, as well as associated benefits to conservation areas and the setting of historical features will be seen through the provision of access points in keeping with the local character. This policy will also increase the value of material assets, including walking and cycling routes as well as bringing positive benefits to human and population health through the promotion of active travel.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Encourage local communities and access user groups to work with land managers and occupiers in the development of better facilities to support and sustain rural economy. 	?	+	?	?	?	?	+	?	?	?	T	ST	L	<p>This action will see an increase in the material asset value as well as bringing about benefits to population and human health through the provision of better facilities which help to increase connectivity to the rural community. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Develop a comprehensive access network for a wider range of user abilities and interest. 	?	+	?	?	?	?	+	?	?	?	P	LT	L	<p>This action will likely result in benefits to population and human health through increased accessibility and the material asset value. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Remove barriers and build links so that everyone is able to enjoy and explore the Highlands to the best of their ability. 	?	+	?	?	?	?	?	?	?	?	P	LT	L	<p>Increasing accessibility will benefit local populations across the region by promoting active travel and improving facilities and links for less mobile individuals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>With regards to cycle parking facilities, the Council will:</p> <ul style="list-style-type: none"> Look to improve cycle parking provision at key sites as part of its Travel Plan; Continue to develop cycle parking installation programme for schools and further education establishments through Travel Plans and the Safer Routes to School Programme; and With developers promote the installation of short and long stay cycle parking at key trip attractors in each settlement, through travel plans and the development management process. 	?	+	?	?	+	+	?	?	?	?	T	ST	L	<p>The implementation of more cycle parking facilities will help to remove local barriers to cycling and could potentially contribute to a modal shift away from private vehicle use; this could benefit population and human health and lead to improvements in air quality and reduced greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>

Policy Heading	CP4: Pedestrian and Cycle Network													
Active travel masterplans will be undertaken for all main settlements. These will address improvements and future needs for walking and cycling networks and access to public transport.	?	+	?	?	+	+	?	?	?	?	T	MT	L	<p>Masterplan proposals which seek to encourage the use of sustainable forms of transport will promote a modal shift away from private vehicle use; this could benefit population and human health and lead to improvements in air quality and reduced greenhouse gas emissions. Masterplans should also identify other environmental benefits or enhancements which could be delivered in line with sustainable transport proposals. Examples could include identifying sites suitable for habitat creation and / or landscaping along key pedestrian and cycle routes, or opportunities to increase access to local cultural heritage features.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Active Travel design issues will promoted by the Council through training for relevant professionals and policy guidance will be included in the update to Highland's current "Road Guidelines for New Development".	?	+	?	?	?	?	+	?	+	?	T	ST	L	<p>The use of road guidelines will help increase the value of the asset but also ensure that appropriate designs are undertaken which improve the landscape of the study area.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Adherence to design guidelines documents and requirements set out in Active Travel Masterplans will be considered at planning application stage. This guidance will aim to achieve the following:														
<ul style="list-style-type: none"> New developments should incorporate street layout and form which is walkable to services within ½ mile i.e. by providing shorter pedestrian and cycle route where possible. New development should also connect into and enhance existing walking networks. 	+	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action could result in a reduction in land-take required for equivalent development where higher density is promoted. This would in turn reduce the impact of development on habitat sites and species, particularly for greenfield sites. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions, particularly where walking or cycling replaces vehicle use for shorter trips.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> New development should incorporate street layout and key pedestrian connections to public transport corridors/main routes. 	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action will ensure best use is made of existing public transport networks, enhancing the material assets value. This action could also contribute to a modal shift by promoting public transport. The associated benefits of this would extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Location of major development where they can be more easily accessed by non car modes, i.e. public transport, walking and cycling. 	+	+	?	?	+	+	+	?	+	?	P	LT	R	<p>This action could result in a reduction in land-take required for equivalent development where major developments are prioritised on brownfield sites or where higher densities are promoted on greenfield sites near existing infrastructure. This would enhance the material assets value, and reduce the land-take required for equivalent development, reduce the impact to habitat sites and species and benefit the landscape and visual amenity in and around settlement areas.</p> <p>This action could also contribute to a modal shift by promoting sustainable travel modes. The associated benefits of this would extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>

Policy Heading	CP4: Pedestrian and Cycle Network													
<ul style="list-style-type: none"> Design of entrances and access routes into major developments should consider those arriving on foot/cycle and by public transport. 	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action could contribute to a modal shift by promoting sustainable travel modes. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Cycle parking facilities as per standards in Cycling by Design. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting sustainable travel modes. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to contribute to a modal shift away from private vehicle use, particularly for short local trips, by increasing the attractiveness, ease of use and accessibility to sustainable transport modes through the provision of facilities and services for cyclists and pedestrians. Overall this will benefit population and human health and local air quality and reduce greenhouse gas emissions. In general, impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
<p>Recommendations/ Mitigation</p>	<p>The location and design of new development determines the extent of land-take required, particularly on greenfield sites. This can increase the length of journeys taken, with negative impacts to air quality and climate factors. Associated negative impacts also extend to biodiversity (through the destruction of habitats) and cultural heritage sites. Policy actions which seek to influence the location of development or design of street layouts should also recognise the relationship between development context and density and the scope of transport infrastructure required. Decisions on planning applications should consider whether site locations or street layout proposals seek to minimise land-take required for new and major developments wherever possible.</p> <p>Proposals, including active travel masterplans, should seek to identify environmental benefits or enhancements which could be delivered in line with sustainable transport proposals. Examples could include identifying sites suitable for landscaping and habitat creation along key pedestrian and cycle routes, or opportunities to increase access to local cultural heritage features.</p> <p>Regular surveys should be undertaken to record the effect of this policy on the number and frequency of pedestrian trips and cycle use. This will aid in monitoring the local impact of policy implementation on a wider modal shift away from private vehicle use. Traffic counts and air monitoring should also be undertaken to determine the cumulative benefits to air quality as a result of policy implementation.</p> <p>Impacts to environmental topics which are dependant on the details of specific proposals should be identified through subsequent EIAs where appropriate.</p>													

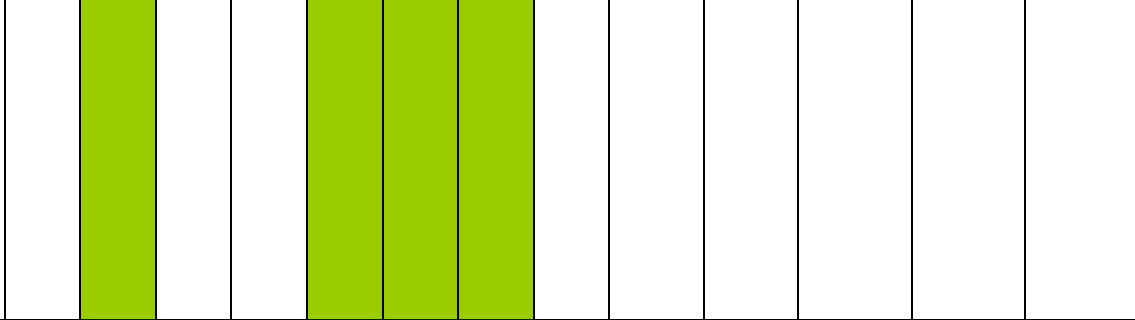
Policy Heading	CP5: Road based Public Transport – Part 1Key route network													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
Along core routes the Council will seek to provide bus priority measures, through its own funding, developer funding and through other grants that become available during the LTS period.	?	+	?	?	+	+	+	?	?	?	T	MT	R	This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
The Council will support and jointly lobby for improvements to the strategic and regional network with its regional partners.	?	?	?	?	?	?	?	?	?	?	T	MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown
For Inverness corridors, specific junctions and approaches for bus priority are identified (refer to LTS paragraph 5.60 for comprehensive list of proposals).	?	+	?	?	+	+	+	?	?	?	T	MT	L	This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
Bus Improvements outside Inverness are:														
<ul style="list-style-type: none"> Fort William – three main junctions along A830; A82/A830 junction. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
<ul style="list-style-type: none"> A830 through Fort William where single carriageway. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals. The cumulative impact of this policy will be minor positive.
<ul style="list-style-type: none"> A82 – Fort William to Inverness – all canal bridges cause bottleneck / congestion. 	?	?	?	?	?	?	?	?	?	?	?	MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown

<ul style="list-style-type: none"> Nairn – A96 trunk road junctions with local roads/exit onto trunk road. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Thurso – stopping space in the town centre is very limited / constrained physically. 	?	?	?	?	?	?	?	?	?	?	?	MT	L	<p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown</p>
<ul style="list-style-type: none"> A9 Inverness to Invergordon Alness Business Park, exit time difficult at peak times. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Trunk roads – all trunk routes provide public transport connections and should be safeguarded for public transport. 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting public transport. In addition to increasing the material assets value, this would have benefits for population and human health as well as local air quality and climate change in the long-term. Impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to contribute to a modal shift away from private vehicle use by defining, protecting and, where possible, enhancing existing bus routes. Overall this will benefit population and human health, improve local air quality and reduce greenhouse gas emissions. In general, impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
<p>Recommendations/ Mitigation</p>	<p>How the Council will implement extensions to the existing bus network as a result of new development is not clear from the present policy wording. This should be addressed.</p> <p>Passenger and traffic counts should be undertaken to monitor the impact of policy implementation on a modal shift away from private vehicle use. Air quality modelling should also be undertaken to determine the cumulative benefits to air quality and climate factors as a result of policy implementation.</p> <p>Impacts to environmental topics which are dependant on the details of specific proposals should be identified through subsequent EIAs where appropriate.</p>													

Policy Heading	CP6: Road Based Public Transport – Part 2 Service frequency/journey times													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The following service standards are identified under this core policy:														
<ul style="list-style-type: none"> Minimum frequency of link between each size of settlement and local / regional centre (formula to take account of journey time / distance). 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording is confusing and does not outline a specific action or identify a clear recommendation for a minimum target. More information is required regarding the formula to be applied for determining such a target. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
<ul style="list-style-type: none"> Minimum frequency for local trips within community beyond reasonable walking distance (Demand Responsive Transport and local bus services). 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording does not outline a specific action or identify a clear recommendation for a minimum target. More information is required regarding the formula to be applied for determining such a target. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
<ul style="list-style-type: none"> Maximum journey time on main corridors compared to direct time by car to determine where priority measures may be needed in the future. 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording is confusing. Recommend re-wording to emphasise that maximum journey times for main bus corridors should be regularly compared to direct travel times undertaken by car for the same journey. Priority measures should be directed to those journeys where bus travel times exceed car travel times. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
<ul style="list-style-type: none"> Affordable (Council fare scale on contracts including increases not above inflation). 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording is confusing and does outline a specific action. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
<ul style="list-style-type: none"> Accessible services for disabled / elderly – routes, vehicles, access to stops; rural and urban issues. 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording is confusing and does not outline a specific action. More information is required to establish how services would be provided for those people with limited mobility and where service provision should be prioritised. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown; this will depend on the specific proposals identified to deliver required improvements.
Public transport will be considered in all planning applications and new development. This will include:														
<ul style="list-style-type: none"> Protection of the defined network from new building and development that would prevent the provision of public transport priority and infrastructure 	?	?	?	?	?	?	?	?	?	?	?	MT	L	The policy wording is unclear. Consider re-wording to clarify whether new development proposals should be evaluated against their impact on the existing bus network or whether proposals are capable of integrating with the existing network through the provision of new public transport infrastructure and/or services. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.

<ul style="list-style-type: none"> Seek opportunities to provide infrastructure on the defined core network through Section 75 agreements 	?	?	?	?	?	?	?	?	?	?	?	MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown; this will depend on what new infrastructure is required and how it is intended to be delivered.
<ul style="list-style-type: none"> New developments should incorporate street layout and form which is accessible by bus and allows for efficient bus operation where possible. Further detail will be set out in the design guide. 	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action could contribute to a modal shift by promoting public transport where development is located such that a viable extension to the existing public transport network is possible.</p> <p>The associated benefits of this would extend to population and human health, improve local air quality, reduce greenhouse gas emissions and increase the material assets value.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Where possible major developments should be located where they can be served efficiently by public transport 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting public transport. The associated benefits of this would extend to population and human health, improve local air quality, reduce greenhouse gas emissions and increase the material assets value.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<ul style="list-style-type: none"> Design of entrances and access routes into major development should consider those arriving on foot/cycle and public transport 	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting sustainable travel modes. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Synergistic Impacts	<p>This policy seeks to contribute to a modal shift away from private vehicle use by improving the quality of service for existing bus routes. Overall this will benefit population and human health, improve local air quality and reduce greenhouse gas emissions. In general, impacts to remaining environmental topics are currently unknown; these will depend on the details of specific proposals.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
Recommendations/ Mitigation	<p>The policy wording is very confusing in places and, in some instances, does not clearly identify actions to achieve stated or implied targets; this has been identified for specific sub-objectives in the comments above. This requires to be addressed, with further clarification provided where identified.</p> <p>Guidance for the design of new development should seek to identify environmental benefits or enhancements which could be delivered in line with public transport proposals, improvements to existing public transport routes, extensions through new development, the provision of new bus facilities and the multi-modal design of entrances. This should consider the landscape and visual amenity of new route development as well as local biodiversity; it could include identifying sites or routes which are suitable for hard or soft landscaping treatment or opportunities for habitat creation.</p>													

Policy Heading	CP7: Rail based Public Transport Part 1 Key Route network													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The Council will promote improvements in partnership with Network Rail, train operating companies and HITRANS including the reopening of Conan Bridge Station.	?	+	?	?	+	+	+	?	?	?	P	MT	L	<p>This action could contribute to a modal shift by promoting rail as a sustainable transport mode. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
The Council will seek to provide improvements at and to stations which encourage the use of rail, such as good pedestrian and cycle connections to rail station, cycle parking facilities; improved personal safety measures and security; and information and integration with other modes.	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting integration between sustainable transport modes. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Encouragement of park and ride use of rail stations should be sought in conjunction with Network Rail at those stations where car parking is available. Secure sheltered cycle parking should also be provided to encourage cycle based park and ride with rail.	?	+	?	?	+	+	+	?	?	?	P	MT	L	<p>This action could contribute to a modal shift by providing the opportunity for rail to replace private vehicle trips for part-journeys and promoting integration between sustainable transport modes. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Further work will be carried out to identify specific needs for stations on the network and service improvements.	?	?	?	?	?	?	?	?	?	?	?	MT	L	<p>The policy wording does not recommend a specific action or define the scope of work required to identify priority needs. Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown; these will depend on the recommendations of future work.</p>
The Council will work with its regional partners and the rail authorities to seek improvement to services where possible and where they are considered to provide optimum benefit.	?	+	?	?	+	+	+	?	?	?	P	MT	L	<p>This action could contribute to a modal shift by promoting rail as a sustainable transport mode. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Where possible major developments should be located where they can be served efficiently by public transport including rail.	?	+	?	?	+	+	+	?	?	?	P	MT	L	<p>This action could contribute to a modal shift by promoting rail as a sustainable transport mode. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Infrastructure, such as shelters, information and	?	+	?	?	+	+	+	?	?	?	T	MT	L	<p>This action could contribute to a modal shift by promoting rail as a sustainable transport</p>

<p>access routes to rail stations should be provided, and the Council will work in partnership with Network rail to improve integration and provide these facilities.</p>		<p>mode. This would improve the material assets value. Associated benefits would also extend to population and human health, improve local air quality and reduce greenhouse gas emissions.</p> <p>Impacts to remaining environmental topics are currently unknown; these will depend on the specific proposals identified to deliver required improvements.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to contribute to a modal shift away from private vehicle use by improving the quality of rail services across the Highlands. Overall this will benefit population and human health, improve local air quality and reduce greenhouse gas emissions. In general, impacts to remaining environmental topics are currently unknown; these will depend on the specific proposals identified to deliver required improvements.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>	
<p>Recommendations/ Mitigation</p>	<p>Passenger and traffic counts should be undertaken to monitor the impact of policy implementation on a modal shift away from private vehicle use. Air quality modelling should be undertaken to determine the cumulative benefits to air quality and climate factors as a result of policy implementation.</p> <p>Impacts to environmental topics which are dependant on the details of specific proposals, particularly where the need for a new rail station or park & ride facility is identified, should be assessed through subsequent EIAs where appropriate.</p>	

Policy Heading	CP8: Air Services													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenities	Noise				
<p>The Council has identified a core network for air links. Along with HITRANS, the Council has also set out strategic and regionally important links to the islands within the Council area and wider island links. The Council will support and jointly lobby for improvements to this strategic and regional network with its regional partners.</p>	?	+	?	?	-	-	+	?	?	-	P	LT	R	<p>This action involves expanding existing regional air services and will result in adverse impacts to local air quality and increased greenhouse gas emissions. It will also increase noise at receptors close to the airport and under the flight path of the new services. At the same time, improving services will increase accessibility in fragile and fringe areas, bringing benefits to population and human health while also increasing the value of material assets. The overall impact will depend upon the scope and frequency of service improvements offered.</p> <p>The cumulative impact of this policy will be moderate negative.</p>
<p>The Council continues to seek potential operations from Broadford airstrip and is also investigating the use of sea planes at appropriate locations</p>	?	+	?	-	-	-	+	?	?	-	P	LT	R	<p>The operation of air services from Broadford would result in adverse impacts to local air quality and increased greenhouse gas emissions. It will also increase noise levels in the surrounding area and under the flight paths of the aircraft. If sea planes were to be incorporated into the scheme there is also the potential for adverse impacts upon local water quality. The scheme will however see benefits to the local population by increasing accessibility in the area and also increase the material asset value. The overall impact will dependant upon the frequency of the service that is offered.</p> <p>The cumulative impact of this policy will be moderate negative.</p>
<p>Progress has been made on developing further air links from Inverness since the first LTS, in particular, routes operated by budget airlines.</p>	?	?	?	?	-	-	+	?	?	-	P	LT	N	<p>The policy wording is confusing. It comments on actions taken to date rather than setting out actions to be undertaken under the strategy. Recommend re-wording to clarify if the Council intends to continue expanding links and services from Inverness airport, particularly from budget airlines.</p> <p>Should the Council continue to expand these links, it would result in adverse impacts to local air quality and increased greenhouse gas emissions. It will also increase impacts from noise at receptors close to the airport and under the flight path of the new services.</p> <p>The cumulative impact of this policy will be moderate negative.</p>

<p>A residents fare reduction scheme is in place for services to and from Wick, also benefitting residents of Caithness, and north west Sutherland. This Air discount scheme provides a discount 40% on the core air fare.</p>	?	+	?	?	-	-	+	?	?	-	P	LT	R	<p>The policy wording is confusing. It comments on actions taken to date rather than setting out actions to be undertaken under the strategy. Recommend re-wording to clarify whether the Council intends to discontinue, maintain or expand the fare reduction scheme.</p> <p>As it exists, this action has adverse impacts to local air quality and noise and increases greenhouse gas emissions by promoting More frequent trips via air travel. The scheme also delivers benefits to local populations by increasing accessibility in the area and increasing the material asset value. The overall impact of this action will depend on whether the Council intends to discontinue, maintain or expand the fare reduction scheme.</p> <p>The cumulative impact of this policy will be moderate negative.</p>
<p>Integration with public transport at airport terminals should be maximised to provide multi-modal links. Infrastructure, information and integration with bus / rail services are required, and timetables will be developed by the Council in partnership with service providers.</p>	?	?	?	?	+	+	?	?	?	?	P	LT	L	<p>This policy would minimise impacts to local air quality and climate change as a result of trips made to / from airport terminals. Impacts to remaining environmental topics are currently unknown; these will depend on the frequency and accessibility of local public transport services.</p> <p>The cumulative impact of this policy will be a minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to increase the scope and frequency of air travel links throughout the Highland area. Overall this will increase the value of material assets and benefit population and human health where it improves accessibility in fragile areas. However, any increase in air traffic frequency will have adverse impacts to local air quality, increase greenhouse gas emissions and noise emissions to local receptors near the airport and under flight paths. In general, impacts to remaining environmental topics are currently unknown; these will depend on the specific proposals identified to deliver required improvements.</p> <p>The synergistic impact of the proposed air services will result in overall moderate adverse impacts as a result of the adverse impacts to air quality, climate change and noise within the Highlands and at origin/destination sites.</p>													
<p>Recommendations/ Mitigation</p>	<p>The policy wording is confusing in some places, setting out what has already been undertaken rather than what the Council will endeavour to undertake under the new strategy.</p> <p>Any increase in air traffic frequency should be assessed both in terms of its impact to noise and local and regional air quality.</p> <p>Where new physical development is required, sensitive design and sustainable materials should be used where possible to aid in offsetting the predicted rise in emissions. A site-specific environmental assessment should undertaken where any new physical development is required to identify expected impacts and detailed mitigation measures.</p>													

Policy Heading	CP9: Ferry Services													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
<p>The Council has identified a core network for ferry services. Along with HITRANS, the Council has also identified strategic and regionally important links to the Highland islands and wider island links. The Council will support and jointly lobby for improvements to the strategic and regional network with its regional partners.</p>	-	+	?	-	+	?	+	?	?	?	P	LT	R	<p>This action will benefit local populations, particularly where it improves accessibility in fragile rural areas. It could also benefit local air quality where ferry services replace trips normally taken by private vehicle or are promoted in combination with sustainable modes of travel. However, it also has the potential to result in adverse impacts to local water quality and ecology where vessel traffic is increased in quantity or frequency.</p> <p>The cumulative impact of this policy will be neutral given the benefits and adverse impacts anticipated.</p>
<p>The Scottish Government has commissioned a study to investigate the effect of introducing a Road Equivalent Tariff (RET) fares system for passengers, cars and commercial vehicles travelling on ferry services. As part of this study, a pilot scheme will operate from October 2008 until spring 2011 on ferry services to the Western Isles and also from Oban to Coll / Tiree.</p>	?	+	?	?	+	?	+	?	?	?	T	ST	L	<p>This action will benefit local populations, particularly as it seeks to improve accessibility in fragile rural areas. It could also benefit local air quality where ferry services replace trips normally taken by private vehicle or are promoted in combination with sustainable modes of travel.</p> <p>It is unclear whether this action will increase the quantity or frequency of ferry vessel traffic on identified routes. Adverse impacts would extend to water quality and ecology where this occurs.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>The Council will continue to provide subsidies to essential ferry services to remote peninsulas which are not supported directly by the Government.</p>	?	+	?	?	+	?	+	?	?	?	T	MT	R	<p>This action will benefit local populations, particularly as it seeks to improve accessibility in fragile rural areas. It could also benefit local air quality where ferry services replace trips normally taken by private vehicle or are promoted in combination with sustainable modes of travel.</p> <p>It is unclear whether this action will increase the quantity or frequency of ferry vessel traffic on identified routes. Adverse impacts would extend to water quality and ecology where this occurs.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>The Council sees importance in the development of the short sea shipping routes. Further development and discussions at a national level will be sought.</p>	-	+	?	-	?	?	?	?	?	?	T	MT	R	<p>This action will benefit local populations, particularly as it seeks to improve economic development in fragile rural areas. However, this will result in adverse impacts to water quality and ecology where 'development' refers to increasing the quantity and frequency of vessel traffic.</p> <p>The cumulative impact of this policy will be minor negative.</p>
<p>Those ferry piers and terminals which are the responsibility of the Council will be maintained and improved where possible.</p>	?	?	?	?	?	?	+	?	?	?	P	MT	R	<p>This action will increase the value of material assets. Impacts to remaining environmental topics are currently unknown; these will depend on the scope of maintenance services undertaken.</p> <p>The cumulative impact of this policy will be minor positive.</p>

<p>Integration with public transport at ferry terminals should be maximised to provide multi modal links. Infrastructure, information and integration with bus / rail services are required, and timetables will be developed by the Council in partnership with service providers.</p>	?	+	?	?	+	+	+	?	?	?	T	MT	R	<p>This action could contribute to a modal shift away from private vehicle use through the promotion and integration of sustainable modes of travel. This will benefit local populations, particularly where it improves accessibility in fragile rural areas. It could also benefit local air quality and climate factors where ferry services replace trips normally taken by private vehicle.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to contribute to economic development in fragile and rural areas as well as encourage a modal shift away from private vehicle use by improving the quality of ferry services across the Highlands. Overall this will benefit population and human health, improve local air quality and reduce greenhouse gas emissions. However, adverse impacts to local water quality and ecology will arise where vessel traffic is increased in quantity or frequency.</p> <p>Impacts to remaining environmental topics are currently unknown; these will depend on the specific proposals identified to deliver required improvements.</p> <p>The overall synergistic impact of implementing this policy is deemed to be minor positive.</p>													
<p>Recommendations/ Mitigation</p>	<p>Any increase to the quantity or frequency of vessel traffic will have adverse impacts to local water quality and ecology. This would be particularly harmful in areas designated for the ecological value of water environments (e.g. SACs, etc.). Where this is proposed, further environmental assessments will need to be undertaken to identify potential impacts and detailed mitigation measures. This could involve undertaking an Appropriate Assessment where European-designated sites are likely to be affected by proposals.</p> <p>Water quality and biodiversity (including marine habitat sites) should be regularly monitored along ferry routes and mitigation measures implemented as impacts are identified. Construction of new infrastructure should be subject to a site-specific environmental assessment to identify any impacts to the marine environment (including water quality and ecology) and to recommend appropriate mitigation. Cleaner technology should be promoted to reduce impacts where possible.</p>													

