

**SCOTTISH  
NATURAL  
HERITAGE**



**Corporate Strategy 2008-  
Corporate Plan 2008-2013**

**Strategic Environment  
Assessment**

**Environmental Report**

**January 2008**

**SEA ENVIRONMENTAL REPORT – COVER NOTE  
PART 1**

To:

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or

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**PART 2**

An Environmental Report is attached for **[name of PPS]:**

Scottish Natural Heritage's Corporate Strategy 2008- and Plan 2008-2011

The Responsible Authority is:

Scottish Natural Heritage

**PART 3**

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is acceptable)



Date

24<sup>th</sup> January 2008

# **SCOTTISH NATURAL HERITAGE CORPORATE STRATEGY 2008- AND PLAN 2008-11**

## **Strategic Environmental Assessment Environmental Report**

### **CONSULTATION INFORMATION**

#### **1.1 Background**

Scottish Natural Heritage is a non-departmental public body sponsored by the Scottish Executive. We are a statutory adviser on natural heritage to Government and local authorities, and we provide advice on how energy policy and associated developments affect the natural heritage. We produce policy statements to promote our position and influence planning for the natural heritage

This is a Strategic Environmental Assessment Environmental Report prepared in support of the development of SNH's Corporate Strategy and Plan 2008 onwards.

SNH is undertaking SEA as required by the Environmental Assessment (Scotland) Act 2005. Following SEA requirements we are consulting on this environmental report and at the same time consulting on the draft Strategy itself.

#### **1.2 Consultation**

This Environmental Report is available for comment until **24th March 2008**. Comments should be directed to the contact below who can supply paper copies or an emailed copy if required. In line with the Act, a notice is also being published in The Scotsman.

This Environmental Report and the draft Corporate Strategy are also available via the SNH website at: <http://www.snh.org.uk/strategy/pd00.htm>.

Responses may be made available in public unless the resposdee specifically requests that the response should be regarded as in confidence. SNH may however be required to make any information available subject to the requirements and limitations of Freedom of Information legislation.

#### **1.3 Contact and response address**

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## Non-Technical Summary

1.1 The following are the key facts about SNH's Corporate Strategy and Plan 2008-.

<b>Responsible Authority</b>	Scottish Natural Heritage
<b>Title of Plan</b>	SNH's Corporate Strategy 2008 - SNH's Corporate Plan 2008-2011
<b>Plan Subject</b>	Natural heritage
<b>Period Covered</b>	5 years plus (Financial years 2008/9 – 2013/14)
<b>Requirement for the Plan</b>	SNH's last Corporate Strategy was published in 2003 and formed the basis for the current Corporate Plan, which expires in March 2008. The Corporate Strategy needs to be renewed to reflect changes in the strategic direction for SNH including the wider public policy agenda.
<b>Frequency of Updates</b>	Every 4 years
<b>Plan area</b>	The Strategy & Plan cover the whole of Scotland
<b>Summary of content /nature of plan</b>	The Corporate Strategy sets out the strategic direction for Scottish Natural Heritage (SNH) and the priorities for delivering this over the next 5 years or more. The Corporate Plan will set out more detailed actions for the period 2008-2011.

1.2 This Environmental Report sets out the environmental effects anticipated from SNH's Corporate Strategy and Plan. The report sets out the environmental information, including baseline data, details of other relevant plans and programmes and details of the method of undertaking the assessment. It presents the results of the assessment, including the consideration of alternatives, and any mitigation measures necessary to address identified significant adverse effects. It outlines plans for monitoring the environmental effects of the Strategy and Plan.

1.3 The Key Findings of the Environmental Assessment are:

- If taken forward, the actions in the Strategy should lead to significant positive benefits for biodiversity, landscape, and the sustainable use of natural resources, with additional benefits for soils and water quality. Actions to increase outdoor recreation and to involve communities in improving local environments should lead to significant benefits for public access and for public health and well-being, e.g. from increasing physical activity. The significance of benefits for climate change mitigation and adaptation are difficult to predict, but are likely to be positive. These benefits are all consistent with the aims of SNH in delivering its Corporate Strategy and will be monitored through the Natural Heritage Trends and Indicators.
- There are likely to be indirect benefits to cultural heritage from measures to promote the sensitive management of landscapes and biodiversity. These will be greatest where consideration is given to cultural heritage interests in management planning and policy development. SNH works closely with Historic Scotland in promoting for the benefit of mutual interests, guided by a concordat between the two organisations.
- The few potentially negative environmental effects are possible local impacts on biodiversity, landscape or cultural heritage in cases where the wider benefits to climate change from renewable energy development are considered to outweigh local impacts.