Policy Heading	CP10: Parking policy													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
Parking should consider the needs of all users.	?	+	?	?	+	+	?	?	?	?	?	ST	L	<p>The policy wording is vague; it does not identify what specific issues should be considered. This should be clarified.</p> <p>This action has the potential to benefit local populations by improving accessibility to parking facilities, particularly for individuals with limited mobility. It could also promote cycling as mode a travel where cycle parking is provided within wider parking schemes.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Parking should be considered on an area wide basis taking account of all parking facilities.	+	+	+	-	+	+	?	?	+	?	?	ST	L	<p>The policy wording is vague; it does not identify what specific issues should be considered. This should be clarified.</p> <p>An area-wide approach to parking provision is supported where it can reduce the amount of land-take required and, particularly, where it can contribute to the re-use of derelict or vacant sites. This would benefit local biodiversity and soil quality and could benefit the landscape and visual amenity where quality design is applied.</p> <p>Likewise, benefits would extend to population and human health, local air quality and climate change where an area-wide approach to parking provision seeks to integrate or promote sustainable modes of travel.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Infrastructure enhancements should be promoted to make parking attractive and user friendly by upgrading facilities and equipment considering the needs of people with mobility impairment. Efforts should be made to improve safety and personal security standards in parking areas.	?	+	?	?	?	?	+	?	+	?	T	ST	L	<p>This action will benefit local populations by improving accessibility to parking facilities, particularly for individuals with limited mobility. It will also increase the material asset value by improving existing facilities.</p> <p>Likewise, benefits would extend to human health, local air quality and climate change where improvements seek to integrate or promote sustainable modes of travel and could benefit the landscape and visual amenity where quality design is applied.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Enforcement should be provided to improve turnover of parking spaces whilst adopting a customer friendly style by allowing a 10min period of grace at the start of any parking period.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>This action is unlikely to result in new physical development or alterations to existing parking facilities. It has the potential to influence the frequency of trips taken to/from local centres.</p> <p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.</p>

Charging should be determined by traffic management needs to ration excess demand for available spaces in areas where there is insufficient parking.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>This action is unlikely to result in new physical development or alterations to existing parking facilities. It has the potential to influence the frequency of trips taken to/from local centres.</p> <p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.</p>
Alterations to a charging regime or new charging should only be considered following a full parking survey which will assess the extent of any traffic problem and allow assessment of charging options.	?	?	?	?	+	?	?	?	?	?	?	ST	L	<p>This action is unlikely to result in new physical development or alterations to existing parking facilities. It has the potential to influence the frequency of trips taken to/from local centres, targeting areas with existing congestion or traffic management problems. Benefits to local air quality would arise where congestion charges reduce the number of private vehicles accessing the area.</p> <p>It is recommended that this action is implemented in line with complementary improvements to public transport services.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Charges should be levied and time limits imposed so as to maximise the use of space available. Where demand for parking exceeds supply, demand can be regulated and reduced by raising the level of parking charges. However care should be taken not to raise charges to levels which might discourage vehicle users from visiting an area. Charging should be set to ensure that there are always around 15% empty spaces available.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>This action is unlikely to result in new physical development or alterations to existing parking facilities. It has the potential to influence the frequency of trips taken to/from local centres, targeting areas where parking demand exceeds supply.</p> <p>It is recommended that this action is implemented in line with complementary improvements to public transport services.</p> <p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown; this will depend on the extent of existing traffic problems in the areas where charges are to be altered.</p>
Charging for parking should not undermine the viability of business areas or adversely affect local roads or the environment.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.</p>
Alterations to parking management arrangements should not be made without adequate public consultation.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.</p>
Short term parking should have priority over long term parking.	?	?	?	?	?	?	?	?	?	?	?	ST	L	<p>This action is unlikely to result in new physical development or alterations to existing parking facilities. It has the potential to influence the frequency of trips taken to/from local centres.</p> <p>Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.</p>
Parking arrangements should make due allowance for disabled vehicles, motorcycles and pedal cycles and pedestrian movements.	?	+	?	?	+	+	?	?	?	?	T	ST	L	<p>This action will benefit local population and human health by improving accessibility to parking facilities, particularly for individuals with limited mobility. Benefits will also extend to local air quality and climate change where arrangements promote more sustainable modes of travel (e.g. cycling).</p> <p>The cumulative impact of this policy will be minor positive.</p>

Park and ride facilities recommended for sites at Tore and Smithton in Inverness.	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action will benefit local air quality and climate change where public transport replaces private vehicle use, even for part-journeys. Benefits will extend to local populations through increased accessibility, particularly where park and ride facilities provide multi-modal interchange opportunities, and increase the material asset value by enhancing existing services and facilities.</p> <p>The site selection process should ensure that impacts to local biodiversity, soils and other sensitive receptors are avoided or, at best, minimised.</p> <p>The cumulative impact of this policy will be minor positive.</p>
The charge for Park & Ride needs to be set relative to city centre parking charges and local bus services.	?	+	?	?	+	+	+	?	?	?	P	LT	L	<p>This action is unlikely to directly result in new physical development or alterations to existing Park & Ride facilities. It has the potential to influence the frequency of private vehicle trips taken to/from local centres.</p> <p>This action will benefit local air quality and climate change where public transport replaces private vehicle use, even for part-journeys. Benefits will extend to local populations through increased accessibility, particularly where park and ride facilities provide multi-modal interchange opportunities, and increase the material asset value by enhancing existing services and facilities.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Synergistic Impacts	<p>This policy seeks to rationalise the provision of parking facilities for all modes of transport across the region. Benefits local air quality and climate change will arise from the promotion of sustainable travel modes through the integrated provision of parking facilities and where public transport replaces private vehicle use, even for part-journeys, through the provision of new or improvements to existing Park & Ride facilities. Benefits will extend to local populations through increased accessibility, particularly where proposals provide multi-modal interchange opportunities or improve arrangements for individuals with limited mobility. Potential adverse impacts could arise from land-take required to provide new parking facilities. Impacts to remaining environmental topics are currently unknown; these will depend on the scope of improvements or new development required.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
Recommendations/ Mitigation	<p>The policy wording is vague in some places; it does not identify what specific issues should be considered. This should be clarified where identified above.</p> <p>The site-selection process for new parking facilities, including Park & Ride facilities, should seek to minimise land-take wherever possible, particularly on greenfield land. The provision of new parking facilities within settlements should be directed to derelict or vacant sites where viable.</p> <p>Construction of new facilities and associated infrastructure should be subject to a site-specific environmental assessment to identify any impacts to the environment and to recommend appropriate mitigation. Cleaner technology and sustainable materials should be promoted to reduce impacts where possible.</p>													

Policy Heading	CP11: Travel Plans													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenities	Noise				
Travel plans will be required with new developments at planning application stage where a Transport Assessment is required.	?	+	?	?	+	+	?	?	?	?	T	ST	L	This action will have benefits to population and human health, local air quality and climate factors by promoting sustainable modes of travel through the design of major new development. The cumulative impact of this policy will be minor positive.
The Council is undertaking its own Travel Plan for all staff in its employment.	?	?	?	?	?	?	?	?	?	?	?	ST	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown; this will depend on the specific measures identified in the forthcoming plan.
Travel plans should set out a programme of interventions which should see a shift to more use of active travel modes.	?	+	?	?	+	+	?	?	?	?	?	ST	L	This action will have benefits to population and human health, local air quality and climate factors by promoting sustainable modes of travel through the design of major new development. The cumulative impact of this policy will be minor positive.
Synergistic Impacts	This policy seeks to encourage sustainable travel patterns by considering the impact of physical development on transport from the planning application stage. In general this will have the potential to benefit population and human health, local air quality and climate factors by promoting sustainable modes of travel through the design of major new development. The extent of any benefits will depend largely on the quality of measures identified and implemented through the Travel Plans. The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.													
Recommendations/ Mitigation	Environmental assessments of individual schemes should be undertaken where appropriate to identify impacts and mitigation measures.													

Policy Heading	CP12: Freight Transport													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
Export of timber by road can put additional pressure on sub-standard roads. Where possible encouragement will be given to transporting timber by canal, sea or rail.	?	+	?	-	+	+	?	?	?	+	T	MT	R	<p>This action will result in improvements to air quality and climate change by reducing the number of lorry trips required. This will also lead to further potential benefits to population and human health and noise along the network. However the use of canal and/or sea to transport the materials may result in adverse impacts to water quality in the area.</p> <p>The cumulative impact of this policy will be minor positive.</p>
The Council will encourage all freight types to shift from road to rail, canal and sea where possible.	?	+	?	-	+	+	?	?	?	+	T	MT	R	<p>This action will result in improvements to air quality and climate change by reducing the number of lorry trips required. This will also lead to further potential benefits to population and human health and noise along the network. However the use of canal and/or sea to transport the materials may result in adverse impacts to water quality in the area.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Consideration will be given to prioritising maintenance where access roads are important for freight movement.	?	?	?	?	?	?	?	?	?	?	?	MT	R	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown
The Council will support and encourage transport of goods by rail into major settlements, i.e. Inverness and Fort William, where possible.	?	+	?	?	+	+	?	?	?	+	T	MT	R	<p>This action will result in improvements to air quality and climate change by reducing the number of lorry trips required. This will also lead to further potential benefits to population and human health and noise along the network.</p> <p>The cumulative impact of this policy will be minor positive.</p>
The Council will seek to identify suitable locations for lorry parking in and around Inverness.	?	?	?	?	?	?	?	?	?	?		MT	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
Synergistic Impacts	<p>This policy seeks to promote more sustainable modes of freight transport, including rail, canal and sea-based transport where possible. In general, this will result in improvements to air quality and climate change by reducing the number of road-based lorry trips required. This will also lead to further potential benefits to population and human health, by improving road safety, and reducing noise impacts associated with freight transport along the network.</p> <p>Notably, replacement modes of travel could present alternative environmental impacts which will need to be considered, particularly land-based transport leads to an increase in land-take required to delivery new infrastructure or where water-based transport leads to an increase in the quantity or frequency of vessels, impacting upon water quality and ecology.</p> <p>The overall synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
Recommendations/ Mitigation	<p>Any increase to the quantity or frequency of vessel traffic will have adverse impacts to local water quality and ecology. This would be particularly harmful in areas designated for the ecological value of water environments (e.g. SACs, etc.). Where this is proposed, further environmental assessments will need to be undertaken to identify potential impacts and detailed mitigation measures. This could involve undertaking an Appropriate Assessment where European-designated sites are likely to be affected by proposals.</p> <p>Water quality and biodiversity (including marine habitat sites) should be regularly monitored along routes where water-based transport replaces road-based transport and mitigation measures implemented as impacts are identified.</p>													

Policy Heading	CP13 – Design guidelines for new developments													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
The current New Roads Guidelines Review will be updated and completed to address the requirements for walking, cycling and public transport. Guidelines will also set out requirements for road layout for general traffic and have reference to PAN 76, New Residential Streets.	?	+	?	?	+	+	?	?	+	?	P	ST	L	<p>This action could benefit local populations through an increase in accessibility, with associated benefits to local air quality and climate factors where sustainable modes of travel are promoted. Promotion of good design which considers the visual and environmental context of the site could also enhance the landscape and visual amenity of the area. Impacts to remaining environmental topics are currently unknown; these will depend on the specific requirements proposed.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Parking standards are also being revised, having reference to PAN 75, Planning for Transport.	?	?	?	?	?	?	?	?	?	?	?	ST	L	Whether or not this measure will have an impact upon the environment, or result in cumulative impacts is currently unknown.
For specific area masterplans, the new guidelines will set out the requirements which are needed to support new development.	?	+	?	?	+	+	?	?	+	?	P	ST	L	<p>This action could benefit local populations through an increase in accessibility, with associated benefits to local air quality and climate factors where sustainable modes of travel are promoted. Promotion of good design which considers the visual and environmental context of the site could also enhance the landscape and visual amenity of the area. Impacts to remaining environmental topics are currently unknown; these will depend on the specific requirements proposed.</p> <p>The cumulative impact of this policy will be minor positive.</p>
Synergistic Impacts	<p>This policy seeks to promote sustainable modes of travel through the design of new development. In general, this could benefit local populations through an increase in accessibility, with associated benefits to local air quality and climate factors where sustainable modes of travel are promoted. Promotion of good design which considers the visual and environmental context of the site could also enhance the landscape and visual amenity of the area. Impacts to remaining environmental topics are currently unknown; these will depend on the specific requirements proposed.</p> <p>The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
Recommendations/ Mitigation	Designs guidelines should incorporate methodologies for the enhancement of the existing landscape as well as measures such as habitat creation.													

Policy Heading	CP14: Road Safety Plan													
LTS Policy	SEA Objectives										Permanence	Duration	Spatial Scale	Comments on Significance
	Biodiversity	Population And human Health	Soil	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape and Visual Amenity	Noise				
<p>Improve road safety addressing locations where road accidents are above average levels.</p>	?	+	?	?	?	?	?	?	?	?	T	LT	L	<p>Improving road safety will result in benefits to population and human health in the long term. Impacts to remaining environmental topics are currently unknown; these will depend on the specific requirements proposed.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Increase levels of cycling and walking</p> <ul style="list-style-type: none"> Promote the development of walkable neighbourhoods, through the promotion of travel awareness and the appropriate location and internal design of new and existing developments. Promote higher levels of cycling through travel awareness and the provision and maintenance of appropriate infrastructure. 	?	+	?	?	+	+	+	?	+	?	T	LT	L	<p>This action could benefit local populations through an increase in accessibility, with associated benefits to local air quality and climate factors through the promotion of active travel modes. Promotion of good design in new development and through improvements to existing layouts which considers the visual and environmental context of the site could also enhance the landscape and visual amenity of the area. This could also see benefits to material assets where improvements increase the value of existing transport networks.</p> <p>Impacts to remaining environmental topics are currently unknown; these will depend on the specific requirements proposed.</p> <p>The cumulative impact of this policy will be minor positive.</p>
<p>Synergistic Impacts</p>	<p>This policy seeks to improve road safety. This will have clear benefits to population and human health, with associated benefits extending to local air quality and climate factors where also sustainable transport is promoted.</p> <p>It is recognised that improvements could include superficial interventions such as improved signage and traffic management controls with minimal environmental impacts or major overhauls of traffic junctions and/or crossings with potentially significant implications to the environment. Impacts to environmental topics are, therefore, generally unknown. The synergistic impact of implementing this policy is deemed to be minor positive as a result of the number of beneficial impacts to the environment the policy delivers.</p>													
<p>Recommendations/ Mitigation</p>	<p>Regular road safety monitoring should also include impacts to local wildlife. This could include wildlife fatality as a result of road traffic accident counts, particularly along the trunk road network.</p> <p>Site-specific environmental assessments should be undertaken to identify environmental impacts and detailed mitigation measures where significant improvements are required to the existing transport network.</p>													

Appendix E

Responses to Comments on Scoping Report

Summary of the Highland Councils response to Comments received from Consultees on the Scoping Report

Name and Address of Respondent	Issue Raised	Council Response
<p>Susan Haslam, Acting Planning Unit Manager (North), Scottish Environment Protection Agency, SEPA Corporate Office, Erskine Court Castle Business Park, Stirling, FK9 4TR</p>	<p>Policy</p> <p>We consider that the PPS listed in Appendix A provides a very good background framework to the development of the Strategy. There are a very small number of other PPS which we suggest are also considered and these are outlined below. To assist you with the process of considering the PPS, we provide a brief synopsis of the PPS aim, and where available, a link to the original document.</p> <p><u>Water</u></p> <ul style="list-style-type: none"> • River Basin Management Plans, which set out the proposed arrangements for River Basin Management Planning in the each of Scotland's two River Basin Districts (www.sepa.org.uk/about_us/consultations.aspx); • In relation to flood risk, the Directive on the Assessment and Management of Flood Risks (EC Directive 2007/60/EC). The Floods Directive's aim is to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity (http://ec.europa.eu/environment/water/flood_risk/index.htm). Note that this also be relevant to the climate change receptor; • Thematic Strategy on the Protection and Conservation of the Marine Environment (2002), its purpose being to protect and conserve the marine environment (www.scotland.gov.uk/Topics/Environment/Water/16440/7090). 	<p>Additional policy to be added</p>

Air

- The EU Thematic Strategy on Air Pollution (2005), which sets out interim objectives for improving air quality (<http://ec.europa.eu/environment/air/cafe/index.htm>).

Climate Change

- The Second European Climate Change Programme (currently in preparation) which notes that the work identified in the first programme is being undertaken according to plan, but that further measures will be required in order to meet the EU's commitments under the Kyoto agreement (<http://ec.europa.eu/environment/climat/eccpii.htm>).

Material Assets (including waste management)

- Taking Sustainable Use of Resources Forward: A Thematic Strategy on the prevention and recycling of waste (EU, 2005), one of several sector-focused strategies produced under the Environmental Action Programme (http://ec.europa.eu/environment/waste/pdf/sec_2005_1682_en.pdf);
- Building a Better Scotland Infrastructure Investment Plan: Investing in the Future of Scotland, (2005) sets out the delivery plan for achieving significant investment in transport, education, health, water, waste management, sports, business, flood prevention and regeneration programmes in Scotland (www.scotland.gov.uk/Publications/2005/02/20756/53560);
- Zero Waste Scotland, new policy and targets on waste management (www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1);
- Councils own Waste Strategy (revision understood currently to be in draft);
- EC Framework on Waste 75/442/EEC Waste Framework Directive which establishes a framework for the management of waste across the European Community

	<p>www.wasteonline.org.uk/resources/InformationSheets/Legislation.htm#75442).</p>	
	<p>Baseline</p> <p>In relation to our interests the baseline information provided is good. The only specific area we would welcome more information on is in the air quality section; you may find the Environmental Report of the Regional Transport Strategy helpful in this regard.</p> <p>Most of our own data is available directly from SEPA's website. If you have difficulty location anything please contact our Access to Information team (Telephone: 01786 457700).</p> <p>In addition to this there are obviously other sources of information which may be useful and to try and help this work progress generally, we make the following suggestions.</p> <p>The Scottish Climate Change Impacts Partnership (SCCIP) website (www.sccip.org.uk) offers free access to data on climate trends and their impacts on Scotland which might be helpful.</p> <p>When considering the effects of climate change on flood risk the most recent climate change information for the UK as a whole is the United Kingdom Climate Change Impact 2005 (UKCIP05) study (Hulme et al., 2005). This study produced four scenarios (ranging from 'Low Emissions' to 'High Emissions') of climate change, based upon different projected inputs of greenhouse gasses to the atmosphere over the course of the 21st Century. Updated information was expected last year and is now expected in the spring. Further information can be found at www.ukcip.org.uk/.</p> <p>Where information on a Highland level is not available SEPA's State of the Environment Report for Scotland could provide national information (www.sepa.org.uk/changetomorrowtoday/report/index.html).</p>	<p>Additional air quality data to be added</p>
	<p>Scoping in/out of SEA Objectives</p> <p>We agree that in this instance all environmental receptors should be scoped into the assessment.</p>	<p>Noted</p>
	<p>Alternatives</p>	

	<p>Unfortunately we were not able to attend the scoping meeting and are therefore are not aware of the discussions on alternatives that took place.</p> <p>We agree that the purpose of SEA is not to generate alternatives. Instead its purpose is to assess the reasonable alternatives that have been considered in the plan-making process. From the text it would seem that the LTS facilitates recommendations made in other higher-level strategies. There are obviously different ways that these could be facilitated, and we would consider that it is these different options that representing the reasonable alternatives in this instance, and therefore it are these alternatives which should be assessed.</p> <p>Please note that if you have no intentions as a plan-make to either "do nothing" or pursue "business as usual" then we would not consider these to represent reasonable alternatives.</p>	<p>Following this comment a revised approach to the assessment of alternatives has been agreed with the Consultee Authorities.</p>
	<p>Approach</p> <p>We note that it is proposed that the strategic vision, objectives and core policy are all to be assessed. Having examined the draft strategy we consider this to be reasonable. Generally we would expect all aspects of the Strategy which could have significant effects to be assessed.</p> <p>The SEA Objectives proposed all seem reasonable to us. Providing the NTS and RTS SEA objectives alongside your proposed LTS SEA Objectives is a very useful way to demonstrate the linkages between the documents. We also welcome the setting of questions as a practical way to consider the assessment. In relation to material assets we would welcome that the SEA objective itself, or at least the assessment criteria question, consider waste management issues. A question "Will the LTS minimise the amount of waste produced, or encourage waste to be reused and recycled rather than disposed off?", or similar, should address this.</p>	<p>Noted</p> <p>Will include question on waste management in assessment criteria.</p>
	<p>Assessment</p> <p>We understand that the strategic vision and objectives will be assessed using one style of table and the core policy, using another. Generally rather than "compatibility" we would welcome assessment of significant effects, as this is what is required by the Act.</p> <p>It is not clear why the STAG criteria are also included in the policy assessment table; we would suggest</p>	<p>The Assessment matrices for the visions and objectives will be amended to look at the significant effects.</p>

that these might be best kept separate. If they are to be kept within the table then please ensure that comments on the assessment and significance relate to environmental issues and not social or economic issues.

We would expect the "comment on significance" box to be used in full to justify the decisions made. Removing the STAG criteria would allow more space for the comments box in the table.

We welcome the inclusion of mitigation in the table. However, we would encourage you to use this assessment to improve the environmental performance of individual aspects of the Strategy, and therefore mitigation would be best placed as a column (rather than a row) so that it can be related to each policy. Please remember that changes to the Strategy itself are the strongest forms of mitigation and we will be interest to see the differences between the current draft of the document and the one what will be published following assessment, along-side the ER.

Where the mitigation proposed does not relate to modifications to the Strategy itself then it should be clear how the mitigation will be achieved and by whom. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate). It would be extremely helpful to set out all mitigation measures in a way that clearly identified: (1) the measures required, (2) when they would be required and (3) who will be required to implement them. A summary table could be included as part of the preparation of the ER.

Generally when carrying out the assessment please refer to sections 6.3.7 to 6.3.3.12 of the Scottish Government SEA Toolkit which outlines the proposed coverage of the issues expected. Specific issues to consider may include, for example, the fact that:

- While air quality is generally very good in the area, air quality hotspots may occur at key points of congestion;
- Transport routes are an important source of diffuse pollution; and
- Construction of transport infrastructure will generally require watercourse crossings which can lead to disturbance of watercourses and the presence of permanent structures such as bridges can increase the risks of flooding.

	<p>Monitoring</p> <p>There is no reference in the scoping report to an approach to the monitoring of significant environmental effects from the Strategy.</p> <p>Although not specifically required at this stage, monitoring is a requirement of the Act and early consideration should be given to a monitoring approach particularly in the choice of indicators. It would be helpful if the ER included a description of the measures envisaged to monitor the significant environmental effects of the plan.</p>	<p>A draft monitoring framework will be included within the Environmental Report</p>
	<p>Next Steps</p> <p>We are satisfied with the proposal for an eight week consultation period for the ER.</p>	<p>Noted</p>

<p>George Hogg, Area Manager, Scottish Natural Heritage, Fodderty Way, Dingwall Business Park, Dingwall, Ross-shire. IV15 9XB</p>	<p>Scope and level of assessment</p> <p>1. A key factor for any transport strategy to address is climate change and the contribution that modal shift and increased proximity of services to population can make to combating climate change. Following on from the Climate Change (Scotland) Act 2009 the Scottish Climate Change Delivery Plan indicates contributions to greenhouse gas emission reductions expected from key sectors. An SEA Objective is proposed to address climatic factors, but the assessment criteria for this are more 'open-ended' in nature than the proposed assessment criteria for the other SEA Objectives. Therefore an understanding of the methodology and conclusions here may prove complicated. Any negative assessment ought as clearly as possible to be able to be concluded, so that mitigation can be considered or if necessary residual negative environmental effects clearly identified for the purposes of consultation and decision making.</p> <p>Leading on from this, since the draft LTS Objectives have already been identified in the draft LTS sent with the scoping report, it is possible to see that at present no LTS Objective specifically relates to the need to address climate change through the reduction of greenhouse gas emissions and adaptation to the effects of climate change. Although this could be considered within the proposed LTS Objective for the Environment ("Manage/reduce the impacts of transport on the natural and built environment"), we believe this objective should focus on more direct possible effects, with an additional LTS Objective being included to concentrate on climate change (e.g. "Seek to reduce greenhouse gas emissions and adapt transport infrastructure to withstand changing weather patterns").</p>	<p>We will amend assessment criteria for climate change to be more specific</p> <p>This will be considered as a recommendation following the assessment process.</p>
	<p>2. There is no reference in the other plans, programmes and strategies to the Highland Council's Single Outcome Agreement (SOA-2), although the draft LTS itself does include reference to the SOA (paras 2.76-2.77). However even here the reference is limited to the specific outcomes relating to transport, and so do not reflect the wider aspirations of the SOA to which all partners should work towards in their operations. Accordingly there needs to be more reference to and consideration of the SOA-2 as a whole in both the LTS and the SEA. The following local outcomes appear relevant at least -</p> <ul style="list-style-type: none"> • People across the Highlands have access to the services they need • Our natural heritage is protected and enhanced, enabling it to deliver economic, health and 	<p>Will provide text within the Environmental Report highlighting the links between the SOA 2 and the proposed LTS</p>

	<p>learning benefits</p> <ul style="list-style-type: none"> • Carbon emissions are reduced and communities are protected from the consequences of changing weather patterns (note this is one of the priority local outcomes) • The impact of the recession is limited and sustainable economic growth is supported (another priority) • To support the economy, access is improved to housing, transport and high speed broadband • Healthy life expectancy is improved, especially for the most disadvantaged <p>Any specific outcomes, indicators or targets relating to transport proposals in this SOA may need to be considered in the LTS SEA for any likely significant effects on the environment, since there was no SEA carried out for the SOA in view of its 'high level' nature. Thus one of the targets for transport in SOA-2 is to 'increase investment in lifeline roads and bridges'. A cross-reference could be made to the relevant LTS Objective or core policy that is taking this element of the SOA forward.</p>	
	<p>3. The relationship between the Local Transport Strategy, the Capital Programme and SEA needs to be considered carefully. Figure 9 of the draft LTS indicates that the Capital and Revenue Programmes sit underneath the LTS and are part of it ("LTS Capital and Revenue Programme"). Indeed Appendix B of the LTS will be the Capital and Revenue Programmes 2009-2014. However there is no reference to the components of the capital programme in the SEA, despite being how the LTS will be delivered on the ground. One possibility could be for the more significant proposed capital projects to be assessed against the SEA Objectives as well, e.g. road upgrades and improvements, new park and ride sites. Alternatively the assessment of the core policies of the LTS should allow for those elements within the capital programme that will deliver them, i.e. in scoring the core policy on road improvement schemes against the SEA objectives, account should be taken of relevant components of the capital programme that will be the 'on the ground' expression of the policy.</p>	<p>Cameron to advise on the status of the capital programme</p>
	<p>4. The proposed consideration of alternatives in the SEA essentially is either to produce the LTS or not to produce it. This does appear rather weak, and while we appreciate alternatives need to be reasonable and not devised for their own sake, it is a requirement to identify, describe and evaluate alternatives in the Environmental Report.</p>	<p>Following this comment a revised approach to the assessment of alternatives</p>

	<p>Figure 9.4 of the SEA Toolkit suggests a 'hierarchy' of alternatives, ranging from need/demand to mode/process, to location, to timing/implementation. There may be reasonable alternatives within the LTS relating to mode/process (i.e. alternative priorities that could be assigned to the LTS Objectives and hence the core policies that take them forward) and also – especially if the Capital Programme is more thoroughly included – relating to location and timing (i.e. selection and phasing of capital projects).</p>	<p>has been agreed with the Consultee Authorities.</p>
	<p>5. The SEA Scoping Report does not have a section on monitoring (included in part 9 of schedule 3 of the 2005 Act), but the draft LTS does, with Table 4 putting forward a draft monitoring framework for the LTS Objectives. This is to be welcomed, but the monitoring indicators will need to be expanded to consider the environmental effects covered in the SEA. Further examples might therefore be –</p> <ul style="list-style-type: none"> • The extent of fragile areas (or the index within this that considers accessibility) • Road kill deaths of protected species, especially badger and otter (fulfilling surveillance requirements for incidental killings of European Protected Species) • Development within designated nature conservation areas • Loss of prime agricultural land or peatland <p>For climate change, an indicator may be possible as part of any wider programme by The Highland Council in terms of monitoring greenhouse gas emissions, i.e. transport as a contributor to GHG emission levels in Highland.</p>	<p>A draft monitoring framework will be included within the Environmental Report</p>
	<p>6. In submitting a draft LTS at the same time as the SEA scoping report, there is a natural concern that the SEA process is not informing the production of the LTS. It is highly desirable that any mitigation identified in the draft Environmental Report should be reflected in the draft LTS prior to its consultation, with the draft LTS and the draft ER being available for consultation at the same time. This will mean that exactly parallel consultation times will not be possible for the draft LTS and the Highland Wide Local Development Plan Main Issues Report, but it would we believe be very beneficial for the LTS production process.</p>	<p>Noted</p>
	<p>Consultation period for the environmental report</p> <p>We note that a minimum period of eight weeks is proposed for consultation on the Draft Environmental Report (at the same time as consultation on the draft LTS) and we are content with this proposed minimum period and with</p>	<p>Noted</p>

	<p>consultation on the draft LTS and draft ER taking place at the same time.</p>	
	<p>PPS Review</p> <p><u>International Tier</u></p> <p>Suggest add for completeness re climate change the European Climate Change Programme (2005)</p> <p>The Ramsar Convention could be added, although the EC Wild Birds Directive is included</p> <p><u>UK National Tier</u></p> <p>Suggest add the UK National Aviation Strategy</p> <p><u>Scottish Tier</u></p> <p>Scottish Planning Policies – suggest add –</p> <ul style="list-style-type: none"> • SPP 11 Open Space and Physical Activity (references in here to green networks and to core paths) <p>Planning Advice Notes – suggest add –</p> <ul style="list-style-type: none"> • PAN 52 Planning and Small Towns • PAN 59 Improving Town Centres • PAN 75 Planning and Transport • PAN 76 New Residential Streets 	<p>PPS review to be updated in accordance with comments</p>

- PAN 77 Designing Safer Places

Add “Scotland’s Scenic Heritage” and Planning Circular 9/1987 in order to cover National Scenic Areas

Add Countryside (Scotland) Act 1967 – public bodies have a duty in respect of conserving the natural beauty and amenity of the countryside

Add Land Reform (Scotland) Act 2003 in order to cover access, e.g. this places a duty on local authorities to identify and manage a core path network

Could add “European Protected Species, Development Sites and the Planning System” (Scottish Executive, 2001) to address EPS more at the national level

Add Scottish Soil Framework

Health strategies and programmes should be added, to provide context for active travel, e.g –

- Let’s Make Scotland More Active (2003)
- Improving Health in Scotland – The Challenge (2003)
- Delivering a Healthy Scotland – Meeting the Challenge (2006)

Also in this context is “Safe Routes to Schools” to add

Since ferries are included in the LTS, any PPS relating to the protection of the marine environment should be included – one example may be the OSPAR Convention on international cooperation on protection of the marine environment of the North-East Atlantic

Local Tier

As noted in the letter, there must be added a reference to the Single Outcome Agreement of THC (SOA-2) – the

	<p>LTS must clearly demonstrate how it is working to achieve relevant parts of the SOA</p> <ul style="list-style-type: none"> • Add reference to the suite of Landscape Character Assessments covering Highland • Add reference to Core Path Plans covering Highland • Add reference to A96 Corridor Framework Plan • Add reference to Highland Council's Badger Policy Guidance Notes • If the Cairngorms National Park area is included within the LTS, then the Park Plan • and the Park Local Plan will need to be added 	
	<p>PSS Review Updates</p> <p>8 EU Habitats Directive - Amend third sentence to read "Projects are only permitted adversely affecting such sites under exceptional circumstances" – since there is a need also to be mindful of developments outwith sites but which could impact upon a site. Protected species should refer to Annex IV (European Protected Species) Amend last sentence to read "... must be subject to an Appropriate Assessment if there is likely to be a significant effect either alone or in combination with other plans and proposals".</p> <p>Add a sentence to say that "Any development or works that could potentially affect a European Protected Species can only be permitted if a licence to disturb can be obtained from the Scottish Government"</p> <p>Refer also to Article 10 Features – wildlife corridors – need to avoid fragmentation and to seek connectivity – support the green network concept as also now being advocated in NPF2 – safeguard and enhance functioning green networks</p> <p>10 EC Birds Directive - This should refer in column 2 to SPAs and the test once again about the possible need for Appropriate Assessments. In column 3 there should be consideration of impacts on wild birds themselves as well</p>	<p>PPS review to be updated in accordance with comments</p>

	<p>as on wild birds' habitats.</p> <p>17 Wildlife and Countryside Act 1981 as amended. Refer also here to protected species under Schedules 1 (birds), 5 (other animals) and 8 (plants) – strict protection except in exceptional circumstances</p> <p>22 NPF2 – this is now adopted</p> <p>30 NPPG 14 Natural Heritage – no need to refer to cultural heritage here too</p> <p>46 Title should be The Conservation (Natural Habitats, &c.) Regulations 1994 as amended – it has been amended several times, so it may be too unwieldy to have an entry for each Amendment Regulation – the overall implications for the LTS are consistent</p> <p>58 Scottish Climate Change Bill</p> <p>This is now the Climate Change (Scotland) Act 2009. The Scottish Climate Change Delivery Plan indicates the contribution to greenhouse gas emission reduction targets expected from key sectors. It identifies measures which can lead to a 32% reduction in transport-related emissions by 2020 (when compared with 2006 levels).</p>	
	<p>PPS to be removed</p> <p>21 NPF1 – this can now be deleted (replaced by NPF2)</p> <p>25 SPP 6 Renewable Energy – uncertain if this is relevant to LTS, so could be removed</p> <p>64-65 , 72 Other renewable energy strategies at the Scottish and Highland levels – as for SPP 6 it is rather unclear as to how this LTS can promote or otherwise renewable energy usage – so this may be an aspect that can be omitted (unless the electrification of the Inverness – Edinburgh/Glasgow railway line is promoted?)</p>	<p>PPS review to be updated in accordance with comments</p>
	<p>Baseline</p>	

	<p><u>Biodiversity, Flora and Fauna</u></p> <p>Table 1 – SPAs are for wild birds, not for flora and fauna. The total area figure of 6.59 km² is incorrect</p> <p>2.3.3 This should refer to Schedules 2 and 4 of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, not the Habitats and Birds Directive 1994 (amended 2008). The European Protected Species listed could just refer to those occurring in Scotland, so long as this was made clear in the text – so the following can be omitted –</p> <ul style="list-style-type: none"> • Large butterfly • Dormouse • Sand lizard • Smooth snake • Shore dock • Early gentian • Lady’s slipper • Creeping marshwort • Fen orchid • Floating leaved water plantain <p>There is a duty on Member States under Article 12.4 of the Habitats Directive to establish monitoring of incidental or accidental capture and killing of European Protected Species. Otter in particular are vulnerable to collisions with road traffic. A simple system of recording road kill by the Council’s roads maintenance crews could help both inform the design of road improvements and contribute to Scotland’s duty under the Directive to undertake</p>	<p>Baseline to updated in accordance with comments</p>
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surveillance. This can form part of the monitoring of this SEA and be baseline data for the SEA of future LTSs.

In the same vein Scottish Badgers has a database of the location of badger Road Traffic Accidents (RTAs) throughout Scotland, and this baseline data should be referred to by the Highland LTS, given the issues around the A96 corridor in particular. Highland Council should hold data on the inventory of ancient, semi-natural and long established woodland, and also selective Phase 1 Habitat Survey coverage.

Water

The WFD Area Management Plans for Argyll and Lochaber and for North East Scotland should be included to enable complete coverage of Highland.

Soil

Agricultural land classification could be used to consider possible effects on prime land. We note peatland data can be taken from Scottish data on both soils and land cover. Under soil is proposed a consideration of geodiversity. Therefore baseline information is required for this. Examples should include –

- Geological SSSIs
- Geological Conservation Review sites
- Regionally Important Geological Sites (RIGS)

Air

The Air Pollution Information Service (APIS) is the key source of information on the impacts of air pollution on habitats and species – see www.apis.ac.uk

Climatic Factors

The MONARCH Project (Modelling Natural Resource Responses to Climate Change) may provide useful environmental baseline data – it provides a valuable framework for studying the response of the key biodiversity elements to climate change.

	<p><u>Landscape</u> Areas of Great Landscape Value (AGLVs) should be added to Table 18 – data can be obtained from THC. Search Areas for Wild Land is another possible environmental baseline, although it may be concluded that the LTS will have no effect on such areas (negative or positive).</p> <p><u>Material Assets</u> The SEA Objective relating to this may need to be changed – as discussed at the workshop it may be better to focus this more on the walking and cycling networks, rather than transport infrastructure as a whole. Otherwise this will be a very self fulfilling section for a LTS. So data on cycle routes as well as core paths would need to be added.</p>	
	Yes - agree that all topics should be scoped in.	Noted
	<p>SEA Objectives</p> <p><u>General</u> It would be useful to see if the assessment criteria can all be answered ‘yes’ or ‘no’ in a consistent way, at least within each topic. Thus for Population and Human Health, the desired answer to the first two criteria is ‘yes’ while the desired answer to the last criterion is ‘no’ – it would be easier in reading the assessment if the last was converted to seek a ‘yes’ answer also, i.e. “Will the LTS maintain or enhance the air and water quality of the region”? – (although having said that these are repeated later, so this criterion is not really necessary here).</p> <p>The assessment criteria should allow for the scope for positive as well as negative environmental effects – thus for cultural heritage (“Will the LTS result in any adverse impacts upon the cultural heritage features of the Highlands?”) this may suppress consideration of seeking positive effects as well as avoiding negative effects – so this can be solved by simply removing “adverse” from this and other similar criterion.</p> <p><u>Biodiversity</u> 2nd criterion – rather than an ‘adverse effect’ it would be preferable if this was amended to ‘impact’ in order to be consistent with the 3rd and 4th criterion, and in order to allow in theory for positive as well as negative effects,</p>	<p>Noted</p> <p>Will review assessment criteria to ensure there is scope for positive as well as</p>

	<p>which is part of the SEA process.</p> <p>A further assessment criterion could be added to take account of green/wildlife networks and corridors (bearing in mind Article 10 of the Habitats Directive). It is important that functioning green networks should not be fragmented or connectivity impaired. On the positive side it would be desirable for currently fragmented wildlife movement areas to be connected by say hedge or tree planting. Therefore an additional criterion under Biodiversity could be along the lines of –</p> <ul style="list-style-type: none"> • Will green networks for the movement of wildlife be safeguarded and enhanced? <p><u>Soil</u> 3rd criterion – SPAs would not be designated on the basis of geology – so delete reference to SPA here.</p> <p><u>Climatic factors</u> See comments in main letter – the qualifications and caveats to the first two assessment criteria may over-complicate this part.</p>	<p>negative impacts</p> <p>To be amended</p> <p>Noted</p>
	<p>As noted above, the 3rd criterion under Population and Human Health could be omitted, as it duplicates air and water quality elsewhere. Otherwise the need to scope in all the issues limits the degree to which the objectives can be more focussed.</p>	<p>Noted</p>
	<p>Assessment matrices</p> <p>The methodology appears to switch between the Vision/Objectives and the Core Policies, using a different scoring system for each. It is not clear why this is proposed, and the proposed methodology for the Core Policies is the more conventional (ranging from major positive to major negative).</p> <p>The mitigation/recommendations column at the right hand side of the Vision/Objectives matrix is welcomed, and it would be clearer if similarly the final column at the right hand side of the Policies matrix was also headed Mitigation/Recommendations. It is highly desirable that identified mitigation should be taken back into the draft LTS produced at the same time as the draft ER, in order that it is clear that it is informing the strategy rather than</p>	<p>The Assessment matrices for the visions and objectives will be amended to look at the significant effects</p> <p>Column to amended</p> <p>Noted</p>

	<p>being left to a possible future document (thus 'economic growth' in the vision may need to be prefixed by 'sustainable'; an additional LTS Objective as noted may need to relate to the contribution to tackling and adapting to climate change; and Core Policy 13 re design guidance for new developments may need to include reference to species, habitats, landscape and access).</p> <p>The proposed consideration of potential cumulative impacts of the core policies is to be welcomed. It is however unclear how the assessment methodology will consider if necessary any cumulative impacts with other PPS, especially the Highland Wide Local Development Plan.</p> <p>More detailed matrices than that shown in Appendix C of the scoping report will presumably be included in the Draft Environmental Report to enable understanding of how aggregate scores of significance are obtained from a combined consideration of the assessment criteria, duration, permanence/reversibility and spatial scale.</p>	<p>Noted</p> <p>A robust commentary will be provided in the assessment matrices to justify how the aggregate scores of significance are obtained</p>
	<p>Methodology</p> <p>It does not seem necessary to include Scottish Transport Appraisal Guidance (STAG) criteria as well as SEA Objectives in the assessment methodology. It would seem less complicated if the STAG was kept separate from the SEA</p>	<p>Stag criteria to be removed</p>
	<p>Detailed Comments</p>	<p>To be amended</p>

Location	Section of text (if applicable)	Comment
Page 9, Table 2	Biodiversity, Flora and Fauna	Reference should be to Cairngorms National Park.
Page 11, Table 3	Biodiversity, Flora and Fauna	Should add reference also to species.
Page 16, Table 5	Soil	Add question mark after fourth bullet point
Appendix A, Links to other Plans, Programmes and Policies and their environmental objectives		
17. Wildlife and Countryside Act 1981 as amended		In column 3 should be SSSIs not SSS's. Reference to SAC and SPA here is slightly misleading as these are international sites rather than national ones and are not linked directly to the Wildlife and Countryside Act.
17. Wildlife and Countryside Act 1981 as amended	"...in terms of biodiversity) and strive to ensure they are adequately protected..."	Bracket not necessary; "...strive to ensure..." is not strong enough given that Highland Council has a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity. Cross reference could be made to NPPG 14 and the policy test therein for development affecting SSSIs.
45. Nature Conservation (Scotland) Act 2004	"The LTS should seek to ensure [SSSI] protection and enhancement where possible".	"...seek to ensure..." is not strong enough given that Highland Council has a duty under the Act to further the conservation of biodiversity. Cross reference could be made to NPPG 14 and the policy test therein for development affecting SSSIs.

	<p>46. The Conservation (Natural Heritage <i>[sic]</i> & c.) Amendment (Scotland) Regulations 2004</p>	<p>Column 2, paragraph 3: "...Part Me of the Wildlife and Countryside Act 1981."</p>	<p>Should be The Conservation (Natural Habitats, &c.) Regulations</p> <p>Misprint re "Part Me"</p>	
Appendix B: Environmental baseline - Section 2; Biodiversity, flora and fauna				
Page 3, Table 1	SSSIs	Strictly speaking SSSIs are not defined as 'exemplary places for nature conservation' but as land of special interest by reason of its natural features.		
Page 7, Para. 2.5		Reference to Habitats Directive does not need to be in bold.		
Page 8, Para. 3.3.1. Population – para 3, line 9 of 10.	"Fodd Shop"	Should be food shop; Figure 3 Fragile Areas fails to state what the key means. Presumably the higher the indicator number, the more fragile the area, but this should be clarified.		
Page 11, Table 4	Road Accidents and Casualties	The "All Scotland" figure for fatalities (71) appears incorrect, as this is less than the number of fatal accidents (255)		
<p>Alasdair McKenzie, Strategic Environmental Assessment Team Leader, Historic Scotland,</p>	<p>Scope and level of assessment</p> <p>I found the Scoping Report to be clear and thorough and, subject to the specific comments set out below and in the annex, I am content with the scope and level of detail proposed for the environmental assessment.</p> <p>My understanding from the Scoping Report is that the environmental assessment will undertake an assessment of:</p>			<p>Noted</p>

<p>Longmore House, Salisbury Place, Edinburgh EH9 1SH</p>	<ul style="list-style-type: none"> • Strategic Vision • Objectives • Core Policy 	
	<p>I note that alternatives to the strategy have been considered, including a ‘business as usual’ and a ‘do nothing’ approach. You may wish to include in the report a discussion on how alternatives within the strategy itself have been assessed and to record the outcomes of these in a clear manner. For example, where a preferred option for a project is identified in the Local Transport Strategy (LTS), a discussion of the project’s alternatives should to be included in the Environmental Report to demonstrate that the environmental implications of the various options have been considered in determining the preferred option to be taken forward in the LTS.</p>	<p>Noted</p>
	<p>While we accept that the timing of the scoping exercise can be difficult to judge, the submission of the Draft LTS at the same time as the scoping report raises concerns that the preferred content of the strategy has already been substantially determined. It will therefore be important to demonstrate how the SEA has influenced the development of the LTS, indicating any mitigation measures or changes made during the course of the assessment within the Environmental Report.</p>	<p>Noted</p>
	<p>Simply for information, Scottish Historic Environment Policy (SHEP) (Chapter 1) provides a useful definition of the historic environment. It defines that the historic environment encompasses built heritage features (ancient monuments, archaeological sites and landscapes, historic buildings, townscapes, parks, gardens and designed landscapes, as well as marine heritage) and the context or setting in which they sit, and the patterns of past use, in landscapes and within the soil, and also in our towns, villages and streets. It also recognises that the historic environment has less tangible aspects including the historical, artistic, literary, linguistic and scenic associations of places and landscapes.</p>	<p>Noted</p>
	<p>Impacts on historic environment features often depend on the land-take associated with infrastructure and supporting activities, and may be avoided through appropriate locational measures. Impacts on the historic environment should be considered in terms of the following:</p>	<p>Noted</p>

	<ul style="list-style-type: none"> • direct i.e. loss of and/or damage to a feature of the historic environment e.g. through land take • indirect e.g. effects on the setting of a listed building or scheduled ancient monument; changes to surface drainage patterns, removal of peat; etc 	
	When undertaking the environmental assessment, you may find that some impacts are uncertain at the strategic level. Where this is the case it is important to identify these issues and to be clear how they will be taken into account at the lower level, for example at project level, and who will be responsible for following them through.	Noted
	<p>Consultation period for the Environmental Report</p> <p>I am content with the 8-week period proposed for consultation on the Environmental Report. Please note that, for administrative purposes, Historic Scotland consider that the consultation period commences on receipt of the relevant documents by the SEA Secretariat.</p>	Noted
	At the Environmental Report stage, I would prefer to receive paper copies of the report and the draft strategy, both of which should be sent via The Scottish Government Gateway in line with the procedures set out in the SEA Tool Kit (available at www.scotland.gov.uk/Publications/2006/09/13104943/45).	Noted
	<p>Introduction, setting the context and Draft Context of the Local Transport Strategy</p> <p>I found these sections very helpful for setting the context for the Local Transport Strategy (LTS) in particular the relevant issues, objectives and the policy context for LTS.</p>	Noted
	<p>Relationship with other Plans, Programmes and Strategies</p> <p>I am content with the PPS included for the historic environment in Appendix A.</p>	Noted
	<p>PPS Updates</p> <p>SHEP supersedes the policy elements of Passed to the Future and so you may wish to remove the reference to it from the list of relevant PPS.</p> <p>Managing Change in the Historic Environment Guidance Notes have now gone out to public consultation (31</p>	PPS review to update in line with comments

	<p>August). The consultation seeks views on the form and content of the guidance notes, which are designed to support the Scottish Historic Environment Policy (SHEP) and Scottish Planning Policy SPP23: Planning and the Historic Environment. The initial series of 14 notes replace guidance previously provided by the Memorandum of Guidance (1998). The notes have been designed to offer clear, consistent advice to professionals, developers and applicants and be published on-line. The consultation documents can be accessed via the following link http://www.historic-scotland.gov.uk/index/about/consultations/currentconsultations.htm</p>	
	<p>PPS Removal Please see Paragraph 1 of PPS Updates section above.</p>	Noted
	<p>Baseline</p> <p>I note that Gardens and Designed Landscapes (GDL) is listed in both Historic Environment and Landscape baseline data in Appendix B. For clarity and for accurate recording of environmental impacts you should amend the baseline data to show GDL's in one or the other and not both, and you should also include GDL's under the same SEA topic (Historic Environment or Landscape) in Table 2 page 10.</p> <p>I can confirm the following information for our historic environment interests:</p> <ul style="list-style-type: none"> • 186 A Listed Buildings • 1667 B Listed Buildings • 1162 C (S) Listed Buildings • 1237 Scheduled Monuments • 51 Gardens and Designed Landscapes (as a minor point we use the term Gardens and Designed Landscapes rather than <i>Historic</i> Gardens and Designed Landscapes.) <p>You may wish to also use the same historic environment protection objective as set out in Table 5 page 17 of the</p>	<p>To be amended</p> <p>Noted</p>

	<p>scoping report to ensure consistency.</p> <p>Historic Scotland can provide up to date GIS datasets under licence for scheduled monuments, listed buildings, and gardens and designed landscapes (contact hsgimanager@scotland.gsi.gov.uk). This information can also be downloaded from Historic Scotland's spatial data warehouse at http://hsewsf.sedsh.gov.uk/pls/htmldb/f?p=500:1:8448412299472048421::NO</p>	<p>To be amended</p> <p>Noted</p>
	<p>Proposed Scope and Level of Detail</p> <p>Do you agree with the approach to Scope all topics in?</p> <p>A: I note that all topics including the historic environment are scoped in to the assessment and I am content.</p> <p>Do you agree with the approach to assess the do nothing and do everything as our alternatives?</p> <p>A Please see my comments at point 1.3 of the accompanying letter.</p>	<p>Noted</p> <p>Noted</p>
	<p>SEA Framework</p> <p>Q.7 Are the SEA Objectives suggested in Table 5 suitable for this particular assessment?</p> <p>A: I am content with the SEA objectives suggested for the historic environment in Table 5.</p> <p>Q.8 What recommendations would you have on refining the list to ensure focus is maintained on only the key significant issues for the LTS?</p> <p>A: Significant issues for the historic environment arising from the implementation of the strategy are likely to be negative/adverse due to the new transport interventions and land-take associated with these, and I therefore agree that the assessment criteria should concentrate on the potential for adverse impacts to the historic environment.</p> <p>Q. 9 Do the assessment matrices outlined in Appendix C provide sufficient detail on the proposed assessment</p>	<p>Noted</p> <p>Noted</p>

	<p>methodology?</p> <p>A: I am content with the proposed methodology for the assessment of the LTS. I welcome the early consideration of how any mitigation measures will be identified and taken forward. As you will be aware these should follow the mitigation hierarchy i.e. avoid, reduce, remedy or compensate (for negative effects) and enhance where appropriate (for positive effects). Mitigation measures may include making changes to the strategy, as well as proposing more detailed measures to be implemented as the strategy objectives or policies are delivered.</p>	<p>Noted</p>
	<p>Monitoring</p> <p>The ER should provide an outline of how significant and unforeseen environmental effects will be monitored. When monitoring the effects of the strategy, indicators chosen for the historic environment should reflect both the actions to be taken within the strategy and the potential impacts identified in the course of the SEA. I would be happy to discuss this further should you find it helpful.</p>	<p>A draft monitoring framework will be included within the Environmental Report</p>

Appendix F

The Highland Council Local Transport Strategy: Screening for Appropriate Assessment

Introduction

This report documents the screening for ‘Appropriate Assessment’ (AA), which has been undertaken as part of the Strategic Environmental Assessment of the Highland Council’s Local Transport Strategy (LTS). An Appropriate Assessment is required where any plan is likely to have a significant effect on a ‘Natura 2000’ site (designated under the EU Habitats and Birds Directives), which are transposed into Scottish law by the ‘Conservation (Natural Habitats &c) Amendment (Scotland) Regulations 2007. Natura 2000 sites include Special Areas of Conservation and Special Protection Areas. Ramsar sites are also included in Appropriate Assessment, in accordance with advice from Scottish Natural Heritage.

The LTS lies within or adjacent to a large number of Natura 2000 sites, of which 41 have the potential to be significantly affected. The potential environmental impacts of the LTS on these sites and their interaction with the requirements of the Habitats Regulations are critical to the development of a realistic and viable strategy.