These can be minimised through consideration at early stages in the design and planning processes, with advice from relevant organisations including SNH and Historic Scotland.

- 1.4 The alternative of SNH not including the proposed Actions was also assessed. Taking into account the key role that SNH plays in biodiversity conservation, landscape protection, promotion of outdoor access, and understanding and awareness of the natural heritage, as well as current pressures upon biodiversity and landscape, the assessment concluded that in the absence of SNH Action, there would be significant negative impacts on biodiversity and landscape objectives, and the sustainable use of natural resources, and potentially on public health.

# 1. Introduction

## Background

- 1.5 SNH is a non-departmental public body (NDPB), responsible through Ministers to the Scottish Parliament. SNH's remit is to promote the care and improvement, responsible enjoyment, greater understanding and appreciation and sustainable use of the natural heritage, now and for future generations.
- 1.6 SNH's last Corporate Strategy was published in 2003 and formed the basis for the current Corporate Plan, which expires in March 2008. The Corporate Strategy needs to be renewed to reflect changes in the strategic direction for SNH including the wider public policy agenda. The new draft Corporate Strategy sets out the strategic priorities for Scottish Natural Heritage (SNH) and the priority actions to deliver them over the next 5 years or more. The Corporate Plan will set out a more detailed Plan for the period 2008-2011.

## Purpose of SEA

- 1.7 The requirement for SEA comes from the European Directive on the assessment of the effects of certain plans and programmes on the environment – commonly known as the SEA Directive (42/2001/EC). This is implemented in Scotland through the Environmental Assessment (Scotland) Act 2005.
- 1.8 The purpose of SEA is to ensure that information on the environmental effects of a plan or programme is gathered and made available to plan-makers and decision takers as the plan is prepared and implemented with a view to promoting sustainable development. The key objectives of SEA are to:
  - provide a systematic means of identifying, describing, evaluating and reporting on the environmental effects of a plan;
  - try to prevent, reduce and/or offset as far as possible any possible adverse effects of implementing a plan;
  - try to improve the environmental performance of a plan through its preparation;
  - ensure consultation and engagement with the statutory Consultation Authorities and the public;
  - monitor implementation of a plan for any unforeseen environmental effects and to take appropriate remedial action where necessary.
- 1.9 The key SEA stages are:
  - **Screening-** determining whether the policy is likely to have significant environmental effects and whether an SEA is required.
  - **Scoping** - deciding on the scope and level of detail of the Environmental Report, and the consultation period for the report – this is normally done in consultation with three consultation authorities, of which Scottish Natural Heritage is one. For this SEA formal consultation was with the other two: Scottish Ministers (Historic Scotland) and the Scottish Environmental Protection Agency.
  - **Environmental Report-** publishing an Environmental Report on the policy and its environmental effects, and consulting on that report.
  - **Adoption-** providing information on: the adopted policy; how consultation comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the policy.

- **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.

## Purpose of this Report

- 1.10 The purpose of this Environmental Report is to set out the environmental effects anticipated from SNH's Corporate Strategy and Plan. The report sets out the environmental information, including baseline data, details of other relevant plans and programmes and details of the method of undertaking the assessment. It presents the results of the assessment, including the consideration of alternatives, and any mitigation measures necessary to address identified significant adverse effects. It outlines plans for monitoring the environmental effects of the Strategy and Plan.
- 1.11 This environmental report has been prepared as far as possible using the Scottish Executive SEA Toolkit and also has been prepared jointly with Scottish Environment Protection Agency as a format for use by both organisations for their SEA work relating to corporate business plans. It takes account of comments received from the consultation authorities on the Screening and Scoping Reports.
- 1.12 This Environmental Report along with the draft Strategy is being sent to a wide range of public and voluntary bodies and representatives of private business. The public can access the report and draft Strategy from SNH's website <http://www.snh.org.uk/strategy/pd00.htm> or can inspect it at SNH's Battleby and Inverness Offices.

## SEA activities to date

- 1.13 A screening report was prepared in July 2007, and following consideration of responses from the relevant consultative authorities, Scottish Environmental Protection Agency (SEPA) and Historic Scotland, a screening determination was published in the Scotsman on 11 September 2007, indicating our intention to carry out SEA of the Corporate Strategy and Plan.
- 1.14 A scoping report was prepared in August 2007. Comments were received from the two consultation authorities as summarised below.