The following table provides a summary of the AA process;

Table G1: AA steps

Screening Phase	
Step	Task
1	Identify the geographical scope of the plan.
2	Identify all European sites that may be affected (maritime and terrestrial)
3	Consider the qualifying interests and conservation objectives of each European site which may be affected, in the context of the plan’s aims and objectives
4	Plan implications; consider the development objectives and what they might entail for one or more European sites. Including an estimation of the likely magnitude, duration, location and extent of the effects of these changes as far as possible
5	Determine which, if any, elements of the plan would have a ‘likely significant effect’ on any interest/feature of any European site, alone or in combination with other projects and plans, directly or indirectly
6	If no ‘likely significant effects’ on European sites, plan may be submitted to Scottish Government and adopted
7	For each likely significant effect, consider avoidance measures to remove the significant effect on the European site. If such modifications remove the likelihood of a significant effect on any European site, the plan may proceed to adoption or submission for Scottish Ministers’ approval. Records will be kept of the modifications made, their appraisal and the reasoning behind such a conclusion. Where there are residual likely significant effects, we will progress to Stage 2 (Appropriate Assessment Phase)

Appropriate Assessment (AA) Phase	
8	Where a significant effect on a European site remains likely, an AA is required. Agree the methods and scope of the AA with SNH and other relevant stakeholders (e.g. SEPA; The Scottish Government).
9	For each likely significant effect, alone or in combination, undertake an AA of the implications for the site in light of its conservation objectives (regulation 48(1)).
10	Having formally consulted SNH (regulation 48(3)) and other stakeholders (regulation 48(4)), identify any impacts on European sites, possible avoidance and/or mitigation measures, or restrictions which would allow them to be undertaken. The Scottish Government need to ascertain that the plan would not adversely affect the integrity of any European site (regulation 48(5)). Consider any restrictions or modifications to which the plan may be subjected, in order to achieve 'no adverse effects' (regulation 48(6)).
11	If no adverse effect on European site integrity plan can proceed to adoption. For a high level offshore wind plan, show which developments will need further, more detailed assessment at site level (i.e. lower tier AA)
12	If it <i>cannot</i> be ascertained that a plan will <i>not</i> adversely affect European site integrity, The Scottish Government can only proceed with it if it is agreed that it meets the necessary tests for imperative reasons of overriding public interest.

Methodology

The AA screening complies with Scottish Government guidance on AA². The methodology for this screening is based on discussions³ that took place in September 2009 with Scottish Natural Heritage, the statutory consultee for AA in Scotland. It was decided that a simple table would be produced to outline the key environmental implications for the different transport schemes and what, if any, further AA work was required. This approach was taken for the following reasons;

- To avoid repetition; some of the proposed transport schemes in the LTS have already been assessed in the AAs of other plans⁴

² Assessing Development Plans in Terms of the Need for Appropriate Assessment (Interim Guidance). Scottish Government, 2006.

³ Email correspondence with Graham Neville, 21/10/09, 22/10/09.

⁴ Transport Scotland Strategic Transport Projects Review AA, AA in Support of the HITRANS Regional Transport Strategy

- given the strategic nature of the LTS and its core policies at this time specific detailed interventions have not been identified; they would therefore be extremely difficult to assess appropriately.

All Natura 2000 sites located within or near the Highlands were screened for potential impacts; no sites were ‘scoped out’. Due to some Natura 2000 sites having an extensive list of qualifying interest features, these features and the conservation objectives for the sites are presented in the citations at the end of this appendix.

Table G2 shows the distances for which impacts of the LTS are possible, as used in the AA of the Strategic Transport Projects Review (STPR) for Scotland. For the sake of brevity a full description of species and sensitivity and evidence sources are not repeated here. The receptors in this table refer to the qualifying interest features of all potentially affected Natura 2000 sites.

Impact Screening Methodology

Table G2: Impact receptors and distances

Effect	Receptor used in STPR AA	Distance from transport scheme for possible impact
Habitat Loss and / or Fragmentation;	All habitat types	2 km
Noise & Vibration;	Breeding bird species	1.5 km
Changes in Hydrology and/or Water Quality	All aquatic ecosystems	2 km

Screening for air pollution from NO_x, NH₃, heavy metals and particulates is based on possible impacts from major roads passing within 200m of a Natura 2000 site, a distance quoted in UK Design Manual for Roads Bridges guidance⁵ for possible impacts on Natura 2000 sites.

⁵ Interim Advice Note 61/05: Guidance for Undertaking Environmental Assessment of Air Quality for Sensitive Ecosystems in Internationally Designated Nature Conservation Sites and SSSIs (Supplement to DMRB 11.3.1)

Summary results

Many aspects of the LTS are conceptual and it was therefore not possible to assess any tangible impacts on Natura 2000 sites. However, many specific interventions are presented within Core Policies (CPs) contained in the LTS and it was possible to assess these due to site location details being known. These interventions are shown in the maps at the end of this appendix and are as follows;

- CP2: Road Improvement Schemes; Trunk Road Priorities
- CP4: Pedestrian and Cycle Network
- CP5: Road based Public Transport (Part 1 – Key route network); bus priorities
- CP6: Rail based Public Transport
- CP8: Air Services
- CP9: Ferry Services
- CP10: Parking Policy: new park and ride sites

The assessment found that there were possible significant impacts on 41 Natura 2000 sites (see table G3). These impacts are likely to occur in the following ways;

CP2: Road Improvement Schemes; Trunk Road Priorities

As a result of road improvements, particularly the dualling of the A96 between the A96 and the A9 south of Inverness and link roads between the A96 and A9 and between the A9 and A82. Roads that already run through Natura 2000 sites were also assessed to have likely significant impacts and therefore require further site-level AA. These are as follows;

- The A82 passes through River Moriston Special Areas of Conservation (SAC), Onich to Ballachulish Woods SAC, Glen Coe SAC, Rannoch Moor SAC and the Rannoch Lochs Special Protection Area (SPA) and Ramsar sites and passes very close to Urquhart Bay Wood SAC
- The A9 passes through or very close to Slochd SAC, Kinveachy Forest SPA and Ramsar site, the River Spey SAC, Insh Marshes SAC, SPA and Ramsar sites and the Drumochter Hills SAC and SPA
- Developments associated with the A96 have the potential to impact on the nearby Moray Firth SAC, the Inner Moray Firth SPA/ Ramsar and the Loch Flemington SPA

In general terms these road improvements could fragment all habitat types or degrade it through drainage run-off, changes to water levels or air pollution from dust and chemical pollutants, principally oxides of nitrogen, ammonia and heavy metals. Dust pollution would be more likely to be associated with the construction phase whereas airborne chemical pollution would be more likely to be caused by vehicles using the road after construction. Traffic could also disturb qualifying bird species through noise or light pollution. Finally, increased numbers of vehicles using the A82, A9 and A96, or roads leading from them, could lead to increased recreational pressure on many sites, which could particularly affect ground-nesting bird species that are qualifying features of many SPAs and Ramsar sites.

CP4: Pedestrian and Cycle Network

Impacts from pedestrian and cycleway improvements were only deemed to be likely if new structures were placed in the River Spey SAC, if drainage of pollutants from the path affected the River Spey SAC or if there was a change to water table levels or an increase in recreation disturbance to habitats, qualifying bird species or otters.

CP5: Road based Public Transport (Part 1 – Key route network); bus priorities

Improvements to bus services were seen to improve air quality and therefore reduce potential impacts on Natura 2000 sites, but actual road engineering works could lead to potentially significant impacts. Road widening could also cause impacts on various Natura 2000 sites in the longer term. These impacts would likely be the same as those described above under the potential impacts of CP2.

CP6: Rail based Public Transport

Works at Conon Bridge Railway Station were found to have uncertain impacts due to lack of precise details of the works. The nearest Natura 2000 site to the station is Conon Islands SAC, which lies within 0.5km of the station. However, the SAC is on the opposite side to the A862, meaning impacts may be unlikely unless the A862 itself is affected by the station improvements.

CP8: Air Services

Increased airport usage or expansion could lead to air pollution affecting some Natura 2000 sites but the impacts would depend on weather conditions and emissions from vehicles and aircraft operating from the airports. It could also lead to increased noise and physical disturbance to the qualifying bird species of the Inner Moray Firth SPA and Ramsar site from Inverness airport improvements and the Cuillins SPA from Broadford airstrip operations.

CP9: Ferry Services

Increased use of ferry services could potentially impact on seals, otters and the qualifying bird species of various SACs, SPAs and Ramsar sites if noise disturbance or litter and chemical pollution was to occur in their proximity, but these impacts were seen to be unlikely as JNCC data on Standard Natura Data forms does not indicate any such threats from existing ferry services.

CP10: Parking Policy: New Park and Ride Sites

Impacts were only likely to occur as a result of new park and ride sites if their development in some way led to increased private vehicle usage (and therefore increased air pollution) of the roads in their proximity, drainage of pollutants into designated habitat or direct land-take of designated or supporting habitat.

Conclusions

The AA found that most likely impacts are likely to occur as a result of road improvements, especially with roads that already run through Natura 2000 sites. Impacts from many transport schemes were not easy to predict but possible impacts were listed for habitat loss and fragmentation, air pollution, run-off pollution, road strike, noise pollution and changes to hydrology. To summarise, the AA found that there were possible significant impacts on 41 Natura 2000 sites in total, yet impacts were unlikely to occur on 14 of these sites. For all sites where there was an uncertain impact, further details of the transport schemes will be needed to assess their likely impacts. A large number of schemes, including those listed as having uncertain effects, will require further, site-level AA.

Table G3: Screening Matrix

Intervention	Description	Natura 2000 Sites ⁶	Potentially Significant Impacts	Take forward to scheme specific AA? ✓*
Trunk road priorities				
A96 Inverness to Nairn	Dualling proposals; Masterplan for development through the corridor Inverness to Nairn	Moray Firth SAC	Habitat impact pathways <ul style="list-style-type: none"> • Increased chemical and particulate pollution from construction activities • Increased pollution caused by fuel spills and leakages. • Increased pollution from run-off and erosion from or near road edges. Habitat effects	✓

⁶ Qualifying features and conservation objectives for the international sites of nature conservation interest are listed at the end of this matrix

			<ul style="list-style-type: none"> Elevated sediment and solids levels increasing turbidity and sedimentation rates. Potential change in biotopes and stability of subtidal sandbanks from increased pollution <p>Species effects (secondary)</p> <ul style="list-style-type: none"> Disturbance to, damage and loss of bottlenose dolphins <i>Tursiops truncatus</i> from increased pollution (e.g. affecting breathing, breeding and feeding, depressing immune system etc) 	
		Inner Moray Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution; elevated growth of some plant species from nutrient enrichment Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition Run-off pollution of ditches and drains during construction and operation of the dualled road - could lead to siltation and degrading of the site. Water pollution impacts on substrates and food sources for qualifying bird species. Hydrological impacts due to construction – raised or lowered water tables Habitat loss or fragmentation to SPA or adjacent habitats, including feeding and roosting sites 	✓

			<p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity 	
		Inner Moray Firth Ramsar	<p>Habitat and species effects</p> <p>As above for SPA</p>	✓
		Loch Flemington SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution; elevated growth of some plant species from nutrient enrichment • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and operation of the dualled road - could lead to siltation and degrading of the site. <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to Slavonian Grebe (Podiceps 	✓

			<p>auritus) population</p> <ul style="list-style-type: none"> • Road traffic light pollution disturbance to Slavonian Grebe (Podiceps auritus) population • Physical, noise and light disturbance to grebe population from construction activity 	
A82 corridor	Upgrades to road standard	North Inverness Lochs SPA	<p>If road size or traffic volume increases;</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to Slavonian Grebe (Podiceps auritus) population • Road traffic light pollution disturbance to Slavonian Grebe (Podiceps auritus) population • Physical, noise and light disturbance to qualifying bird populations from construction activity • Recreation disturbance, particularly to ground-nests of Slavonian Grebe 	?
		Urquhart Bay Wood SAC	<ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution; elevated growth of some plant species from nutrient enrichment • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and operation of road • Impacts on water table of alluvial delta/ forest 	✓
		River Moriston SAC	<p>Water Pollution Risk (affecting habitats and species)</p> <ul style="list-style-type: none"> • Pollution (chemical and particulate – suspended solids and 	✓

			<p>turbidity) from construction activities, including dust air pollution</p> <ul style="list-style-type: none"> • Pollution caused by fuel spills and leakages. • Pollution from run-off and erosion. • Impacts from increased sediment and solids levels affecting turbidity and sedimentation processes. • Pollution from concrete structures (if bridge constructed). <p>Habitat effects</p> <ul style="list-style-type: none"> • Direct habitat loss due to construction, including fresh water pearl mussel (<i>Margaritifera margaritifera</i>) habitat • Smothering and coating of river substrate (sand and gravels) with solids and polluting materials. • Impacts on adjacent habitats caused by construction activities, e.g. dust pollution • Habitat fragmentation of wildlife corridors and connected habitats. <p>Species effects – pearl mussel (<i>Margaritifera margaritifera</i>)</p> <ul style="list-style-type: none"> • Hydrological impacts due to construction – raised or lowered water tables; habitat degradation • Disturbance to habitat and damage to the host fish of larvae and/ or food supplies <p>Species effects - salmon</p>	
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			<ul style="list-style-type: none"> Disturbance to salmon using areas where construction taking place (e.g. physical activities and activities causing pollution). 	
		Ness Woods SAC	<p>Habitat effects</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution causing habitat degradation Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition Run-off pollution of ditches and drains during construction and operation of road <p>Species effects - Otter</p> <ul style="list-style-type: none"> Road traffic strike Habitat loss Habitat fragmentation between feeding and sheltering habitat. Removal of safe passage up and down stream. Destruction of holts and couches. Disturbance to habitat and or food chain Possible pollution affecting otters directly (direct toxicity) or indirectly on their food supply (ingestion and subsequent toxicity). Construction and operational (road traffic) noise and disturbance 	✓
		Loch Knockie & Nearby Lochs	<p>Habitat effects</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne 	?

		SPA	<p>heavy metal pollution causing habitat degradation</p> <ul style="list-style-type: none"> • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during road use - could lead to siltation and degrading of the site. • Hydrological impacts due to construction – raised or lowered water tables; habitat degradation <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to Slavonian Grebe (<i>Podiceps auritus</i>) population • Road traffic light pollution disturbance to Slavonian Grebe (<i>Podiceps auritus</i>) population • Physical, noise and light disturbance to qualifying bird populations from construction activity • Recreation disturbance, particularly to ground-nests of Slavonian Grebe 	
		West Inverness-shire Lochs SPA	<p>If road size or traffic volume increases;</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to black-throated diver and common scoter population • Road traffic light pollution disturbance to black-throated diver and common scoter population • Physical, noise and light disturbance to qualifying bird populations from construction activity • Possible increased recreation disturbance to ground-nests of 	?

			black-throated diver	
		Ben Nevis SAC	<p>Habitat effects (principally north-west edge of SAC)</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of habitat • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition 	✓
		Onich to North Ballachulish Woods SAC	<p>A82 runs through SAC; direct impacts possible</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Pollution of associated burns, springs, seepages and wetland areas (chemical and particulate – suspended solids and turbidity) caused by construction activities. • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during road use 	✓
		Glen Coe SAC	<p>A82 runs through SAC; direct impacts possible</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Run-off pollution of ditches and drains during road use • Air pollution of NOx, NH3 causing nutrient enrichment, airborne 	✓

			<p>heavy metal pollution</p> <ul style="list-style-type: none"> • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition 	
		Rannoch Moor SAC	<p>A82 runs through SAC; direct impacts possible</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution; habitat degradation • Changes to surface water morphology through realignment, culverting etc of watercourses and alterations to the beds of watercourses and drains. • Changes to drainage characteristics, aquatic habitats and hydrology in the locality of the site through physical works; habitat degradation • Changes to the hydrogeology/hydrology of the area through physical works. • Pollution of associated streams, springs, seepages and wetland areas (chemical and particulate – suspended solids and turbidity) caused by construction activities; habitat degradation • Pollution caused by oil and fuel spills and leakages. Pollution from run-off and erosion; habitat degradation. • Contamination from waste materials; habitat degradation 	✓

			<ul style="list-style-type: none"> • Habitat loss or deterioration caused by construction footprint • Impacts on adjacent habitats caused by construction activities. • Loss of hydrological continuity through peat with subsequent effects on habitats. <p>Species effects – pearl mussel</p> <ul style="list-style-type: none"> • Hydrological impacts due to construction – raised or lowered water tables; habitat degradation • Disturbance to habitat and damage to the host fish of larvae and/ or food supplies. <p>Species effects - otter</p> <ul style="list-style-type: none"> • Road traffic strike • Habitat loss • Habitat fragmentation between feeding and sheltering habitat. • Removal of safe passage up and down stream. • Loss of holts and couches. • Disturbance to habitat and/ or food chain • Impacts of possible pollution as described above either directly on the species or indirectly via the food supply through ingestion. • Construction and operational (road traffic) noise and disturbance 	
		Rannoch Lochs SPA	<p>A82 runs through SAC; direct impacts possible</p> <p>Habitat effects</p>	✓

			<p>As above for SAC</p> <p>Species effects</p> <p>If road size or traffic volume increases;</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to black-throated diver population • Road traffic light pollution disturbance to black-throated diver population • Physical, noise and light disturbance to qualifying bird populations from construction activity 	
		Rannoch Moor Ramsar	<p>Habitat effects</p> <p>As above for SAC – impacts on mire habitats</p>	✓
A9	Dualling south of Inverness	Slochd SAC	<p>Habitat effects</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of heathland • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition 	✓
		Kinveachy Forest SAC	<p>A9 runs through SAC; direct impacts likely</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss due to dualling of road 	✓

			<ul style="list-style-type: none"> • Increased visitors and recreation disturbance to bog woodland and pinewood habitat • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of bog woodland and pinewood habitat • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and road use • Hydrological impacts due to construction – raised or lowered water tables 	
		Kinveachy Forest SPA	<p>A9 runs through SAC; direct impacts likely</p> <p>Habitat effects</p> <p>As above for SAC</p> <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to Scottish crossbill and capercaillie populations • Road traffic light pollution disturbance to Scottish crossbill and capercaillie populations • Physical, noise and light disturbance to qualifying bird populations from construction activity • Direct road traffic-strike impacts on capercaillie • Increased visitors and recreation disturbance to both bird 	✓

			populations, especially ground nests of capercaillie	
		Cairngorms SAC	<p>Habitat effects (principally north-west edge of SAC)</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of heathland, bog, woodland and standing water habitats • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Increased visitors and recreation disturbance to all habitats • Hydrological impacts due to construction – raised or lowered water tables <p>Species effects - otter</p> <ul style="list-style-type: none"> • Road traffic strike • Habitat loss • Habitat fragmentation between feeding and sheltering habitat. • Removal of safe passage up and down stream. • Loss of holts and couches. • Disturbance to habitat and/ or food chain • Impacts of possible pollution as described above either directly on the species or indirectly via the food supply through ingestion. • Construction and operational (road traffic) noise and disturbance 	✓
		Cairngorms SPA	<p>Supporting Habitat effects</p> <p>As above for SAC</p>	✓

			<p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity • Increased visitors and recreation disturbance to qualifying bird populations, particularly ground-nesting bird – capercaillie and dotterel 	
		River Spey SAC	<p>Water Pollution Risk (affecting habitats and species)</p> <ul style="list-style-type: none"> • Pollution (chemical and particulate – suspended solids and turbidity) from construction activities, including dust air pollution • Pollution caused by fuel spills and leakages. • Pollution from run-off and erosion. • Impacts from increased sediment and solids levels affecting turbidity and sedimentation processes. • Pollution from concrete structures (if bridge constructed). <p>Habitat effects</p> <ul style="list-style-type: none"> • Direct habitat loss due to construction, including fresh water pearl mussel (<i>Margaritifera margaritifera</i>) habitat • Smothering and coating of river substrate (sand and gravels) with solids and polluting materials. • Impacts on adjacent habitats caused by construction activities. 	✓

			<ul style="list-style-type: none"> • Habitat fragmentation of wildlife corridors and connected habitats. • Hydrological impacts due to construction – raised or lowered water tables; habitat deterioration <p>Species effects</p> <ul style="list-style-type: none"> • Disturbance to salmon using areas where construction taking place (e.g. physical activities and activities causing pollution). • Water pollution causing toxicity effects on freshwater pearl mussel (<i>Margaritifera margaritifera</i>), salmon and/or Sea lamprey, direct or indirect via food chain. <p>Species effects - otter</p> <ul style="list-style-type: none"> • Road traffic strike • Habitat loss • Habitat fragmentation between feeding and sheltering habitat. • Removal of safe passage up and down stream. • Loss of holts and couches. • Disturbance to habitat and/ or food chain • Impacts of possible pollution as described above either directly on the species or indirectly via the food supply through ingestion. • Construction and operational (road traffic) noise and disturbance 	
		Insh Marshes SAC	<p>A9 runs alongside SAC; direct impacts likely</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss due to dualling of road 	✓

			<ul style="list-style-type: none"> • Increased visitors and recreation disturbance to bog, standing water and alluvial forest habitat • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of bog woodland and pinewood habitat • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and road use • Hydrological impacts due to construction – raised or lowered water tables; habitat deterioration <p>Species effects - otter</p> <ul style="list-style-type: none"> • Road traffic strike • Habitat loss • Habitat fragmentation between feeding and sheltering habitat. • Removal of safe passage up and down stream. • Loss of holts and couches. • Disturbance to habitat and/ or food chain • Impacts of possible pollution as described above either directly on the species or indirectly via the food supply through ingestion. • Construction and operational (road traffic) noise and disturbance 	
		River Spey – Insh Marshes SPA	<p>Supporting habitat effects – as above for SAC</p> <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations 	✓

			<ul style="list-style-type: none"> • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity • Increased visitors and recreation disturbance to qualifying bird populations 	
		River Spey – Insh Marshes Ramsar	<p>Supporting habitat effects – as above for SAC & SPA</p> <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity • Increased visitors and recreation disturbance to qualifying bird populations, particularly ground-nesting species – red-throated diver, merganser, goosander 	✓
		Drumochter Hills SAC	<p>A9 runs through SAC; direct impacts likely</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss due to dualling of road • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of heathland, bog and grassland habitats • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to 	✓

			<p>soil chemical composition</p> <ul style="list-style-type: none"> Hydrological impacts due to construction – raised or lowered water tables; habitat deterioration Increased visitors and recreation disturbance to all habitats 	
		Drumochter Hills SPA	<p>Supporting habitat effects – as above for SAC & SPA</p> <p>Species effects</p> <ul style="list-style-type: none"> Road traffic noise disturbance to Eurasian dotterel and merlin populations Road traffic light pollution disturbance to qualifying bird populations Physical, noise and light disturbance to qualifying bird populations from construction activity Increased visitors and recreation disturbance to both bird populations, particularly ground-nests of dotterel 	✓
Inverness trunk link road (1)	Link road from A96 to A9;	Moray Firth SAC	<ul style="list-style-type: none"> Pollution (chemical and particulate – suspended solids and turbidity) from construction activities Pollution caused by fuel spills or leakages. Pollution from run-off and erosion. Impacts from elevated sediment and solids levels affecting turbidity and sedimentation rates. Indirect impacts of marine pollution on bottlenose dolphins 	✓
		Inner Moray Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution 	✓

			<ul style="list-style-type: none"> • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and operation of the dualled road - could lead to siltation and degrading of the site. <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity 	
		Inner Moray Firth Ramsar	<p>Habitat and species effects</p> <p>As above for SPA</p>	✓
Inverness trunk link road (2)	Link road from A9 to A82	Moray Firth SAC	<ul style="list-style-type: none"> • Pollution (chemical and particulate – suspended solids and turbidity) from construction activities • Pollution caused by fuel spills or leakages. • Pollution from run-off and erosion. • Impacts from elevated sediment and solids levels affecting turbidity and sedimentation rates. • Indirect impacts of marine pollution on bottlenose dolphins 	✓
		Inner Moray Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne 	✓

			<p>heavy metal pollution</p> <ul style="list-style-type: none"> • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during construction and operation of the dualled road - could lead to siltation and degrading of the site. <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations 	
		Inner Moray Firth Ramsar	<p>Habitat and species effects</p> <p>As above for SPA</p>	✓
Pedestrian and cycleway networks⁷				

⁷ Improvements to cycle/pedestrian networks in locations other than Nairn and Aviemore do not currently have enough site location information to assess

Active Travel Transport Masterplans	Nairn	Moray Firth SAC	<ul style="list-style-type: none"> • Pollution from drainage run-off and erosion. • Impacts from elevated sediment and solids levels affecting turbidity and sedimentation rates. 	?
		Inner Moray Firth SPA	Recreation disturbance to qualifying bird species	?
		Inner Moray Firth Ramsar	Recreation disturbance to qualifying bird species	?
		Moray & Nairn Coast SPA	Recreation disturbance to qualifying bird species – JNCC Standard Data Form for this site shows that recreation has been known to affect breeding success of wildfowl at this site. Ground-nesting birds may be particularly vulnerable – red-breasted merganser	?
		Moray & Nairn Coast Ramsar	Recreation disturbance to qualifying bird species – has been known to affect breeding success at this site – ground nests of Slavonian Grebe may be particularly vulnerable	?
	Aviemore	River Spey SAC	<p>Any new structures in river, e.g. bridges, may cause impacts.</p> <p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss or damage • Change in physical regime • Turbidity effects – dust pollution • Changes to flow and velocity regime 	✓

			<ul style="list-style-type: none"> Impermeable cycle path surfacing materials, inappropriate cambers or drainage - possible pollutant run-off (e.g. horse manure, litter), localised flooding <p>Species effects: Otters</p> <ul style="list-style-type: none"> Habitat loss Habitat fragmentation between feeding and sheltering habitat. Removal of safe passage up and down stream. Loss of holts and couches. Disturbance to habitat and/ or food chain Recreation disturbance from increased number of path users 	
		Kinveachy Forest SAC	<p>Habitat effects on south east edge of SAC</p> <ul style="list-style-type: none"> Physical damage to SAC from track or associated works Hydrological impacts on SAC – raised or lowered water levels; habitat degradation Recreational impacts – e.g. noise, litter, increased fire hazard 	x
		Kinveachy Forest SPA	<p>Habitat effects</p> <p>As above for SAC</p> <p>Species effects</p> <ul style="list-style-type: none"> Recreational noise disturbance to Scottish crossbill and capercaillie populations Recreational light pollution disturbance to Scottish crossbill and capercaillie populations 	x

			<ul style="list-style-type: none"> • Dog disturbance impacts to qualifying bird species 	
		Cairngorms SAC	<p>Habitat effects on north west edge of SAC</p> <ul style="list-style-type: none"> • Increased visitors and recreation disturbance <p>Species effects: Otters</p> <ul style="list-style-type: none"> • Habitat loss • Habitat fragmentation between feeding and sheltering habitat. • Loss of holts and couches. • Disturbance to habitat and/ or food chain • Recreation disturbance from increased number of path users 	x
		Cairngorms SPA	<p>Supporting Habitat effects</p> <p>As above for SAC</p> <p>Species effects</p> <ul style="list-style-type: none"> • Recreational noise disturbance to qualifying bird populations • Recreational light pollution disturbance to qualifying bird populations • Increased visitors and recreation disturbance to qualifying bird populations • Dog disturbance impacts to qualifying bird species 	x
Bus priorities				
Bus priority key routes;	A9/ A96	Inner Moray	Habitat effects	?