**Table 1: Comments received on the SEA Scoping Report**

Scoping Report	SEPA	Historic Scotland
<b>Setting the Context – Key Facts about the SNH Corporate Strategy and Plan</b>	Considered appropriate, given the high level nature of the plan, that each of the proposed Corporate Strategy themes will be assessed including the objectives under each	
<b>Environmental Baseline including other plans, programmes and objectives</b>	Add the preparatory documents for the River Basin Management Plans and the National Planning Framework	Suggest include Scottish Environment Policy 2: Scheduling: protecting Scotland's nationally important monuments, NPPG 5 Archaeology and Planning, and NPPG 18 Planning and the Historic Environment. In summary the key environmental protection objectives of the legislation and policy framework is 'to protect and where appropriate enhance the historic

		environment’.  Since historic environment is scoped in, baseline information for the historic environment and the likely issues arising from the strategy should be included.
<b>Scope of assessment and level of detail</b>	SEPA is content that air has been scoped out on the basis that the Corporate Plan will have minimal effects on this receptor  Content with the proposed level of detail of the assessment.  Discussion regarding alternatives is useful. SEPA is content with the proposed approach to consider what effects would be if SNH addresses each objective and what effect there would be if it did not.	HS consider that the Corporate Strategy and Plan are unlikely to have significant effects on the historic environment. Note that historic environment is scoped in to explore links with the strategy’s landscape objectives. Content with this.  Content that the SEA will be undertaken at the level of the Strategy’s objectives.  Content with the SEA objective for the cultural heritage.
<b>Assessment Method</b>	Content with the approach which is similar but in slightly more detail to SEPA’s own approach to its Corporate Plan	Framework is clear. Welcome use of comments box. Important to identify issues where the impacts are uncertain at this stage and be clear how they will be taken into account at lower levels, and who will be responsible for following them through.  Report should clearly describe any changes made to the strategy following the identification of mitigation needs, and who will be responsible for mitigation measures to be taken forward as the strategy is implemented.
<b>Consultation period for the Environmental Report</b>	Content with proposed 12 week consultation period	Content with the proposed 12 week consultation period

## 2. SNH's Corporate Strategy and Plan – objectives and contents

### Key Facts

2.1 Table 2 below sets out some key facts about the SNH Corporate Strategy and Plan:

<b>Responsible Authority</b>	Scottish Natural Heritage
<b>Title of Plan</b>	SNH's Corporate Strategy 2008 - SNH's Corporate Plan 2008-2011
<b>Plan Subject</b>	Natural heritage
<b>Period Covered</b>	5 years plus (Financial years 2008/9 – 2013/14)
<b>Requirement for the Plan</b>	SNH's last Corporate Strategy was published in 2003 and formed the basis for the current Corporate Plan, which expires in March 2008. The Corporate Strategy needs to be renewed to reflect changes in the strategic direction for SNH including the wider public policy agenda.
<b>Frequency of Updates</b>	Every 4 years
<b>Plan area</b>	The Strategy & Plan cover the whole of Scotland
<b>Summary of content /nature of plan</b>	The Corporate Strategy sets out the strategic direction for Scottish Natural Heritage (SNH) and the priorities for delivering this over the next 5 years or more. The Corporate Plan will set out more detailed actions for the period 2008-2011.

2.2 The Corporate Strategy sets out the strategic direction for Scottish Natural Heritage (SNH) and the priorities for delivering this over the next 5 years or more. The Corporate Plan will start with these priorities but also include detailed actions. This SEA assesses environmental effects at the strategic priorities level. As the detailed actions in the Plan are drafted, our expectation is that the strategic environmental effects will already have been identified and assessed within this SEA under the relevant strategic priority. However we will consider whether additional significant environmental effects are likely to emerge that have not been identified in this SEA and would require further environmental assessment.

### Contents of SNH's Corporate Strategy

2.3 Set out in Table 3 are the contents of the Corporate Strategy and those parts that are assessed within the SEA.

**Table 3 – Parts of the Plan that are assessed in this Environmental Report**

Chapter	Proposed Content	Assessed in the SEA?
1	Introduction	No, this chapter introduces SNH's remit and the purpose of the Strategy
2	Context: <ul style="list-style-type: none"> <li>o The significance of the natural heritage of Scotland to its people and internationally</li> </ul>	No, this chapter provides a summary of the environmental, policy and legislative context for the Strategy

	<ul style="list-style-type: none"> <li>○ The current state of the natural heritage and wider trends in Scotland</li> <li>○ Objectives of the current Scottish Government</li> <li>○ Links to Scotland's Sustainable Development Strategy and SNH's Natural Heritage Futures programme</li> </ul>	
3	Priorities, outcomes and actions	Yes. This sets out the outcomes that SNH will work towards under each cross-cutting Priority and identifies actions to achieve these
4	Taking the Strategy Forward	No, this sets out the process for taking the Strategy forward, including working with partners and monitoring delivery

## 3. Context and Environmental Baseline

### Introduction

3.1 This section of the Environmental Report provides details about the context in which SNH's Corporate Strategy and Plan will operate. It includes:

- a review of other relevant plans, programmes and strategies in order to understand the policy and legislative context; and
- an overview of the environmental baseline conditions relevant to the Corporate Strategy, highlighting any particular problems or characteristics.

### Relationship with other Plans, Programmes & Objectives

3.2 Appendix A sets out a list of plans and programmes considered to be relevant to the Corporate Strategy and provides brief commentary on their relevance to the Strategy. Given the wide geographic and subject scope of the Corporate Strategy it is not meaningful to identify every possible plan or programme. Rather, the key plans only have been identified. Those that are particularly relevant to the Strategy are highlighted below.

3.3 The Scottish sustainable development strategy 'Choosing our Future' (2005) sets out the challenges that require to be met if Scotland is to evolve in a sustainable way. That strategy is based on two founding principles, of 'living within environmental limits' and 'ensuring a strong, healthy and just society'. SNH's Corporate Strategy starts from these principles and aims to make a contribution to all four ambitions of that strategy – the well-being of Scotland's people, thriving communities, the protection of Scotland's natural heritage and resources, and the reduction of Scotland's global footprint.

3.4 In 2007, in its economic strategy, the Scottish Government established a new overarching purpose, to focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. Sustainable economic growth means building a dynamic and growing economy and at the same time ensuring that future generations can enjoy a better quality of life. This overall purpose will be delivered through five strategic objectives which together map out the direction of a successful, sustainable Scotland: Healthier; Wealthier and Fairer; Smarter; Safer and Stronger; and Greener. SNH's draft Strategy outlines how its proposed priorities will contribute to all five of these objectives.

3.5 The Scottish Budget: Spending Review 2007 sets out the Scottish Government's spending plans over the next 2008-09 to take forward its purpose and strategic objectives. It includes a National Performance Framework including 15 National Outcomes and a set of National Indicators and Targets. SNH's draft Corporate Strategy highlights those National Outcomes and National Indicators/Targets that are relevant to each of the five Priorities.

3.6 SNH has set out a vision for the natural heritage for the year 2025 within our Natural Heritage Futures prospectuses, which represents our view of how the natural heritage can contribute to sustainable development in practice<sup>1</sup>. To move towards that vision will require action by a wide range of organisations and individuals. This Corporate Strategy sets out what SNH intends to do towards meeting that vision.

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<sup>1</sup> There are six national prospectuses covering respectively forests and woodlands, hills and moors, coasts and seas, settlements, farmland and fresh waters, plus twenty-one local prospectuses each covering a distinctive region of Scotland.

## Environmental Baseline

- 3.7 In order to be able to understand the significant environmental effects of the Corporate Strategy, it is necessary to set out some basic information about the current environment in Scotland relative to issues covered in the Corporate Strategy. This is presented in Appendix B.
- 3.8 Given the very wide geographic and issue coverage of the Strategy it is not possible to go down to a very detailed level. The environmental baseline draws strongly from SNH's Natural Heritage Indicators series, which will be used to indicate progress towards the outcomes of the Corporate Strategy (see section 6). They highlight a number of existing environmental problems that the Strategy aims to address, as part of SNH's contribution to sustainable development. The draft set of indicators summarises the existing state of biodiversity, landscape, public access & recreation, and the impact of climate change on biodiversity.
- 3.9 In addition, for other environmental factors that are not the focus of SNH's Strategy, e.g. air and water quality, a summary is provided in Appendix B extracted from SEPA's State of the Environment Report for Scotland – *Change Tomorrow Today* (2006), together with links to the report itself which provides further detail about prevailing environmental conditions and trends.
- 3.10 The section on the historic environment refers to information on the main features of the historic environment which is available on the websites [www.historicscotland.gov.uk](http://www.historicscotland.gov.uk), [www.PASTMAP.org.uk](http://www.PASTMAP.org.uk), and [www.rcahms.gov.uk](http://www.rcahms.gov.uk).