Inverness/ approaches to Inverness	improvements	Firth SPA	<ul style="list-style-type: none"> • Habitat loss if A96 were widened to north • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition • Run-off pollution of ditches and drains during any road improvements - could lead to siltation and degrading of the site. • Hydrological impacts due to construction – raised or lowered water tables; habitat deterioration <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity 	
		Inner Moray Firth Ramsar	<p>Habitat and species effects</p> <p>As above for SPA</p>	?
Bus priority key routes; Nairn A96	A96 improvements	Inner Moray Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss if A96 were widened to north • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to 	?

			<p>soil chemical composition</p> <ul style="list-style-type: none"> • Run-off pollution of ditches and drains during any road improvements - could lead to siltation and degrading of the site. • Hydrological impacts due to construction – raised or lowered water tables; habitat deterioration <p>Species effects</p> <ul style="list-style-type: none"> • Road traffic noise disturbance to qualifying bird populations • Road traffic light pollution disturbance to qualifying bird populations • Physical, noise and light disturbance to qualifying bird populations from construction activity 	
		Inner Moray Firth Ramsar	<p>Habitat and species effects</p> <p>As above for SPA</p>	?
Bus priority key routes; Fort William	A82 improvements (work on A82/A380 junction)	Ben Nevis SAC	<p>Habitat effects (principally north-west edge of SAC)</p> <ul style="list-style-type: none"> • Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of habitat (impacts unlikely if bus use reduces private car use) • Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition 	×

	A82 improvements (work on canal bridges)	River Moriston SAC	<ul style="list-style-type: none"> Run-off pollution of ditches and drains during construction - could lead to siltation, increased turbidity and degrading of salmon and freshwater pearl mussel habitat. 	✓
A82 / A830 improvements	A830 through Fort William where single carriageway	Ben Nevis SAC	<p>Habitat effects (principally north-west edge of SAC)</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of habitat (impacts unlikely if bus use reduces private car use) Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition 	?
Bus priority key routes/ junctions; Fort William to Inverness	A9 Inverness to Invergordon Alness Business Park	Cromarty Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> Habitat loss if A9 were widened to east Air pollution; construction dust deposition; abrasion of plants, shading, and cumulative effects e.g. drought stress, change to soil chemical composition Run-off pollution of ditches and drains during any road improvements - could lead to siltation and degrading of the site. <p>Species effects</p> <ul style="list-style-type: none"> Road traffic noise disturbance to qualifying bird populations Road traffic light pollution disturbance to qualifying bird populations 	?

			<ul style="list-style-type: none"> Physical, noise and light disturbance to qualifying bird populations from construction activity 	
Rail				
	Conon Bridge Railway Station	Conon Islands SAC	Impacts unlikely as station is on other side of A862	×
New Park and Ride Sites				
	Inverness	Moray Firth SAC	<ul style="list-style-type: none"> Pollution from drainage run-off and erosion. Impacts from elevated sediment and solids levels affecting turbidity and sedimentation rates. 	?
		Inner Moray Firth SPA	Impacts unlikely on qualifying bird species unless designated or supporting habitat in some way affected, e.g. land take	×
		Inner Moray Firth Ramsar	Impacts unlikely on qualifying bird species unless designated or supporting habitat in some way affected, e.g. land take	×
		Tore	Monadh Mor SAC	<p>Impacts unlikely unless road traffic increases on A832 or A835. If this occurs;</p> <ul style="list-style-type: none"> Air pollution of NOx, NH3 causing nutrient enrichment, airborne heavy metal pollution of bog woodland and mire habitats
Air				

Continued development of Inverness and Wick Airport	Inverness airport	Moray Firth SAC	<ul style="list-style-type: none"> • Pollution from drainage run-off and erosion. • Impacts from elevated sediment and solids levels affecting turbidity and sedimentation rates. 	?
		Inner Moray Firth SPA	<p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss or fragmentation if size of airport increases • Air pollution of NO_x, NH₃ causing nutrient enrichment, airborne heavy metal pollution <p>Species effects</p> <ul style="list-style-type: none"> • Noise disturbance to qualifying bird species 	?
		Inner Moray Firth Ramsar	<p>Habitat effects</p> <ul style="list-style-type: none"> • Habitat loss or fragmentation if size of airport increases • Air pollution of NO_x, NH₃ causing nutrient enrichment, airborne heavy metal pollution <p>Species effects</p> <ul style="list-style-type: none"> • Noise disturbance to qualifying bird species 	?
Seek potential operations from Broadford airstrip	Broadford airstrip	Kinloch & Kyleakin Hills SAC	<ul style="list-style-type: none"> • Air pollution of NO_x, NH₃ causing nutrient enrichment, airborne heavy metal pollution (affecting north-west part of SAC) 	?
		Cuillins SPA	<p>Species effects</p> <ul style="list-style-type: none"> • Noise disturbance to qualifying bird species 	?

Residents fare reduction scheme	Applies to services to and from Wick, also benefiting residents of Caithness and north west Sutherland. This Air Discount Scheme provides a discount of 40% on the core air fare.	East Caithness Cliffs SPA	<p>If air traffic associated with Wick airport increases as a result;</p> <p>Species effects</p> <ul style="list-style-type: none"> Noise disturbance to qualifying bird species 	x
Ferry Services				
	Thurso	North Caithness Cliffs SPA	<p>If ferry traffic increases:</p> <ul style="list-style-type: none"> Possible increased noise disturbance from ferries on qualifying bird species Increased recreational disturbance on qualifying bird species 	x
	Gills Bay	North Caithness Cliffs SPA	<p>If ferry traffic increases:</p> <ul style="list-style-type: none"> Possible increased noise disturbance from ferries on qualifying bird species (Island of Stroma part of SPA) 	x
	Lochmaddy	Loch nam	Habitat effects	x

		Madadh SAC	<ul style="list-style-type: none"> • Chemical/litter pollution from ferries; degradation of intertidal habitats, lagoons, reefs, and subtidal sandbanks <p>Species effects: Otters</p> <ul style="list-style-type: none"> • Pollution risk to all qualifying habitats and/ or food chain • Noise disturbance from increased number of ferries 	
	Uig	Ascrib, Isay & Dunvegan SAC	<p>Species effects: Common seals</p> <ul style="list-style-type: none"> • Disturbance to habitat, including haul-out sites and/or food chain, e.g. through pollution • Noise disturbance from increased number of ferries passing near the Ascrib islands 	x
	Scarnish	Sleibhtean agus Cladach Thiriodh SPA	<p>Species effects: qualifying bird populations</p> <ul style="list-style-type: none"> • Noise disturbance from increased number of ferries 	x
		Sleibhtean agus Cladach Thiriodh Ramsar	<p>Species effects: qualifying bird populations</p> <ul style="list-style-type: none"> • Noise disturbance from increased number of ferries 	x
	Arinagour	Coll SPA	<p>Species effects: qualifying bird populations (Greenland white-fronted goose, Greenland barnacle goose)</p> <ul style="list-style-type: none"> • Noise disturbance from increased number of ferries 	x
		Coll Ramsar	<p>Species effects: qualifying bird populations (Greenland white-fronted</p>	x

			goose) <ul style="list-style-type: none"> Noise disturbance from increased number of ferries 	
	Port Ellen	South East Islay Skerries SAC	Species effects: Common seals <ul style="list-style-type: none"> Disturbance to habitat, including haul-out sites and/ or food chain, e.g. through pollution Noise disturbance from increased number of ferries passing near south-east Islay 	x

Conservation Objectives and Qualifying Interest Features for International Sites

**Conservation Objectives for
Ascrib, Isay and Dunvegan Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Common seal

Conservation Objectives for Ben Nevis Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Acidic scree
- Alpine and subalpine calcareous grasslands
- Alpine and subalpine heaths
- Base-rich scree
- Blanket bog*
- Caledonian forest*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Dry heaths
- High-altitude plant communities associated with areas of water seepage*
- Montane acid grasslands
- Mountain willow scrub
- Plants in crevices on acid rocks
- Plants in crevices on base-rich rocks
- Species-rich grassland with mat-grass in upland areas*
- Tall herb communities
- Western acidic oak woodland
- Wet heathland with cross-leaved heath

* Indicates priority habitat

Conservation Objectives for Cairngorms Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Acid peat-stained lakes and ponds
- Acidic scree
- Alpine and subalpine heaths
- Blanket bog*
- Bog woodland*
- Caledonian forest*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Dry grasslands and scrublands on chalk or limestone
- Dry heaths
- Hard-water springs depositing lime*
- High-altitude plant communities associated with areas of water seepage*
- Juniper on heaths or calcareous grasslands
- Montane acid grasslands
- Mountain willow scrub
- Plants in crevices on acid rocks
- Plants in crevices on base-rich rocks
- Species-rich grassland with mat-grass in upland areas*
- Tall herb communities
- Very wet mires often identified by an unstable `quaking` surface
- Wet heathland with cross-leaved heath

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

Conservation Objectives for Cairngorms Special Area of Conservation

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Green shield-moss
- Otter

The site overlaps with Cairngorms and Abernethy Forest Special Protection Areas

**Conservation Objectives for
Urquhart Bay Wood Special Area of Conservation**

To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitat that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitat:

- Alder woodland on floodplains*

* Indicates priority habitat

Conservation Objectives for Slochd Special Area of Conservation

To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitat that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitat:

- **Dry heaths**

Conservation Objectives for Sléibhtean agus Cladach Throidh Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Barnacle goose (*Branta leucopsis*)
- Dunlin (*Calidris alpina schinzii*)
- Greenland white fronted goose (*Anser albifrons flavirostris*)
- Oystercatcher (*Haematopus ostralegus*)
- Redshank (*Tringa totanus*)
- Ringed plover (*Charadrius hiaticula*)
- Turnstone (*Arenaria interpres*)

The site overlaps with Loch a' Phuill Special Area of Conservation and Tíree Machair Special Area of Conservation

"Ramsar" Convention on Wetlands of International
Importance Especially as Waterfowl Habitat.

**RAMSAR CITATION (Montreux criteria, 1990)
FOR PUBLIC ISSUE**

**SLÉIBHTEAN AGUS CLADACH THIRIODH (TIREE WETLANDS AND COAST),
ARGYLL & BUTE**

The Sléibhitean Agus Cladach Thiriodh Ramsar site covers an area of coastal foreshore, machair, heath and freshwater lochs on the island of Tiree which lies 17 km west of Mull in Argyll and Bute. The site includes Sléibhitean Agus Cladach Thiriodh SSSI, and parts of Hough Bay & Balevullin SSSI and Ceann a'Mhara to Loch a'Phuill SSSI.

Sléibhitean Agus Cladach Thiriodh Ramsar site qualifies under **Criterion 1** by supporting substantial areas of freshwater loch, freshwater marsh, wet machair and maritime grassland. The occurrence and botanical composition of these areas reflect the long interaction between landforms and low-intensity farming on Tiree. Several of the lochs are of very high quality in terms of their aquatic plant communities. Species present include the nationally rare Shetland pondweed *Potamogeton rutilus* and a range of nationally scarce aquatic vascular plants and charophytes.

Sléibhitean Agus Cladach Thiriodh Ramsar site qualifies under **Criterion 6** by regularly supporting internationally important wintering populations (1995/96-99/00 winter peak means) of Greenland white-fronted goose *Anser albifrons flavirostris* (1,419 5% of total world population, 10% of GB); Greenland barnacle goose *Branta leucopsis* (1,456, 5% of total world population, 5% of GB); ringed plover *Charadrius hiaticula* (653, 1% of East Atlantic Flyway population, 2% of GB) and turnstone *Arenaria interpres* (873, 1% of Western Palearctic population, 1 % of GB).

Sléibhitean Agus Cladach Thiriodh Ramsar site further qualifies under **Criterion 6** for its internationally important breeding populations of dunlin *Calidris alpina* temperate *schinzii* race (114 pairs, 1% of GB and total world breeding population) and exceptionally high breeding densities of ringed plover (1% of GB), redshank *Tringa totanus* and oystercatcher *Haematopus ostralegus*.

Area: 1938.59 ha

Grid refs.: NL 955420, 962456, 968447, 983446, NM 014455, 030485, 034472, 039479 NL 968484 to NM 043460, NM 040437 to NM 043460, NM 029434 to NL 997434, NL 995427 to NL 988392, NL 936422 to NL 939472 and NM 071463

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September 2001

Natura 2000

Scottish Natural Heritage

**Conservation Objectives for
South-East Islay Skerries Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Common seal

**Conservation Objectives for River Spey – Insh Marshes
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Hen harrier (*Circus cyaneus*)
- Osprey (*Pandion haliaetus*)
- Spotted crane (*Porzana porzana*)
- Whooper swan (*Cygnus cygnus cygnus*)
- Wigeon (*Anas penelope*)
- Wood sandpiper (*Tringa glareola*)

The site overlaps with Insh Marshes Special Area of Conservation and River Spey Special Area of Conservation

**Conservation Objectives for River Spey – Insh Marshes
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Hen harrier (*Circus cyaneus*)
- Osprey (*Pandion haliaetus*)
- Spotted crake (*Porzana porzana*)
- Whooper swan (*Cygnus cygnus cygnus*)
- Wigeon (*Anas penelope*)
- Wood sandpiper (*Tringa glareola*)

The site overlaps with Insh Marshes Special Area of Conservation and River Spey Special Area of Conservation

**Conservation Objectives for
River Moriston Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species, including range of genetic types for salmon, as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**
- **Distribution and viability of freshwater pearl mussel host species**
- **Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species**

Qualifying Species:

- Atlantic salmon
- Freshwater pearl mussel

"Ramsar" Convention on Wetlands of International
Importance Especially as Waterfowl Habitat.

**RAMSAR CITATION
FOR PUBLIC ISSUE**

RIVER SPEY-INSH MARSHES, HIGHLAND REGION (223A)

The River Spey-Insh Marshes hold a remarkable variety of freshwater wetland habitats and qualifies under **Criterion 1** for each of four component features: the River Spey is considered to be a unique example in Britain of a large, high altitude, but slow flowing river; Loch Insh is, however, noted for its exceptionally rapid water turnover and is an excellent example of a mesotrophic loch, an uncommon type in Britain; Insh Marshes form the largest, most northerly, single-unit flood-plain mire of the poor fen type in Great Britain; the gravel fan at the confluence of the rivers Spey and Feshie is considered to be of the highest importance for its geomorphological features.

The site also qualifies under **Criterion 2a** by supporting a number of rare species of plants and animals. It has two species of nationally rare plant, the string sedge *Carex chordorrhiza*, and the reed *Calamagrostis purpurea* as well as six species of nationally scarce plant: water sedge *Carex aquatilis*, least water lily *Nuphar pumila*, awlwort *Subularia aquatica*, cowbane *Cicuta virosa*, shady horsetail *Equisetum pratense* and pillwort *Pilularia globulifera*. The invertebrate fauna is particularly rich reflecting the diversity of wetland and associated habitats. It includes 31 Red Data Book species two of which, *Hammerschmidtia ferruginea* and *Rhamphomyia trigemina* are considered to be endangered, and 4 of which, *Dorytomus affinis*, *Limonia omissinervis*, *Tachydromia acklandi* and *Nephrotoma aculeata* are considered to be in the vulnerable category. An additional 101 species have been classified as Notable according to the Invertebrate Site Register (recorded from 100 or fewer 10 km squares of the national grid), 8 of which are in the category Notable A (recorded from 30 or fewer 10 km squares of the national grid). The site is also currently regarded as one of the best freshwater areas in Britain for otter *Lutra lutra*.

The site qualifies under **Criterion 2b** by forming a nationally important genetic reservoir for the plant and animal communities associated with poor fen flood plain mires.

The site qualifies under **Criterion 3b** by supporting an assemblage of breeding bird species considered to be indicative of high wetland value and diversity, including osprey *Pandion haliaetus* (4 pairs; 4% of British), wigeon *Anas penelope* (37 pairs; 9% of British), goldeneye *Bucephala clangula* (38 pairs; 40% of British), spotted crake *Porzana porzana* (3 calling birds; 19% of British) and wood sandpiper *Tringa glareola* (2 pairs; 33% of British).

The site qualifies under **Criterion 3c** by supporting, in winter, an internationally important population of whooper swan *Cygnus cygnus cygnus* with in the five-winter period 1990/91 to 1994/95 an average peak of 190 individuals (3% of British and 1% of biogeographic).

The diverse assemblage of wintering waterfowl includes, in addition to whooper swan, pink-footed goose *Anser brachyrhynchus* (190), greylag goose *Anser anser* (480), wigeon *Anas*

penelope (170), teal *Anas crecca* (270), mallard *Anas platyrhynchos* (610), pochard *Aythya ferina* (10), tufted duck *Aythya fuligula* (50), goldeneye *Bucephala clangula* (120) and goosander *Mergus merganser* (10). The figures in brackets are the winter peak means between 1990/91 and 1994/95.

River Spey-Insh Marshes is also an important spring migratory staging post for golden plover *Pluvialis apricaria*. Pre- and post-breeding red-throated divers *Gavia stellata* regularly occur at Loch Insh. Individual marsh harriers *Circus aeruginosus* occur regularly in the summer, and pairs have attempted to breed in the past.

Area: 1176.4 Ha.

National Grid Reference: NH 780013

Latitude & Longitude: 57°05'14 -4°00'45

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Montreux Criteria

MS/GPM

September 1995

Research and Advisory Services Directorate

Scottish Natural Heritage

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 05 January 1976

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Rannoch Moor

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

56 39 20 N 04 35 40 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Perth

The site comprises gently undulating ground, at the western end of the Grampian mountains, in the north-central Highlands of Scotland.

Administrative region: Argyll and Bute; Highland; Perth and Kinross

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 1519.43

Min.	288
Max.	359
Mean	315

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Rannoch Moor is an extensive previously glaciated plateau surrounded by uplands, and represents the most extensive complex of western blanket and soligenous/valley mire in Britain. It is of particular importance for its range of northern mire types. The site also contains part of the open water and shore of Loch Laidon, which runs along the site's north-east boundary. Rannoch Moor is the only remaining British locality for a nationally rare vascular plant species, and contains several other nationally and locally rare plants.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

This site is an excellent example of a complex system of oligotrophic mires, and for its range of northern mire types. It is a particularly good example of a western-type blanket bog and soligenous mire.

Ramsar criterion 2

This is the only British locality for a wetland vascular plant, the Rannoch rush *Scheuchzeria palustris*. It also supports several nationally rare beetles, flies and moths.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, peat, nutrient-poor, igneous, granite
Geomorphology and landscape	upland, hilly, pools
Nutrient status	oligotrophic
pH	strongly acidic
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Ardtnaig, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/Ardtnaig.html) Max. daily temperature: 11.9° C Min. daily temperature: 4.9° C Days of air frost: 50.7 Rainfall: 1343.9 mm Hrs. of sunshine: 1147.8

General description of the Physical Features:

Rannoch Moor lies in a high-level basin at about 300 m altitude. Rannoch is a complex blanket bog with much of the active peat is broken up between rocky knolls and small valleys, and there are many small ladder fens, which separate the ombrotrophic units into relatively small compartments.

Rannoch Moor contains the most extensive complex of western blanket and soligenous/valley mire in Britain and supports a range of nutrient-poor freshwater habitats from dystrophic to oligotrophic waterbodies. The waterbodies vary in size from small lochans to relatively large lochs such as Loch Bà and Loch Laidon. Many of the small lochans have a predominantly peaty substrate resulting in a very low nutrient status, and consequently low species diversity. However the larger lochs support vegetation typical of oligotrophic to mesotrophic standing waters.

The dystrophic lochans of this site exhibit considerable diversity in size, depth and shoreline type, including those with mineral shorelines, a relatively uncommon variant. These upland dystrophic waters are characteristically shallow and base-poor, with an impoverished flora and fauna.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Rannoch Moor lies in a high-level basin at about 300 m altitude. Rannoch is a complex blanket bog with much of the active peat is broken up between rocky knolls and small valleys, and there are many small ladder fens, which separate the ombrotrophic units into relatively small compartments.

Rannoch Moor contains the most extensive complex of western blanket and soligenous/valley mire in Britain and supports a range of nutrient-poor freshwater habitats from dystrophic to oligotrophic waterbodies. The waterbodies vary in size from small lochans to relatively large lochs such as Loch Bà and Loch Laidon. Many of the small lochans have a predominantly peaty substrate resulting in a very low nutrient status, and consequently low species diversity. However the larger lochs support vegetation typical of oligotrophic to mesotrophic standing waters.

The dystrophic lochans of this site exhibit considerable diversity in size, depth and shoreline type, including those with mineral shorelines, a relatively uncommon variant. These upland dystrophic waters are characteristically shallow and base-poor, with an impoverished flora and fauna.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

No special values known

19. Wetland types:

Inland wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	78.8
O	Freshwater lakes: permanent	10.5
Tp	Freshwater marshes / pools: permanent	8.5
M	Rivers / streams / creeks: permanent	1.6
Other	Other	0.6

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Blanket bog - *Scirpus cespitosus*-*Eriophorum vaginatum* and *Calluna vulgaris*-*E. vaginatum* blanket mire.

Oligotrophic soligenous mire - with an abundance of sedges *Carex* spp. and rushes *Juncus* spp. Purple moor-grass *Molinia caerulea* dominates in places.

Marginal swamps and fens around loch edges/open water communities - dominated by sedges *Carex* spp., bogbean *Menyanthes trifoliata* and common cottongrass *Eriophorum angustifolium*.

Bladderworts *Utricularia* spp. in open water and pools.

Dry heath - *Calluna vulgaris*-dominated, principally developed on thin peat/shallow podsols. Swamps usually pass into a shoreward zone of *Sphagnum*, often with well developed pool-hummock systems.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Assemblage.

The site is internationally important because it contains the following Habitats Directive Annex I features:

- H3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*
- H3160 Natural dystrophic lakes and ponds
- H4010 Northern Atlantic wet heaths with *Erica tetralix*
- H4030 European dry heaths
- H7130 Blanket bogs (active)
- H7140 Transition mires and quaking bogs
- H7150 Depressions on peat substrates of the *Rhynchosporion*

Nationally important species occurring on the site.

- Rannoch rush *Scheuchzeria palustris*
 - Dwarf birch *Betula nana*
-

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds**Species Information**

Internationally important species occurring on the site (Habitats Directive Annex II)

- S1029 *Margaritifera margaritifera* Freshwater pearl mussel.
 - S1355 *Lutra lutra* Otter.
-

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

- Aesthetic
- Archaeological/historical site
- Environmental education/ interpretation
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport fishing
- Sport hunting
- Tourism

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Local authority, municipality etc.		+
National/Crown Estate		+
Private		+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Recreation	+	
Current scientific research	+	+
Commercial forestry		+
Fishing: recreational/sport	+	+
Grazing (unspecified)		+
Hunting: recreational/sport	+	+
Transport route		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. *Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
2. *Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
No factors reported	NA				

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	
Special Area of Conservation (SAC)	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

None reported

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Public information boards are provided to aid interpretation of the site.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Birdwatching, deer stalking and sport fishing all occur within the Ramsar boundary, but have an insignificant impact on the interest of the site.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Scottish Executive, Environment and Rural Affairs Department

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Scottish Natural Heritage, 2 Anderson Place, Edinburgh, EH6 5NP

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

- Bridge, MC, Haggart, BA & Lowe, JJ (1990) The history and palaeoclimatic significance of sub fossil remains of *Pinus sylvestris* in blanket peats from Scotland. *Journal of Ecology*, **78**, 77-99
- Flower, RJ *et al.* (1987) *Palaeocological evaluation of the recent acidification of Loch Laidon, Rannoch Moor, Scotland*. Report to Department of the Environment
- McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) *The Habitats Directive: selection of Special Areas of Conservation in the UK*. 2nd edn. Joint Nature Conservation Committee, Peterborough.
www.jncc.gov.uk/SACselection
- Murray, J & Pullar, L (1903) Bathymetrical survey of the fresh-water lochs of Scotland. Part III – Lochs of the Tay Basin. *Scottish Geographical Magazine*, **19**, 449-479
- Ratcliffe, DA (ed.) (1977) *A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain*. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm
- Ward, RGW, Haggart, BA & Bridge, MC (1987) Dendrochronological studies of bog pine from the Rannoch Moor area, western Scotland. In: *Applications of tree-ring studies: current research in dendrochronology and related subjects*, ed. by RGW Ward, 215-225. British Archaeological Reports, Oxford (International Series, No. 333)

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org

Conservation Objectives for Rannoch Moor Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Acid peat-stained lakes and ponds
- Blanket bog*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Depressions on peat substrates
- Dry heaths
- Very wet mires often identified by an unstable `quaking` surface
- Wet heathland with cross-leaved heath

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

Conservation Objectives for Rannoch Moor Special Area of Conservation

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**
- **Distribution and viability of freshwater pearl mussel host species**
- **Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species**

Qualifying Species:

- Freshwater pearl mussel
- Otter

The site overlaps with Rannoch Lochs Special Protection Area

**Conservation Objectives for
Onich to North Ballachulish Woods Special Area of Conservation**

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Base-rich fens
- Mixed woodland on base-rich soils associated with rocky slopes*
- Western acidic oak woodland

* Indicates priority habitat

Conservation Objectives for Ness Woods Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- **Mixed woodland on base-rich soils associated with rocky slopes***
- **Western acidic oak woodland**

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

**Conservation Objectives for
Ness Woods Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Otter

Conservation Objectives for North Inverness Lochs Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Slavonian grebe (*Podiceps auritus*)

Conservation Objectives for North Caithness Cliffs Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Fulmar (*Fulmarus glacialis*)*
- Guillemot (*Uria aalge*)
- Kittiwake (*Rissa tridactyla*)*
- Peregrine (*Falco peregrinus*)
- Puffin (*Fratercula arctica*)*
- Razorbill (*Alca torda*)*

- Seabird assemblage

* indicates assemblage qualifier only

Conservation Objectives for Moray Firth Special Area of Conservation

To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitat that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitat:

- **Subtidal sandbanks**

NB The conservation objectives for the qualifying species are on the next page

Conservation Objectives for Moray Firth Special Area of Conservation

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are established then maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- **Bottlenose dolphin**

The site overlaps with Cromarty Firth, and Dornoch Firth and Loch Fleet Special Protection Areas

Conservation Objectives for Moray and Nairn Coast Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Bar-tailed godwit (*Limosa lapponica*)
- Common scoter (*Melanitta nigra*)*
- Dunlin (*Calidris alpina alpina*)*
- Greylag goose (*Anser anser*)
- Long-tailed duck (*Clangula hyemalis*)*
- Osprey (*Pandion haliaetus*)
- Oystercatcher (*Haematopus ostralegus*)*
- Pink-footed goose (*Anser brachyrhynchus*)
- Red-breasted merganser (*Mergus serrator*)*
- Redshank (*Tringa totanus*)
- Velvet scoter (*Melanitta fusca*)*
- Wigeon (*Anas penelope*)*

- Waterfowl assemblage

* indicates assemblage qualifier only

The site overlaps with Lower River Spey – Spey Bay Special Area of Conservation and River Spey Special Area of Conservation

RAMSAR CITATION (Montreux criteria, 1990) FOR PUBLIC ISSUE

**MORAY BASIN FIRTHS AND BAYS, HIGHLAND & GRAMPIAN (162)
5: MORAY AND NAIRN COAST, HIGHLAND & GRAMPIAN (162E)**

The **Moray and Nairn Coast** is an integral part of the **Moray Basin Firths and Bays** Ramsar site. It comprises the Culbin Bars, Findhorn Bay and Spey Bay which together form the easternmost estuarine component of the Moray Basin ecosystem. The boundary of the site generally follows the coastline within the Culbin Sands, Forest & Findhorn Bay SSSI, the estuarine limit of the Spey Bay SSSI and the boundary of the Lower River Spey SSSI.

The Moray and Nairn Coast Ramsar site qualifies under **Criterion 1** by virtue of supporting a variety of important wetland features. The dunes and shingle at Culbin Sands are of outstanding importance for their vegetation. The large areas of mudflat and saltmarsh at the Culbin Bars and Findhorn Bay are relatively undisturbed and are unaffected by reclamation or industrial development. The mosaic of habitats at Spey Bay/Lower River Spey are the nearest approach in Britain to natural floodplain forest.

The site qualifies under **Criterion 2a** by regularly supporting rare plants and animals. It supports at least 4 Nationally Scarce aquatic plants: sea centaury *Centaureum littorale* and the eelgrasses *Zostera noltii*, *Z. angustifolia* and *Z. marina*. The invertebrate fauna has at least five aquatic Red Data Book species including *Octhebius lenensis* (a small waterbeetle) and *Tetanocera freyi* (a snail-killing fly). The mammal fauna includes common seal *Phoca vitulina* and otter *Lutra lutra*, and the fish fauna includes salmon *Salmo salar* and sea lamprey *Petromyzon marinus* (all Annex II of the EC Habitats & Species Directive).

The site qualifies under **Criterion 3a** by regularly supporting over 20,000 wintering waterfowl with a 1989/90-93/94 winter peak mean of 24,000 waterfowl, comprising 9,500 waders and 14,500 wildfowl.

The site qualifies under **Criterion 3c** by regularly supporting internationally important wintering populations (1988/89-92/93 winter peak means) of Icelandic/Greenlandic pink-footed goose *Anser brachyrhynchus* (7,538, 4% of total population, all of which winters in Great Britain), Icelandic greylag goose *Anser anser* (3,023, 3% of total population, all of which winters in Britain) and redshank *Tringa totanus* (1989/90-93/94 wpm of 1,690, 2% of British, 1% of East Atlantic Flyway).

The diverse assemblage of wintering birds also includes nationally important wintering populations of velvet scoter *Melanitta nigra*, red-breasted merganser *Mergus merganser* and bar-tailed godwit *Limosa lapponica*. Findhorn Bay and Spey Bay are very important feeding areas for ospreys *Pandion haliaetus*.

This citation is accompanied by the citation for the entire Moray Basin Firths and Bays Ramsar site which explains the overall international importance of the Moray Basin as a wetland.

Area: 2,410 ha

Grid Ref: NH 990695, NJ 325660

Latitude and Longitude: 57°42'15 -3°41'42, 57°40'46 -3°7'52

OS Sheets 1:50,000 - 27, 28

RJ/GPM, December 1995

Research and Advisory Services Directorate

Scottish Natural Heritage

Ramsar Convention on Wetlands of International Importance Especially as Waterfowl
Habitat

**RAMSAR CITATION (Montreux criteria, 1990)
FOR PUBLIC ISSUE**

MORAY BASIN FIRTHS AND BAYS, HIGHLAND & GRAMPIAN (162)

The site is a complex area of coastal and estuarine habitats, extending from Loch Fleet in the north to Spey Bay in the south-east. It includes the Dornoch, Cromarty, Beaully and Inverness Firths, Loch Eye, Loch Fleet, Culbin Bars, Findhorn Bay and Spey Bay, together with intervening stretches of more open coast. It is one of the most northerly major wintering waterfowl sites in Western Europe.

The Moray Basin qualifies under **Criterion 1** by virtue of supporting a variety of important wetland features. The Mound Alderwoods at the head of Loch Fleet is the largest estuarine alderwood in Britain. Loch Eye is a eutrophic loch with an outstanding community of aquatic plants. The Dornoch Firth is a particularly good example of an east coast firth and, unlike other nearby firths, has been unaffected by industrial developments. Saltmarsh is well represented, especially at Culbin Bars, Findhorn Bay, and the Beaully, Inverness, Cromarty and Dornoch Firths. Several parts of the Basin are of outstanding importance for their coastal geomorphological features. The Morrich More is one of the most outstanding coastal sites in Britain. It is especially noteworthy for its extensive low-level sandy plain on which parabolic dunes are found. Whiteness Head and Culbin Bar are outstanding examples of sand and shingle spits enclosing an accreting intertidal system of saltings, sand and mud flats, with associated saltmarsh and carseland. Culbin Bar also forms a small part of the entire Culbin Sands complex which is the largest dune system in Great Britain. Whiteness Head and Culbin Bar also have a whole range of coastal landforms which can be clearly linked to coastal processes. The alluvial woodlands at Spey Bay and Lower River Spey are the largest example of boreal floodplain forest in Britain.

The site qualifies under **Criterion 2a** by supporting a number of rare species of wetland plants and animals. At least 9 Nationally Scarce wetland plants are present and the wetland invertebrate fauna includes at least nine Red Data Book species. Mammals include bottlenose dolphin, common seal and otter, and fish species include salmon and sea lamprey.

The Moray Basin qualifies under **Criterion 3a** by regularly supporting in winter over 20,000 waterfowl. In the five-year period 1989/90 to 1993/94 the average peak count was 127,000 wintering waterfowl, comprising 86,000 wildfowl and 41,000 waders.

The site also qualifies under **Criterion 3c** by regularly supporting in winter, during the late 1980s and early 1990s, internationally important populations of 11 waterfowl species with: 60 Slavonian grebe (15% of GB, 1% of North West (NW) European), 763 whooper swan (4% of the total population, 14% of British), 8,000 passage pink-footed geese (4% of the total population, all of which winters in Britain), 14,109 Icelandic greylag geese (14% of the total population, all of which winters in Britain), 32,085 wigeon (4% of NW European, 11% of British), 4,126 teal (1% of NW European, 3% of British), 1,900 red-breasted merganser (2% of NW European, 19% of British), 10,075 oystercatcher (1% of the NW European population, 3% of British), 3,423 bar-tailed godwit (3% of Western European, 7% of British),

4,439 curlew (1% of East Atlantic Flyway (EAF), 4% of British) and 5,448 redshank (5% of EAF, 4% of British).

Notable also on the Moray Basin is the largest wintering concentration of seaduck in Britain including nationally important populations of the three species of diver, scaup, long-tailed duck, common scoter, velvet scoter, goldeneye, red-breasted merganser and goosander.

Other waterfowl wintering in nationally important numbers are mute swan, cormorant, shelduck, pintail, tufted duck, ringed plover, knot and dunlin.

During severe winter weather the site assumes even greater international importance as a cold weather refuge. Waterfowl from other parts of North West Europe concentrate here, attracted by the relatively mild climate and abundant food resources available.

The Moray Basin also supports nationally important breeding populations of osprey, common tern, cormorant and redshank.

Area: 17,761 ha

OS 1:50,000 sheets: 21, 26, 27, 28

RJ/GPM

Research & Advisory Services Directorate

Scottish Natural Heritage

December 1995

Conservation Objectives for Monadh Mor Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- **Bog woodland***
- **Very wet mires often identified by an unstable `quaking` surface**

* Indicates priority habitat

Conservation Objectives for Loch nam Madadh Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Intertidal mudflats and sandflats
- Lagoons*
- Reefs
- Shallow inlets and bays
- Subtidal sandbanks

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

**Conservation Objectives for
Loch nam Madadh Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Otter

This site overlaps with Mointeach Scadabhaigh Special Protection Area

**Conservation Objectives for Loch Knockie and Nearby Lochs
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Slavonian grebe (*Podiceps auritus*)

**Conservation Objectives for Loch Flemington
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Slavonian grebe (*Podiceps auritus*)

Conservation Objectives for Kinveachy Forest Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- *Capercaillie (Tetrao urogallus)*
- *Scottish crossbill (Loxia scotica)*

The site overlaps with Kinveachy Forest Special Area of Conservation and River Spey Special Area of Conservation

Conservation Objectives for Kinveachy Forest Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- **Bog woodland***
- **Caledonian forest***

* Indicates priority habitat

The site overlaps with Kinveachy Forest Special Protection Area

Conservation Objectives for Kinloch and Kyleakin Hills Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Alpine and subalpine heaths
- Blanket bog*
- Dry heaths
- Mixed woodland on base-rich soils associated with rocky slopes*
- Western acidic oak woodland
- Wet heathland with cross-leaved heath

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

**Conservation Objectives for
Kinloch and Kyleakin Hills Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Otter

Conservation Objectives for Insh Marshes Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Alder woodland on floodplains*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Very wet mires often identified by an unstable `quaking` surface

* Indicates priority habitat

NB The conservation objectives for the qualifying species are on the next page

**Conservation Objectives for
Insh Marshes Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Otter

The site overlaps with River Spey – Insh Marshes Special Protection Area

Ramsar Convention on Wetlands of International Importance Especially as Waterfowl
Habitat

RAMSAR CITATION (Montreux criteria, 1990)

INNER MORAY FIRTH, HIGHLAND (7UK135)

The Inner Moray Firth Ramsar site comprises the Beaully Firth and Inverness Firth which together form the south-eastern estuarine component of the Moray Basin ecosystem. The Ramsar site supports large intertidal flats and some saltmarsh and sand dunes. The boundary of the Ramsar site follows those of the Beaully Firth, Munlochy Bay, Longman & Castle Stuart Bays and Whiteness Head SSSIs.

The Ramsar site qualifies under **Criterion 1b** by supporting outstanding examples of wetland habitats. Saltmarsh and intertidal flats are well represented in the Inner Moray Firth. Whiteness Head is a good example of a sand and shingle spit enclosing an accreting intertidal system of saltings, sand and mud flats, with associated saltmarsh and carseland.

The Ramsar site qualifies under **Criterion 3a** by regularly supporting over 20,000 waterfowl with a 1992/93-96/97 winter peak mean of 26,800 waterfowl, comprising 16,800 wildfowl and 10,000 waders.

The Ramsar site qualifies under **Criterion 3c** by regularly supporting internationally important wintering populations (1992/93-96/97 winter peak means) of greylag goose *Anser anser* (2651, 3% of total Icelandic population, all of which winters in GB), red-breasted merganser *Mergus serrator* (1,184, 1% of NW Europe, 12% of GB), bar-tailed godwit *Limosa lapponica* (1992/3-96/97 winter peak mean of 1090, 2% of GB and 1% of West European population) and redshank *Tringa totanus* (1,621, 1% of British & East Atlantic Flyway).

Area: 2339 ha
Grid Ref: NH 672528, 580480, 800590, 705473, 730500
OS Sheets 1:50,000 - 26, 27

March 1999
Natura 2000
Scottish Natural Heritage

Conservation Objectives for Inner Moray Firth Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Bar-tailed godwit (*Limosa lapponica*)
- Common tern (*Sterna hirundo*)
- Cormorant (*Phalacrocorax carbo*)*
- Curlew (*Numenius arquata*)*
- Goldeneye (*Bucephala clangula*)*
- Goosander (*Mergus merganser*)*
- Greylag goose (*Anser anser*)
- Osprey (*Pandion haliaetus*)
- Oystercatcher (*Haematopus ostralegus*)*
- Red-breasted merganser (*Mergus serrator*)
- Redshank (*Tringa totanus*)
- Scaup (*Aythya marila*)
- Teal (*Anas crecca*)*
- Wigeon (*Anas penelope*)*

- Waterfowl assemblage

* Indicates assemblage qualifier only

Conservation Objectives for Glen Coe Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Acidic scree
- Alpine and subalpine calcareous grasslands
- Alpine and subalpine heaths
- Base-rich fens
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Dry heaths
- High-altitude plant communities associated with areas of water seepage*
- Montane acid grasslands
- Mountain willow scrub
- Plants in crevices on acid rocks
- Plants in crevices on base-rich rocks
- Species-rich grassland with mat-grass in upland areas*
- Tall herb communities

* Indicates priority habitat

Conservation Objectives for East Caithness Cliffs Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Cormorant (*Phalacrocorax carbo*)*
- Fulmar (*Fulmarus glacialis*)*
- Great black-backed gull (*Larus marinus*)*
- Guillemot (*Uria aalge*)
- Herring gull (*Larus argentatus*)
- Kittiwake (*Rissa tridactyla*)
- Peregrine (*Falco peregrinus*)
- Razorbill (*Alca torda*)
- Shag (*Phalacrocorax aristotelis*)*

- Seabird assemblage

* indicates assemblage qualifier only

The site overlaps with East Caithness Cliffs Special Area of Conservation

**Conservation Objectives for Drumochter Hills
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- *Dotterel (Charadrius morinellus)*
- *Merlin (Falco columbarius)*

The site overlaps with Drumochter Hills Special Area of Conservation and River Spey Special Area of Conservation

Conservation Objectives for Drumochter Hills Special Area of Conservation

To avoid deterioration of the qualifying habitats (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitats:

- Acidic scree
- Alpine and subalpine heaths
- Blanket bog*
- Dry heaths
- Montane acid grasslands
- Mountain willow scrub
- Plants in crevices on acid rocks
- Species-rich grassland with mat-grass in upland areas*
- Tall herb communities
- Wet heathland with cross-leaved heath

* Indicates priority habitat

The site overlaps with Drumochter Hills Special Protection Area

**Conservation Objectives for Cuillins
Special Protection Area**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Golden eagle (*Aquila chrysaetos*)

The site overlaps with Sligachan Peatlands Special Area of Conservation and Strath Special Area of Conservation

Conservation Objectives for Cromarty Firth Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Bar-tailed godwit (*Limosa lapponica*)
- Common tern (*Sterna hirundo*)
- Curlew (*Numenius arquata*)*
- Dunlin (*Calidris alpina alpina*)*
- Greylag goose (*Anser anser*)
- Knot (*Calidris canutus*)*
- Osprey (*Pandion haliaetus*)
- Oystercatcher (*Haematopus ostralegus*)*
- Pintail (*Anas acuta*)*
- Red-breasted merganser (*Mergus serrator*)*
- Redshank (*Tringa totanus*)*
- Scaup (*Aythya marila*)*
- Whooper swan (*Cygnus cygnus*)
- Wigeon (*Anas penelope*)*

- Waterfowl assemblage

* indicates assemblage qualifier only

The site overlaps with the Moray Firth Special Area of Conservation

Ramsar Convention on Wetlands of International Importance Especially as Waterfowl
Habitat

CROMARTY FIRTH, HIGHLAND (7UK132)

RAMSAR CITATION (Montreux criteria, 1990)

Site Description:

The **Cromarty Firth Ramsar site** is a large, narrow-mouthed estuary which supports the largest intertidal flats in the Moray Basin. The site extends eastwards for approximately 30 km from the islands at the mouth of the River Conon to the town of Cromarty, in the Ross & Cromarty District of Highland Region. The boundary of the site follows those of Cromarty Firth SSSI and the estuarine section of Lower River Conon SSSI.

Qualifying Interest:

The **Cromarty Firth Ramsar site** qualifies under **Criterion 1b** by supporting outstanding examples of wetland habitat. The site holds the largest mudflats in Highland and at the mouth of the River Conon there is a rare surviving example of a transition from woodland, through scrub and freshwater fen, to brackish and finally saltmarsh communities.

The Cromarty Firth Ramsar site qualifies under **Criterion 3a** by regularly supporting over 20,000 waterfowl in winter. In the five-year period 1992/93 to 1996/97, a winter peak mean of 30,200 waterfowl was recorded, comprising 14,800 wildfowl and 15,400 waders.

The Cromarty Firth Ramsar site further qualifies under **Criterion 3c** by supporting internationally important wintering populations (1992/93-96/97 winter peak means) of greylag goose *Anser anser* (1,782, 2% of total Icelandic population, all of which winters in GB) and bar-tailed godwit *Limosa lapponica* (1,355, 3% of GB and 1% of W. European population).

Area: 4197 Ha

Grid Ref: NH 650670

OS Sheets 1:50,000 - 21, 26

March 1999

Natura 2000

Scottish Natural Heritage

Conservation Objectives for Conon Islands Special Area of Conservation

To avoid deterioration of the qualifying habitat (listed below) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitat that the following are maintained in the long term:

- **Extent of the habitat on site**
- **Distribution of the habitat within site**
- **Structure and function of the habitat**
- **Processes supporting the habitat**
- **Distribution of typical species of the habitat**
- **Viability of typical species as components of the habitat**
- **No significant disturbance of typical species of the habitat**

Qualifying Habitat:

- Alder woodland on floodplains*

* Indicates priority habitat

Conservation Objectives for Coll Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Barnacle goose (*Branta leucopsis*)
- Greenland white fronted goose (*Anser albifrons flavirostris*)

The site overlaps with Coll Machair Special Area of Conservation

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 31 March 1995

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Coll

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) **Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

56 39 16 N 06 30 05 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Oban

Coll Ramsar site occupies the north end of Coll, an Inner Hebridean island west of Mull.

Administrative region: Argyll and Bute

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 2208.52

Min.	18
Max.	59
Mean	29

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site supports substantial areas of maritime heath, blanket mire and open water. The occurrence and botanical composition reflect the long interaction between landforms and low-intensity agriculture. The site supports internationally important numbers of geese, together with several nationally rare and nationally scarce wetland plant species.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

3, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 3

The site qualifies by supporting a diverse community of wetland plants including several nationally rare and nationally scarce higher plant species.

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Greenland white-fronted goose, *Anser albifrons flavirostris*, Greenland 991 individuals, representing an average of 3.6% of the population (5 year peak mean for 1996/7-2000/01)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in winter:

Barnacle goose, *Branta leucopsis*, Greenland/Ireland, UK 711 individuals, representing an average of 1.3% of the population (5 year peak mean for 1996/7-2000/01)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm. See Sections 21/22 for details of noteworthy species

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, basic, sand, peat, nutrient-poor, sedimentary, metamorphic, calc-schists
Geomorphology and landscape	lowland, island, coastal, hilly
Nutrient status	oligotrophic
pH	acidic, alkaline
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Tiree, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/tiree.html) Max. daily temperature: 11.6° C Min. daily temperature: 6.6° C Days of air frost: 14.0 Rainfall: 1236.4 mm Hrs. of sunshine: 1399.0

General description of the Physical Features:

The site includes an extensive area of maritime heath, blanket mire and open water in the north-east of the island of Coll.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The site includes an extensive area of maritime heath, blanket mire and open water in the north-east of the island of Coll.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Maintenance of water quality (removal of nutrients)

19. Wetland types:

Inland wetland, Marine/coastal wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	55
Other	Other	20
O	Freshwater lakes: permanent	10
D	Rocky shores	10
E	Sand / shingle shores (including dune systems)	5

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The site contains substantial areas of rich maritime heath, *Sphagnum*-rich blanket mire and wet heath, and many lochs, some with unusual plant communities. There are smaller amounts of sand dune and associated grassland, marshy grassland and dry coastal heath.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.**Higher Plants.**

Najas flexilis, *Spiranthes romanzoffiana*, *Isoetes echinospora*, *Subularia aquatica*, *Deschampsia setacea*, *Eriocaulon aquaticum*.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species Information

None reported

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
 Aquatic vegetation (e.g. reeds, willows, seaweed)
 Livestock grazing
 Non-consumptive recreation
 Scientific research
 Sport fishing
 Tourism
 Traditional cultural

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? **No**

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
National/Crown Estate	+	+
Private	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	+
Fishing: recreational/sport	+	
Livestock watering hole/pond	+	+
Rough or shifting grazing	+	
Permanent pastoral agriculture		+
Hay meadows		+
Hunting: recreational/sport	+	+

Domestic water supply	+	
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26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
No factors reported	NA				

For category 2 factors only.
 What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Management agreement	+	+
Site management statement/plan implemented	+	
Environmentally Sensitive Area (ESA)	+	+

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Flora.

Ericaulon aquaticum monitoring.
Najas flexilis monitoring.

Fauna.