## 4 Assessment

- 4.1 This section of the environmental report sets out in turn:
- a summary of the key issues that the SEA addresses (the “scope”);
  - a description of the level of detail of the assessment;
  - our approach to the assessment of reasonable alternatives;
  - a summary of the assessment findings (full assessment in Appendix C);
  - mitigation measures.

### Scope of the Assessment - SEA Environmental Receptors and SEA Objectives

- 4.2 An initial assessment of the potential environmental effects of the Corporate Strategy was undertaken in order to identify the scope of the SEA. The comments of the consultation authorities on the Screening and Scoping Reports (see Table 1) were also considered. In their response to the Screening Report as a consultation authority, Historic Scotland indicated that on the basis of the information provided the Strategy and Plan were unlikely to give rise to significant effects on the historic environment. In their view, the actions likely to give rise to significant effects on the historic environment include, for example, inappropriate tree-planting or grazing practices, and it is unlikely that the effects of these actions would be captured at this strategic level. We concur with this but have not scoped out cultural heritage issues as there are likely to be links to objectives in the Strategy that relate to landscape which it is helpful to recognise in the assessment.
- 4.3 We have considered possible effects on air quality, e.g. positive effects from habitat management leading to increases vegetation cover or negative effects from biomass plants to reduce greenhouse gas emissions, and have concluded that additional effects arising from the Strategy are likely to be minimal. We have therefore scoped air quality out of the assessment. SEPA were content with this.
- 4.4 All other SEA receptors were scoped into the assessment. Table 4 identifies key issues to be assessed. Table 5 lists the SEA Objectives that the Strategy will be assessed against.

**Table 4 – Scoping of potential environmental effects**

SEA Receptor	Scoped in / out	Significant environmental effects likely to be considered or justification for scoping out	
Biodiversity, Flora, Fauna	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action related to biodiversity outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Positive effects likely from action to address climate change</li> </ul>
Population and Human Health	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action related to improving access and encouraging outdoor recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Positive effects likely from improving local environments</li> </ul>
Soil	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action related to biodiversity outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Positive effects likely from action to address climate change</li> </ul>
Water	In	<ul style="list-style-type: none"> <li>• Some positive effects likely from action related to biodiversity outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Some positive and some negative effects likely from action to address climate change</li> </ul>
Air	Out	<ul style="list-style-type: none"> <li>• Minimal effects</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
Climatic Factors	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action to address climate</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

		change
Material Assets	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action to improve sustainable use of natural resources</li> </ul>
Cultural Heritage	In	<ul style="list-style-type: none"> <li>• Possible negative effects from action to enhance biodiversity and address climate change, e.g. from woodland expansion on archaeology or from coastal realignment on coastal heritage</li> </ul>
Landscape	In	<ul style="list-style-type: none"> <li>• Positive effects likely from action to improve landscape management</li> <li>• Negative effects from action to address climate change</li> </ul>

**Table 5 - SEA Objectives**

SEA Receptor	SEA Objective against which the Corporate Strategy will be assessed, i.e. to what extent does the Strategy...
Biodiversity	Protect and enhance biodiversity
Population and human health	Protect and enhance human health
Access	Promote enjoyment, understanding of and access to the natural heritage.
Soil	Protect soil quality and function
Water	Protect and enhance water bodies to Water Framework Directive 'good' status and maintain and restore key ecological processes
Climatic factors	Reduce greenhouse gas emissions and contribute to effective adaptation to climate change
Material assets	Promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling
Cultural Heritage	Protect and enhance the historic environment
Landscape	Protect and enhance the landscape, especially in designated areas. Value and protect diversity and local distinctiveness

## Level of Detail of the Assessment

4.5 The five Priorities in the draft Strategy are:

**Caring for Nature**, i.e. enhancing Scotland's biodiversity and re-kindling the relationship between people and the natural world.

**Responding to Climate Change**, i.e. understanding the effects of climate change and helping to deliver the contribution that the natural heritage can make in limiting it and adapting to it.

**Delivering Health and Well-being**, i.e. creating places where people want to live or visit, providing opportunities for healthier and greener lifestyles and enabling people to enjoy the natural heritage.