Goose counts.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

None reported

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Informal walking, wildlife watching and occasional sport fishing on some of the lochs within the site.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Scottish Executive, Environment and Rural Affairs Department

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Scottish Natural Heritage, 2 Anderson Place, Edinburgh, EH6 5NP

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1997) *Coasts and seas of the United Kingdom. Regions 15 & 16. North-west Scotland: the Western Isles and west Highland*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)

Boyd, JM & Bowes, DR (eds.) (1983) *The natural environment of the Inner Hebrides. Proceedings of the Royal Society of Edinburgh. Series B: Biological Sciences*, **83**

Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
www.wwt.org.uk/publications/default.asp?PubID=14

Shepherd, KB, Green, M, Knight, AC & Stroud, DA (1988) The breeding birds of Tiree and Coll in 1987/88 with special emphasis on breeding waders. *Nature Conservancy Council, CSD Report*, No. **827**

Shepherd, KB & Stroud, DA (1991) Breeding waders and their conservation on the wetlands of Tiree and Coll, Inner Hebrides. *Wildfowl*, **42**, 108-117

Stroud, DA (ed.) (1989) The birds of Coll and Tiree: status, habitats and conservation. (Contractor: Scottish Ornithologists' Club, Edinburgh). *Nature Conservancy Council, CSD Report*, No. **927**

Stroud, DA (1992) Crofting and bird conservation on Coll and Tiree. *British Wildlife*, **3**(6), 340-349

Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm

Weighell, AJ, Donnelly, AP & Calder, K (eds.) (2000) *Directory of the Celtic coasts and seas*. Joint Nature Conservation Committee, Peterborough

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org

Conservation Objectives for Cairngorms Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- **Population of the species as a viable component of the site**
- **Distribution of the species within site**
- **Distribution and extent of habitats supporting the species**
- **Structure, function and supporting processes of habitats supporting the species**
- **No significant disturbance of the species**

Qualifying Species:

- Capercaillie (*Tetrao urogallus*)
- Dotterel (*Charadrius morinellus*)
- Golden eagle (*Aquila chrysaetos*)
- Merlin (*Falco columbarius*)
- Osprey (*Pandion haliaetus*)
- Peregrine (*Falco peregrinus*)
- Scottish crossbill (*Loxia scotica*)

The site overlaps with Cairngorms Special Area of Conservation, River Dee Special Area of Conservation and River Spey Special Area of Conservation

Conservation Objectives for West Inverness-shire Lochs Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

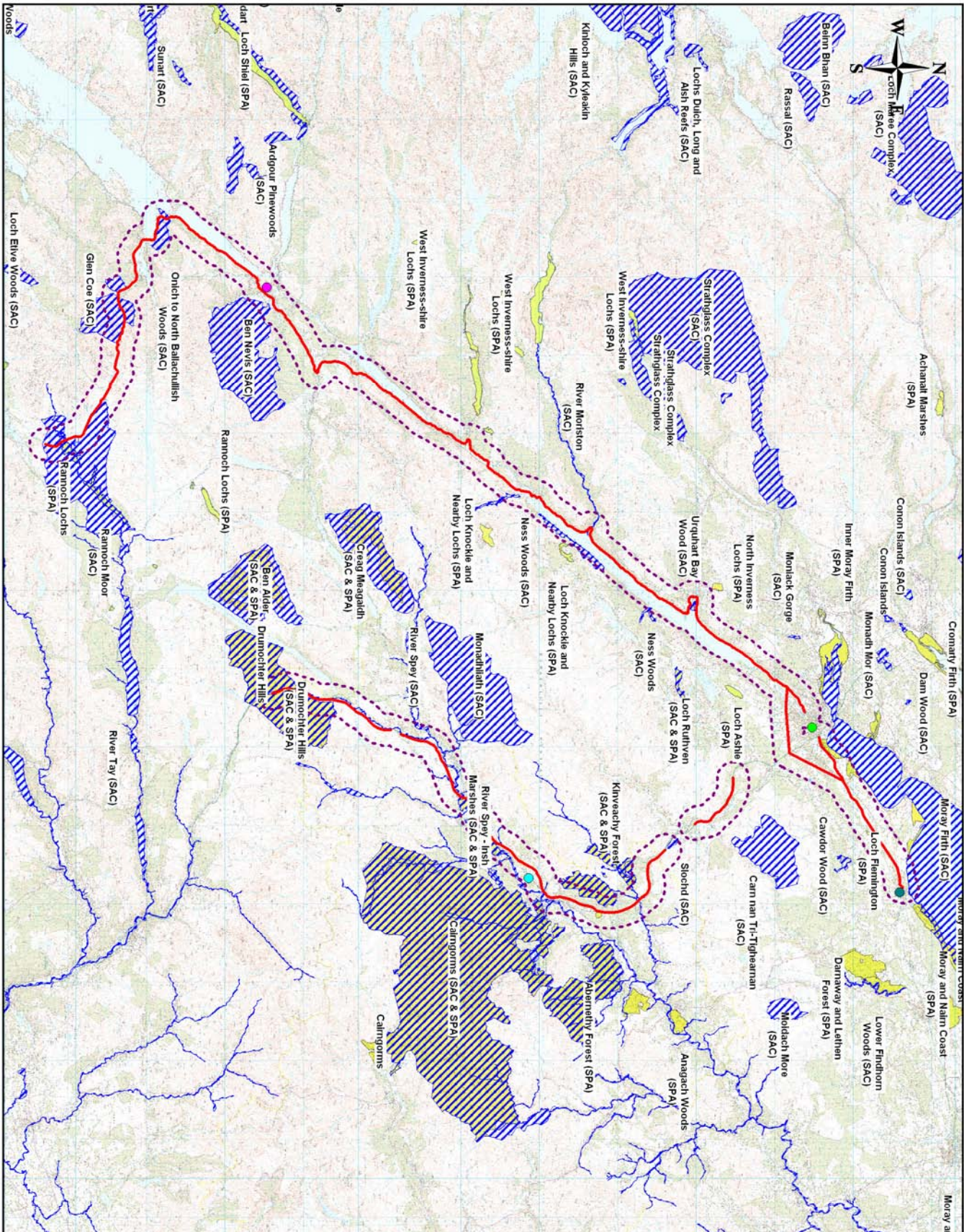
To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying species:

- Black-throated diver (*Gavia arctica*)
- Common scoter (*Melanitta nigra*)

Figures



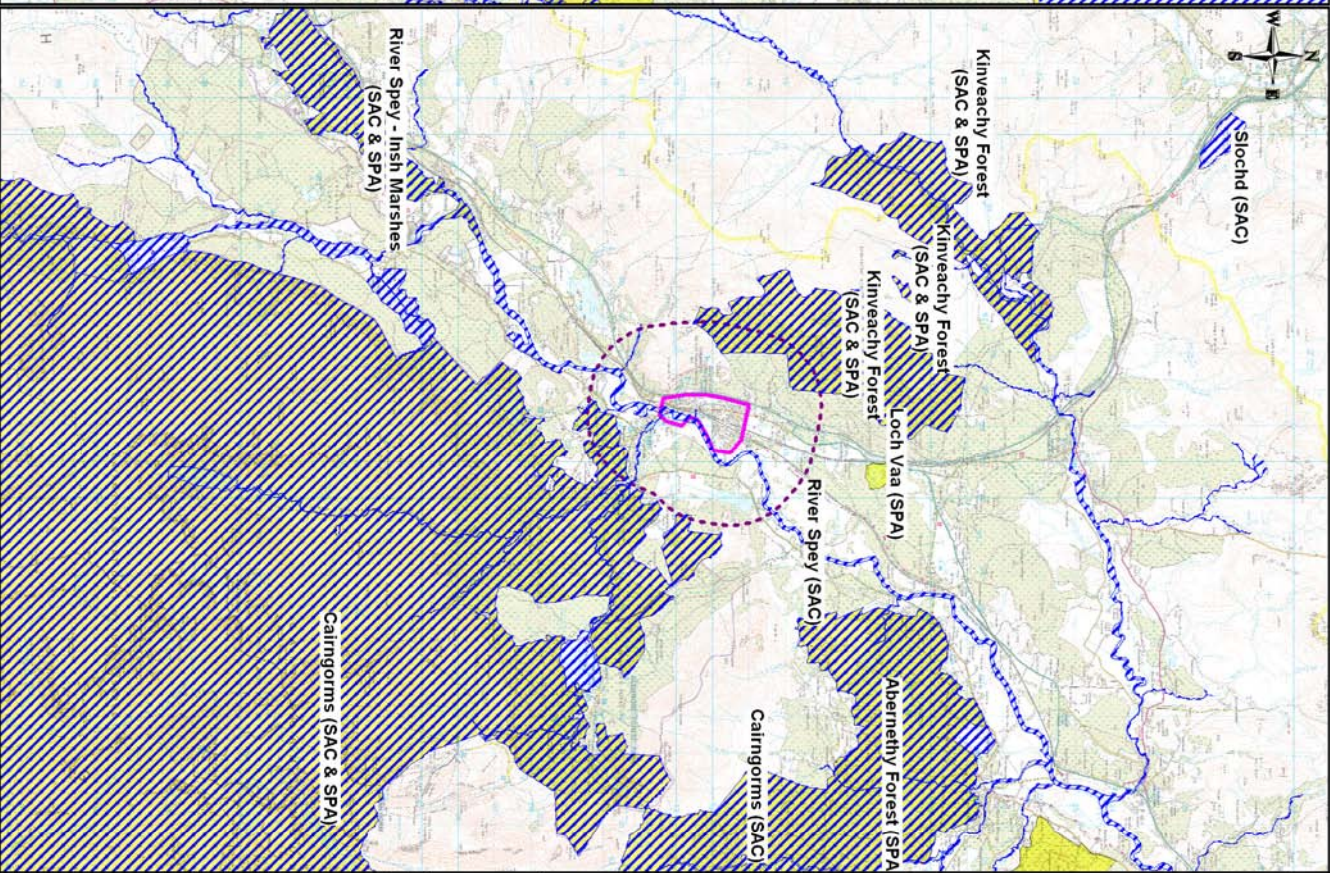
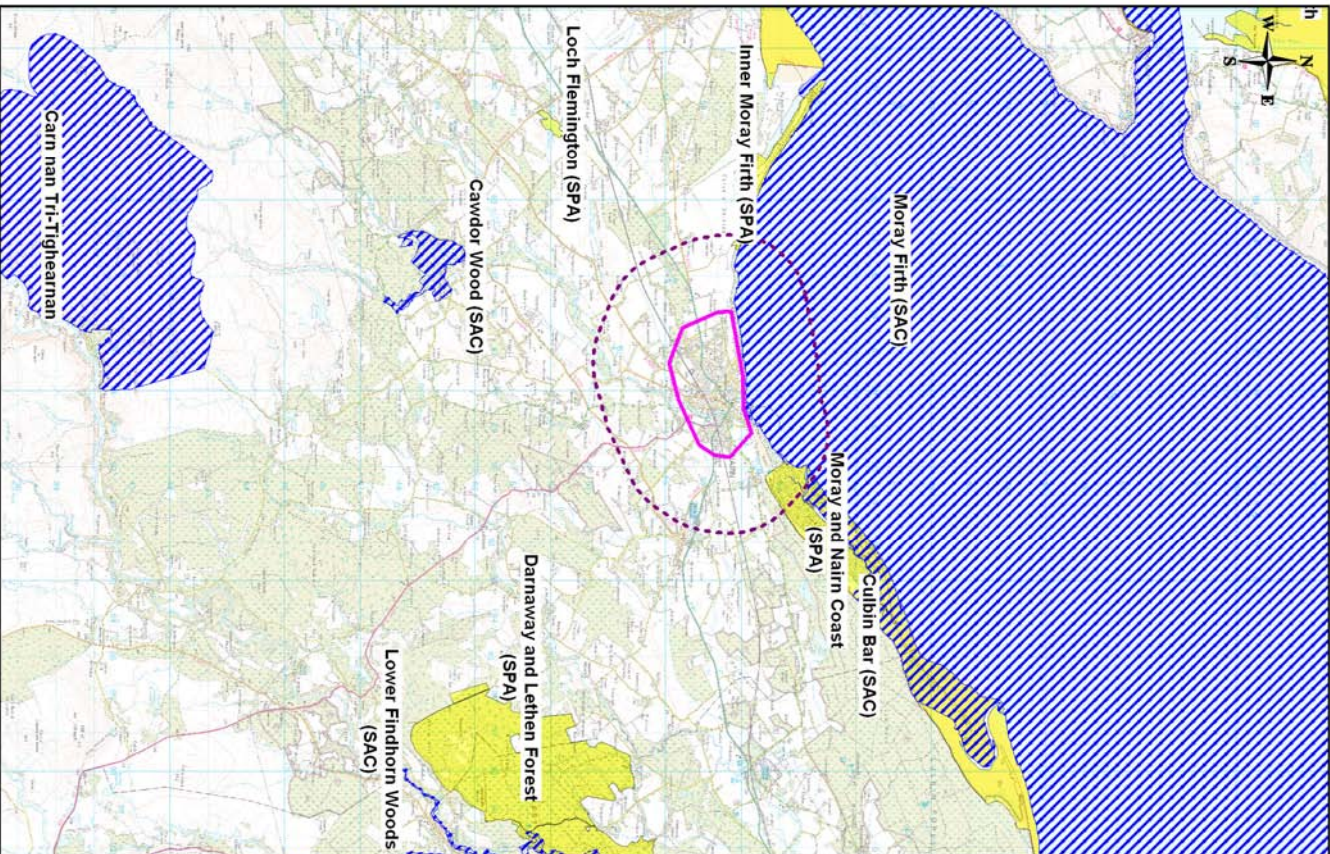
Trunk Road Priorities
 2km Buffer around the intervention
 Nairn
 Aviemore
 Inverness
 Fort William





Special Areas of Conservation (SAC)
 Special Protection Areas (SPA)

Scale	1:50,000
1:50,000	1:50,000



THC LTS SEA
 Trunk Road Priorities
 A9, A96, A82 and Proposed
 Inverness Relief Road
 CEERARENVA007

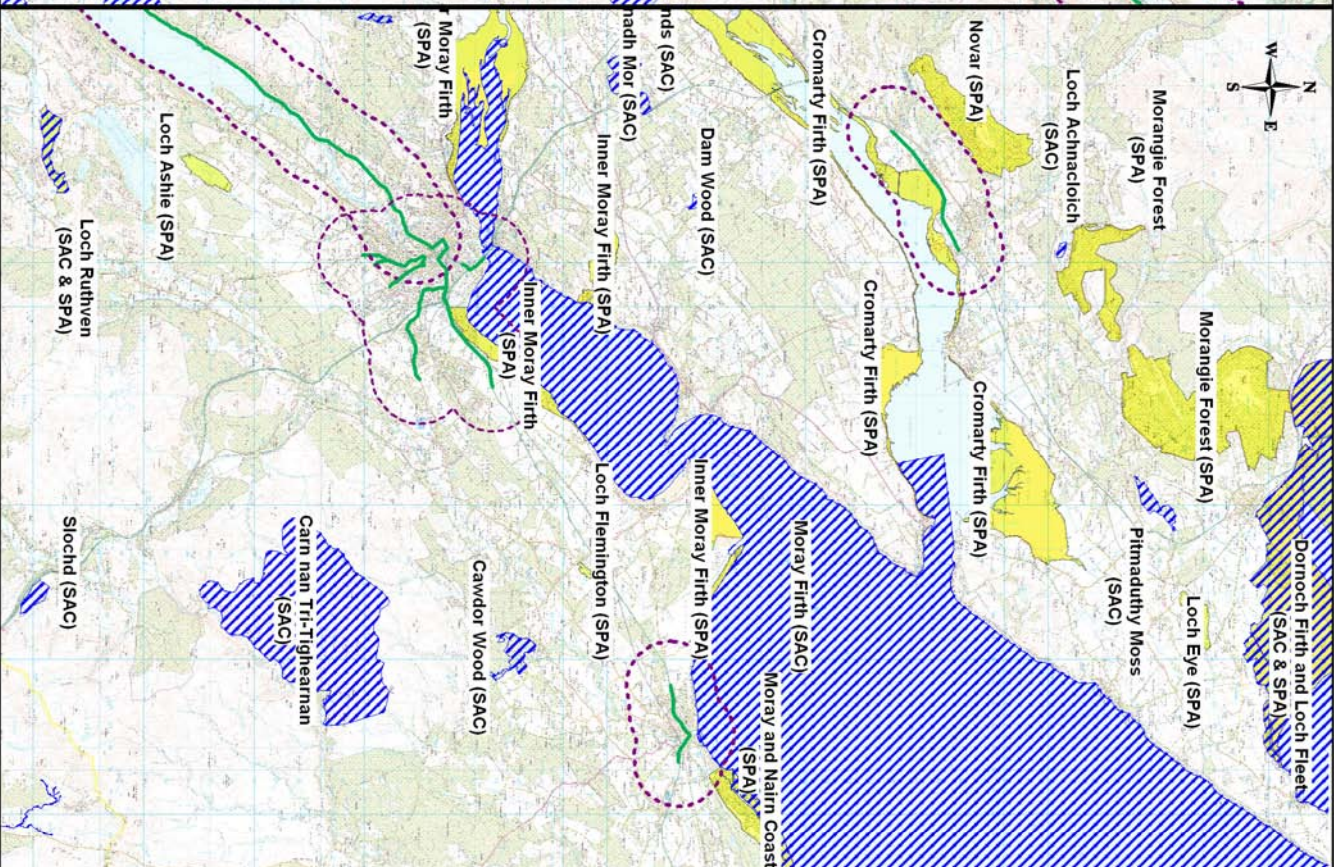
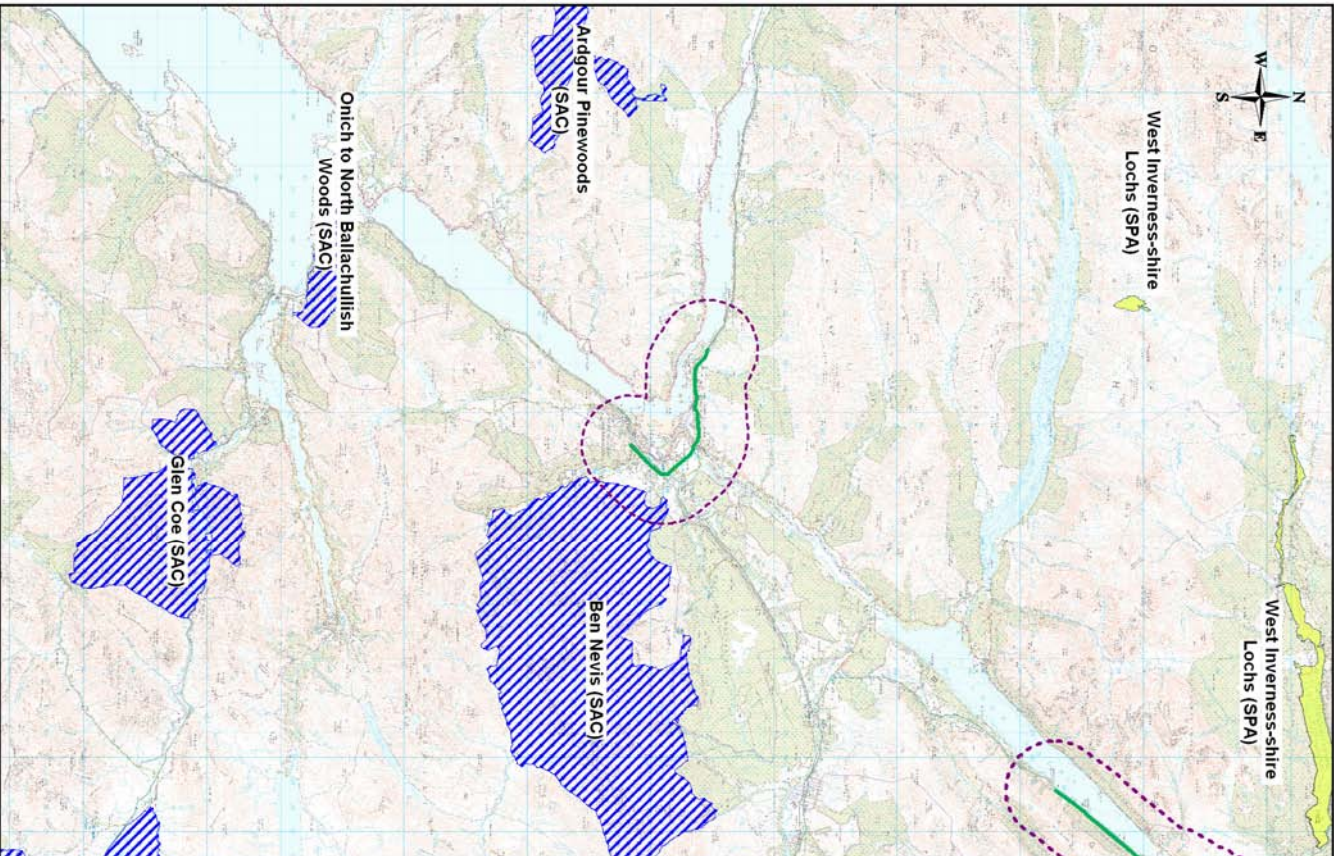


-  Pedestrian and Cycleway Network Improvements
-  Special Areas of Conservation (SAC)
-  Special Protection Areas (SPA)
-  Special Protection Areas (SPA)

Project Name	Start Date	End Date	Status



Project Title: Pedestrian and Cycleway Network Improvements (Insh & Aviemore)
 Client: FHCLTS SEA
 Project No: CEERARENVA001

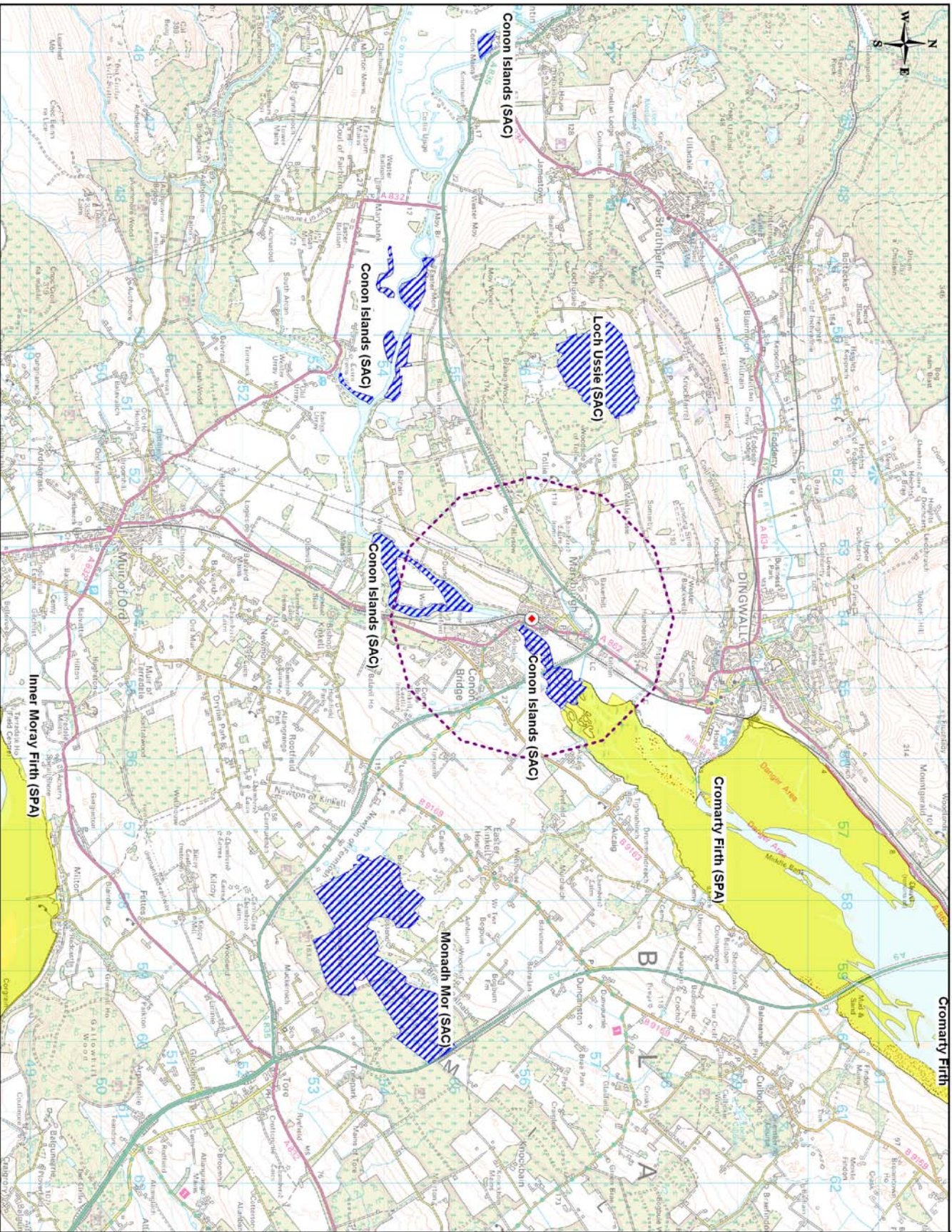


<p>Bus Priority Routes 3km Buffer around the intervention</p>		
<p>Special Areas of Conservation (SAC)</p>		
		<p>Special Protection Areas (SPA)</p>

THC LTS SEA

Bus Priority Routes: Fort William, Inverness, Nairn and the Cromarty Firth

CEEAR/ENVA/006

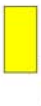


Conon Bridge Railway Station
 2km Buffer around the intervention

Special Areas of Conservation (SAC)