**Supporting the Scottish Economy**, i.e. identifying and helping to deliver the contribution that the natural heritage can make to sustainable economic growth.

**Delivering a high quality public service**, i.e. maintaining an efficient, responsive and environmentally responsible organisation which provides effective guidance on the natural heritage and value and satisfaction for customers, and working jointly with other agencies to ensure an integrated and streamlined approach.

Each of these Priorities is associated with a statement of the outcomes that we want to help to achieve, and a set of actions to indicate how we intend that the priority will be carried forward. (Delivery of these actions is however subject to available resources).

- 4.6 Assessment of potential environmental effects has been undertaken at the level of actions, which relate to what SNH expects to do over the period of the Strategy. The assessment does not assess the outcomes, which are aspirational in nature and depend on the actions of a range of organisations and individuals.

## Alternatives

- 4.7 It is difficult to consider Alternatives for assessment. In assessing actions under each Priority, it is difficult to identify meaningful reasonable alternatives to achieve each of the proposed outcomes, as the actions are quite general, and alternatives may not be realistic. The Scottish Executive's SEA Toolkit emphasises that options or alternatives should not be generated merely for the sake of assessment.
- 4.8 We have concluded that the most transparent way of setting out alternatives is to make clear what the effect will be if SNH adopts each action, and also what the effect would be if SNH did not, on the basis that it is relevant to consider what the impact on the environment would be if SNH did *not* take each action. While in some cases the effect may be neutral, in others there may be a damaging effect on the natural heritage, for example if SNH did not advise on land management or protection requirements. If SNH did not advise on the appropriate development of renewable energy then there would be likely to be a damaging effect on biodiversity and landscapes. If SNH does not help to establish habitat networks then biodiversity may be unable to adapt to climate change.
- 4.9 So in the assessment, for each action we assess the impact on the receptor not only as a consequence of adopting that action, but also, as an alternative, the likely impact on the receptor if we excluded that action.

## Assessment methodology and results

- 4.10 Schedule 3 of the Environmental Assessment (Scotland) Act requires that the likely significant environmental effects of implementing the plan are identified and assessed. This extends to include short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects.
- 4.11 To undertake this assessment, a simple checklist has been used that assesses each set of actions for the five Priorities of the Strategy against the SEA objectives set out in Table 5. This checklist is also used to assess the alternatives of SNH not doing the action. The full assessment is presented in Appendix C with one Table for each of the five Strategy Priorities.
- 4.12 Table 6 summarises the findings of the environmental assessment.