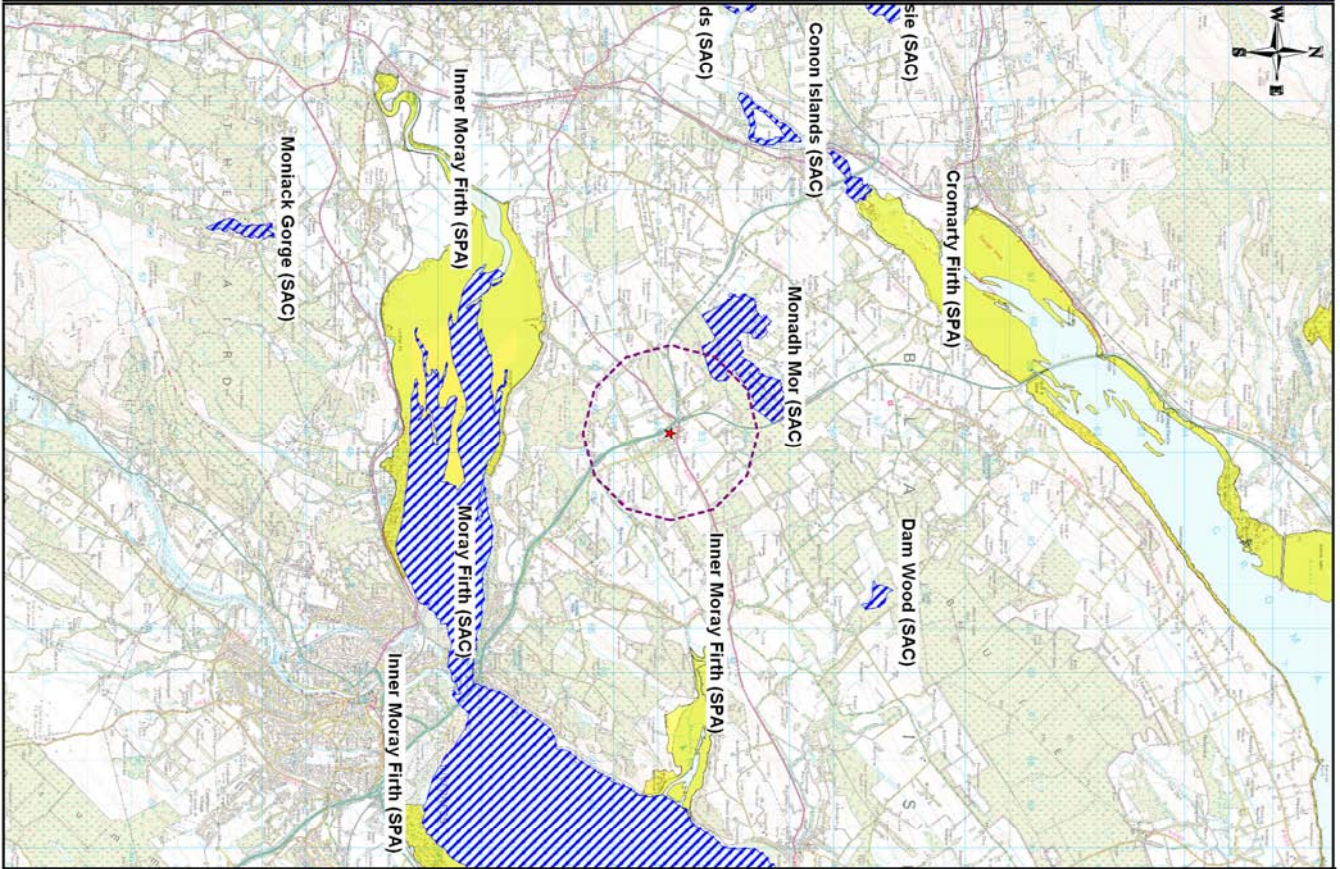
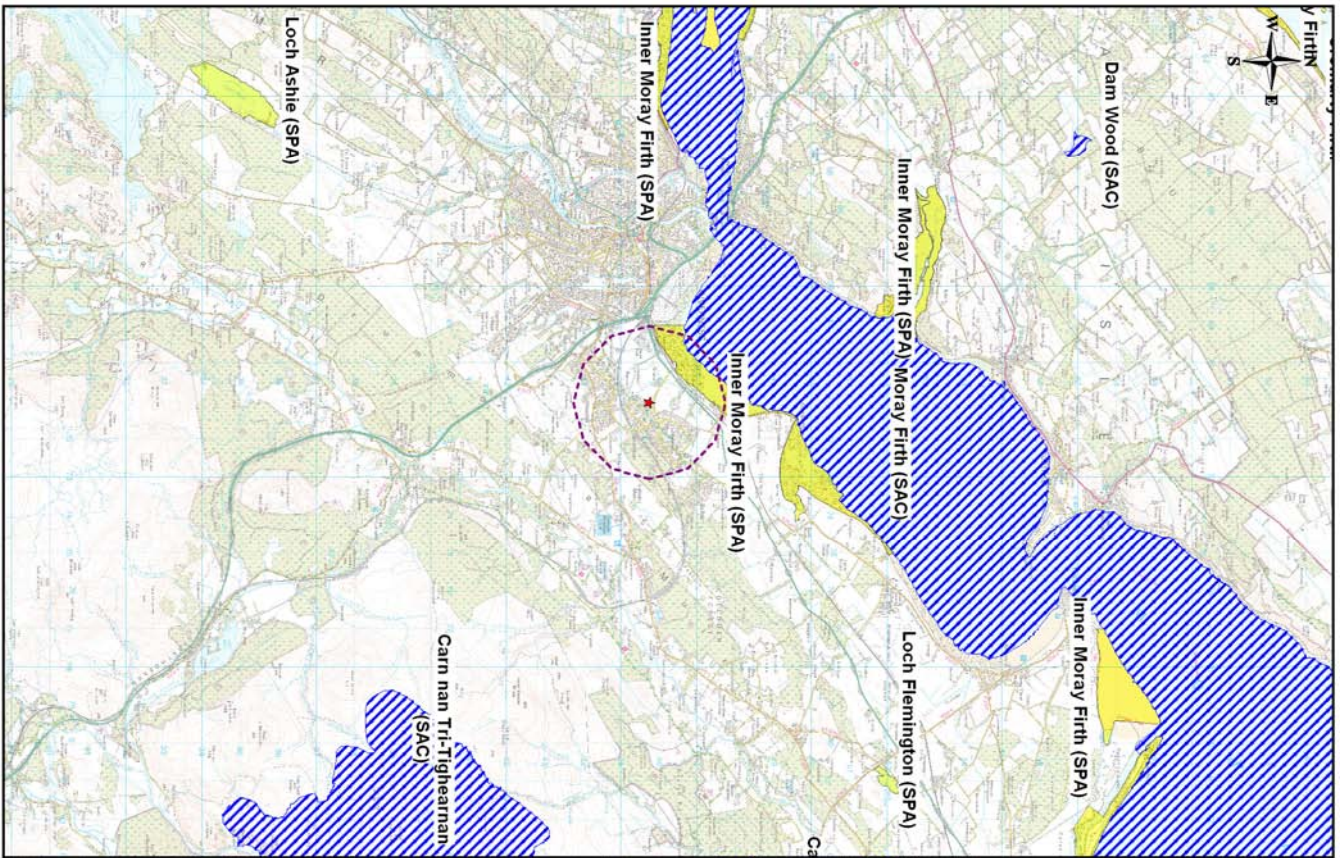
Special Protection Areas (SPA)



NO.	DATE	DESCRIPTION



THC LTS SEA	
01/07/2020	20/07/2020
1:50,000	
Conon Bridge Railway Station (Conon Bridge)	
CEARARENVA004	



Scale 1:50,000
A3

- Park & Ride Sites
- Exact Locations Unknown
- 200m Buffer around the intervention

Special Areas of Conservation (SAC)

Special Protection Areas (SPA)



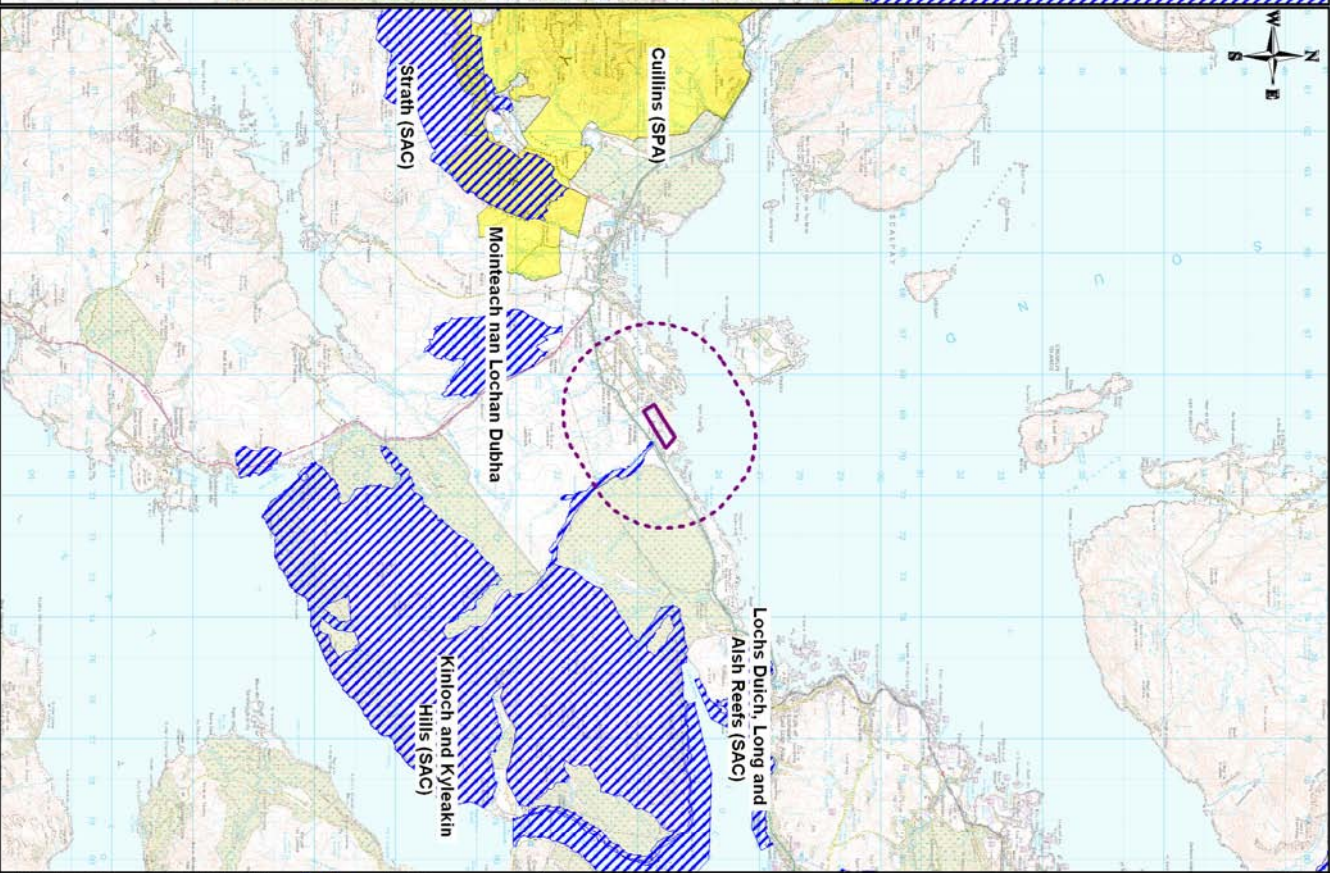
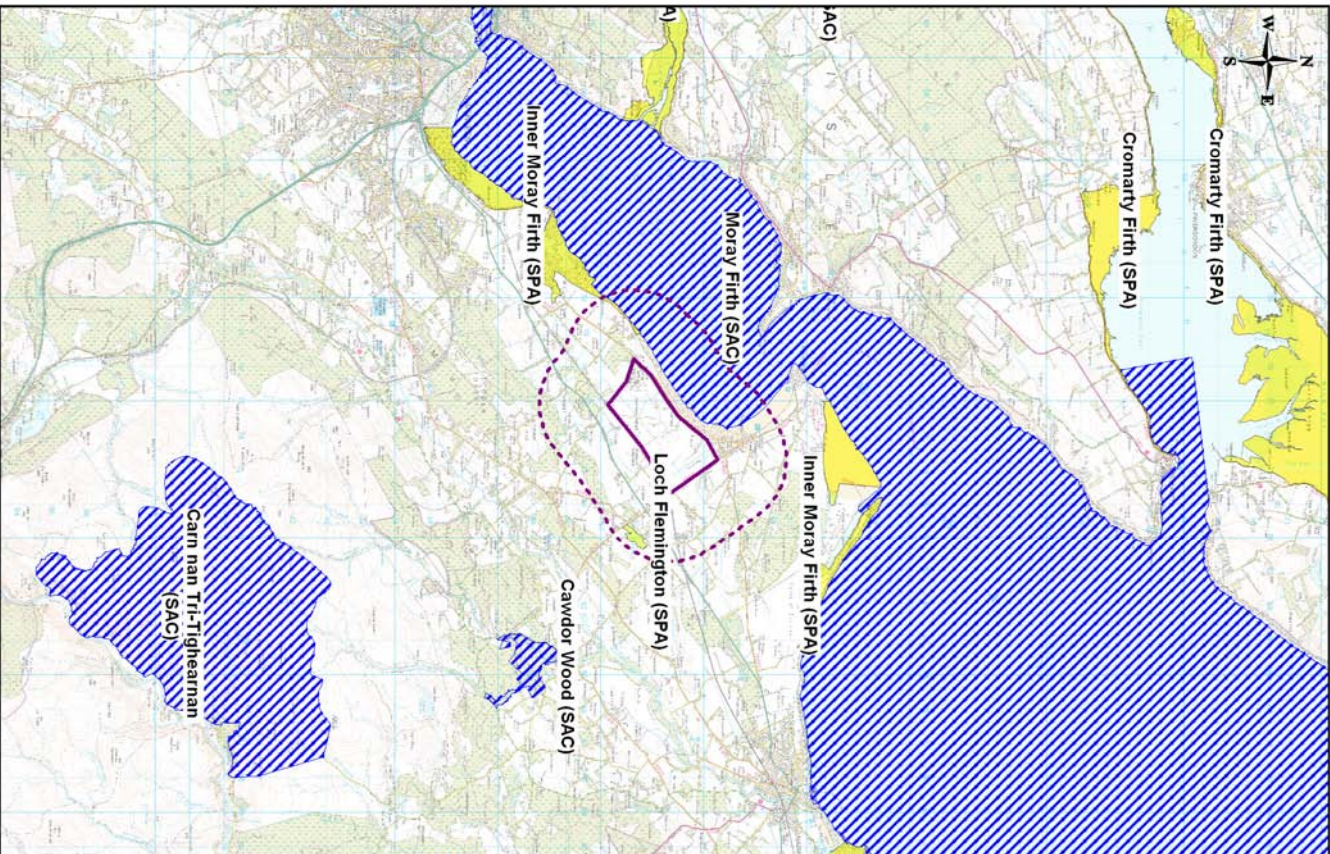
Sheet No.	Scale	Author	Date






THC LTS SEA

Proposed Park & Ride Sites
(Inverness & Torie)

CEEARAENVVA002

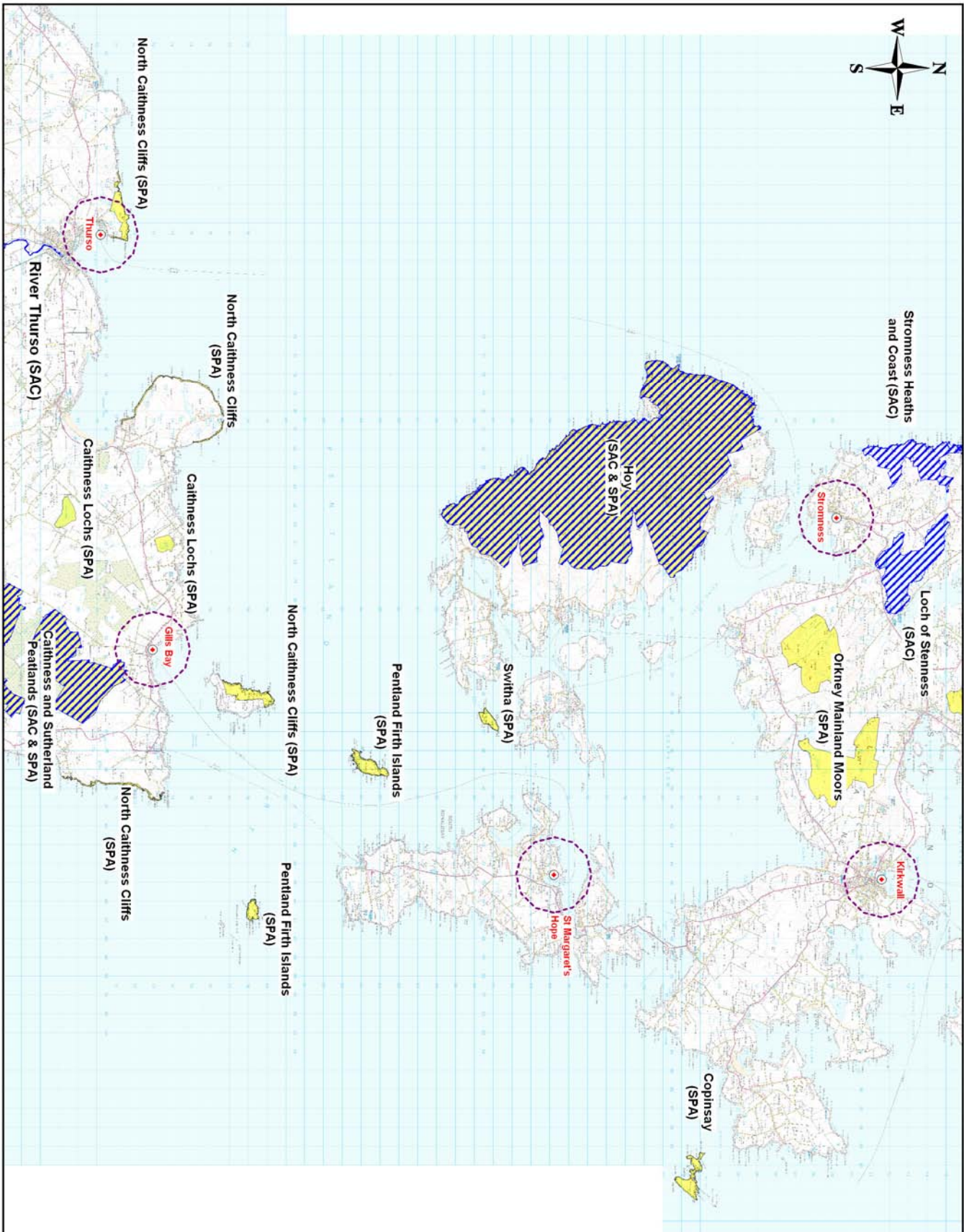






-  Airport Improvements
2km Buffer around the intervention
-  Special Areas of Conservation (SAC)
-  Special Protection Areas (SPA)

Scale	1:50,000
Northings	500000
Eastings	500000



Project Name: Airport Improvements Inverness and Broadford
 Client: THC LTS SEA
 Project Number: CEEAR/ENV/AA/003
 Date: 15/01/2020
 Version: 1.0



-  Special Areas of Conservation (SAC)
-  Special Protection Areas (SPA)
-  Ferry Terminals
-  2km Buffer around the Intervention

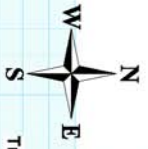
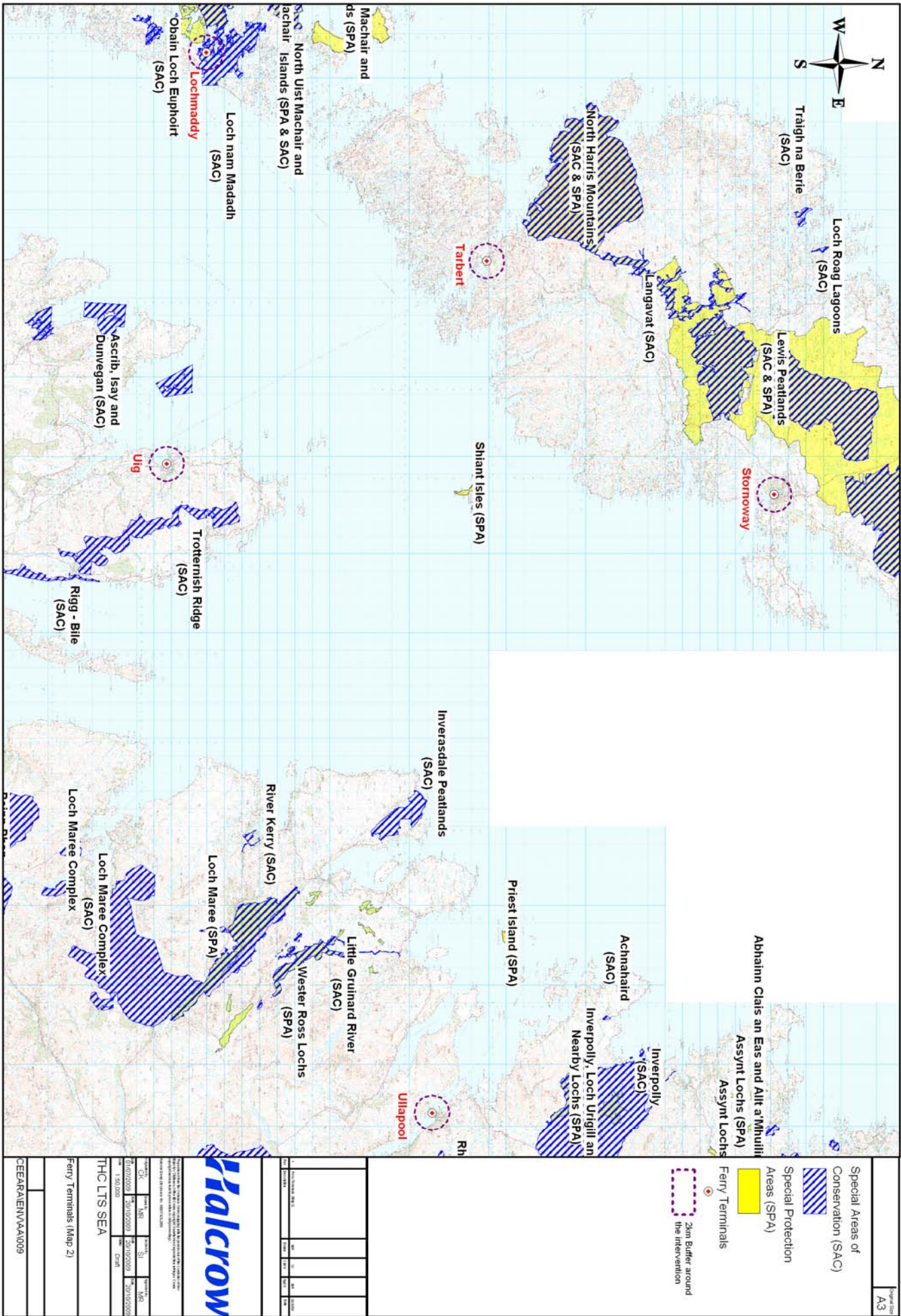
CD	Project Name	EA	CI	SI	MS







DATE	VERSION	BY	FOR
20/07/2023	3	THC	THC LTS SEA
1:50,000			

Ferry Terminals (Map 1)

CEEAR/EN/VA/008



-  Special Areas of Conservation (SAC)
-  Special Protection Areas (SPA)
-  Ferry Terminals
-  2km Buffer around the intervention

Scale	1:50,000
Scale	1:50,000
Scale	1:50,000
Scale	1:50,000
Scale	1:50,000
Scale	1:50,000



THEC LTS SEA
 Ferry Terminals (Map 2)
 CEERARENVA009



South Uist Machair and Lochs
E (SAC & SPA)

Kilpheder to Smerclate,
South Uist (SPA)

Eolligarry, Barra (SPA)

Lochboisdale

Castlebay

Mingulay and Berneray (SPA)

Canna and Sanday (SPA)

Rùm (SAC & SPA)

Cullins (SPA)

Ardnamurchan Burns
(SAC)

Sound of Arisaig
(SAC)

Mingarry Burn (SAC)

Morven Woods
(SAC)

Sleibhtean agus Cladach
Thiiriodh (SPA)

Coll (Corncrake)
(SPA)

Coll (SPA)

Coll Machair (SAC)

Tiree Machair
(SAC)

Scamish

Treshnish Isles
(SAC & SPA)

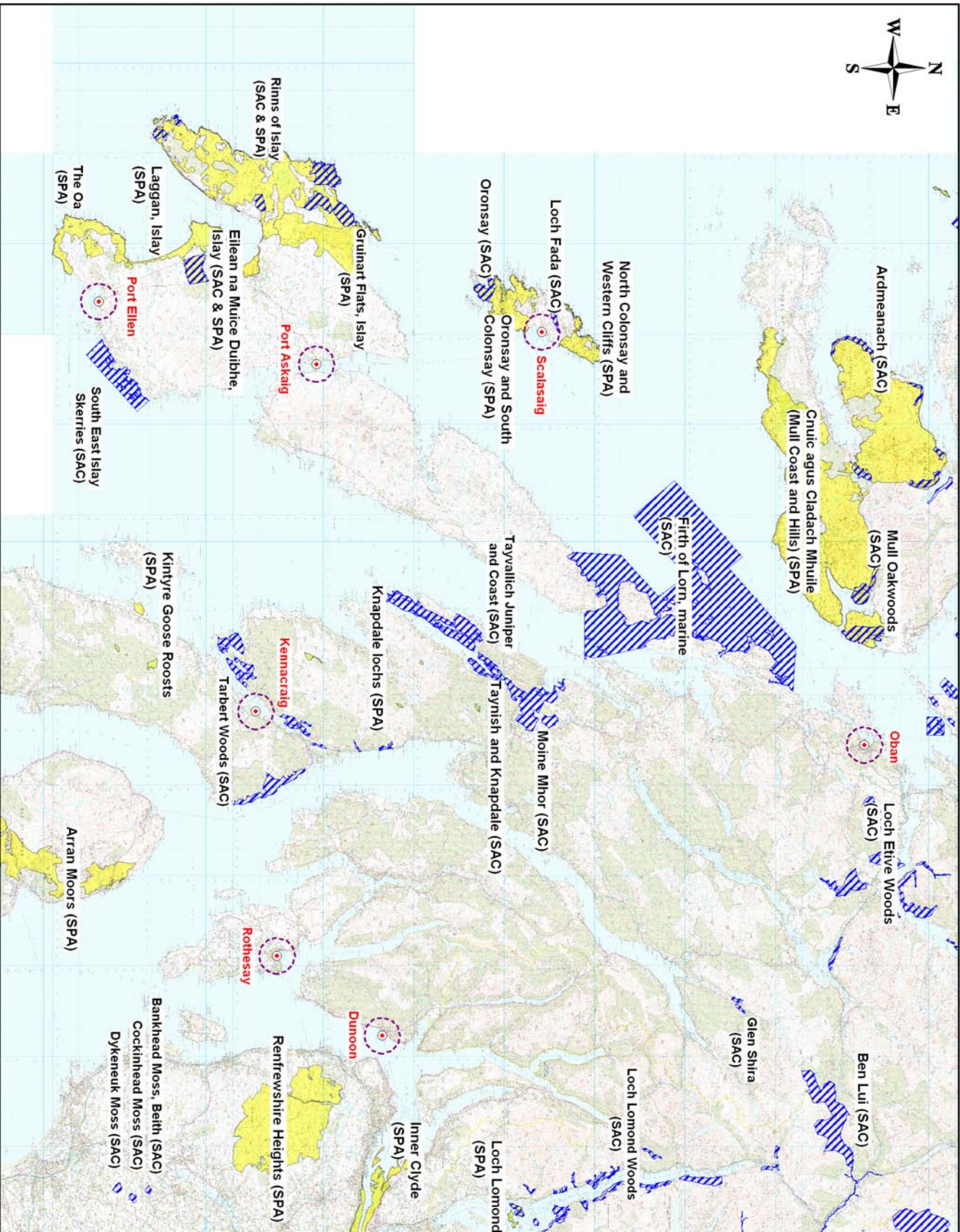
Sunart (SAC)



- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Ferry Terminals
- 2km Buffer around the intervention



Project Name: THC LTS SEA	
Client: CEEAR/ENVA/AA010	
Map 3)	Ferry Terminals
Scale: 1:50,000	
Map No:	Map No:
Scale:	Scale:
Author:	Author:
Checker:	Checker:
Date:	Date:
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Special Areas of Conservation (SAC)

Special Protection Areas (SPA)

Ferry Terminals

2km Buffer around the intervention

Map Ref: A3

Scale: 1:50,000

Map Date: 20/11/2023

Map By: [Name]

Map For: [Name]

Map No: [Number]

Map Title: Firth of Clyde Ferry Terminals (Map 4)

Map Code: CEERARENVA011