**Table 6 - Summary of environmental effects of SNH's draft Corporate Strategy and Plan**

Priority	Assessment of effects	Effects of alternative (i.e. SNH not doing the action)
Caring for Nature	<ul style="list-style-type: none"> <li>• significant positive effects on biodiversity objectives</li> <li>• additional benefits for soils, water quality, climate change adaptation, sustainable use of natural resources, and landscape from positive action for biodiversity</li> <li>• positive benefits for public access and public health</li> <li>• protection of cultural heritage can be integrated into management for biodiversity objectives</li> </ul>	<p>Because of the continuing trends in losses to biodiversity, and because of SNH's lead role in protecting biodiversity, a lack of action in this area would have significant negative effects on biodiversity objectives, and in some cases on other objectives.</p>
Responding to Climate Change	<ul style="list-style-type: none"> <li>• positive medium-long term, cumulative effects on climate change mitigation and adaptation, biodiversity, soil, and water</li> <li>• possible positive effects on access and landscape</li> <li>• positive effects on inter-relationships between these</li> <li>• possible local negative impacts on biodiversity, cultural heritage and landscape where there are overriding climate change benefits from particular renewable energy developments, but with mitigation these should not be significant</li> </ul>	<p>If the actions under this Priority were not included in SNH's strategy, there is a significant risk of failure to meet biodiversity, soil, and climate change objectives from an insufficient response to the changing climate.</p> <p>There is also a risk to biodiversity and landscape objectives from an inappropriate response to climate change such as insensitive renewable energy development or flood defences.</p>
Delivering Health & well-being	<ul style="list-style-type: none"> <li>• significant improvements in the provision for public access, and increasing enjoyment of the natural heritage</li> <li>• associated positive effects on public health, including physical and mental well-being</li> <li>• benefits to biodiversity associated with improved greenspace and access management</li> <li>• significant benefits to landscape objectives from promoting the value of landscapes and appropriate management of local landscapes and designated areas</li> <li>• potential benefits to cultural heritage from increasing awareness and integrating features of the historic environment into positive management, and from linking landscape management to cultural identity.</li> </ul>	<p>Given pressures on greenspace and on landscapes, and SNH's role in supporting the provision of advice and expertise, a lack of action would be likely to result in inadequate provision or inappropriate management of greenspace, and negative effects on local environments and wider landscapes including designated areas.</p> <p>Given the need to increase levels of physical activity to combat obesity, there could be negative effects on public health from a lack of SNH support for public access.</p>
Supporting the Scottish Economy	<ul style="list-style-type: none"> <li>• positive benefits for biodiversity, soils, water, climate change, natural resources and landscape, through promoting economic development that takes full account of these environmental objectives.</li> <li>• increased opportunities for public access and enjoyment through provision for tourists to enjoy the natural heritage</li> </ul>	<p>Without SNH action the contribution of the natural heritage to economic activities and the need to look after it would not be sufficiently recognised, and expertise would not be available to ensure that the natural heritage is used sustainably. This would have negative implications, especially for biodiversity, natural resource and landscape objectives.</p>
Delivering a high quality public service	<ul style="list-style-type: none"> <li>• positive benefits for biodiversity, soils, water, climate change, natural resources, access and landscape, through supporting delivery of the SRDP, action to address UK and international nature conservation issues, and local authority delivery of biodiversity, access and landscape objectives</li> <li>• positive benefits for biodiversity, climate change and sustainable use of resources through improving SNH's environmental management.</li> </ul>	<p>Without effective SNH input to the SRDP, the delivery of benefits could be substantially reduced. Lack of SNH support for JNCC could lead to failure to address issues that need action at national and international levels. Lack of SNH agreement with local authorities on outcome measures may reduce delivery by local authorities of biodiversity, landscape and access objectives. Limited delivery of SNH's environmental management may lead to reduced action</p>

		by other public bodies who see SNH as setting an example.
Combined priorities: Cumulative synergistic effects &	The SNH Corporate Strategy with its cross-cutting Priorities is aimed at promoting synergies between objectives. These are highlighted in the above text and in the wording of the Actions themselves.	Potential synergies through integrating natural heritage objectives into other activities might not be identified, and conflicts could arise between objectives.

**Mitigation measures to be included in the delivery of the Strategy and matters to be addressed within other plans, programmes or strategies**

4.13 Mitigation in relation to the few potential negative effects that were identified in the assessment are considered under the relevant Priority below. In many cases there is potential for indirect or associated positive environmental benefits. Opportunities for synergy are already recognised in the draft Corporate Strategy, e.g. through the links to public health and cultural identity under the Delivering health and well-being Priority. However these can be maximised through appropriate consideration by SNH lead officers in the preparation of plans, policies and strategies, and in SNH's advice to others' plans and strategies.

*Caring for Nature*

4.14 Possible negative effects on the cultural heritage from management for biodiversity can be avoided, and potential benefits enhanced, through following good practice, and working arrangements agreed between SNH and Historic Scotland, e.g. the concordat. Cultural heritage should always be considered in preparation of site management plans, and included in environmental assessments carried out as part of SEA of plans, programmes or strategies involving land management by SNH or SNH-supported land management activity. This is the responsibility of the SNH lead officer, taking account of advice from Historic Scotland. The consideration of cultural heritage in the activities, plans or programmes of other organisations is the responsibility of those organisations and Historic Scotland.

4.15 Similarly SNH should ensure that other objectives, e.g. soils, water, public health, climate change, landscape and access are as far as possible promoted through activities, plans or programmes aimed at taking forward biodiversity objectives. Potential benefits can be highlighted through SEA, EIA, site management planning or internal planning processes as appropriate.

*Responding to Climate Change*

4.16 Actions under this Priority, e.g. from renewable energy development, should take full account of indirect impacts, e.g. on biodiversity, landscape or cultural heritage. Potential negative impacts should be addressed through the planning process, including input by SNH and Historic Scotland to local authority planning policies for renewable development (and associated SEA), and advice on individual developments (and associated EIA). In relation to unavoidable impacts, mitigation actions for consideration at site or project level may include habitat management to compensate for lost habitat.

4.17 Adaptation measures, e.g. the development of habitat networks, should consider the potential benefits to other objectives including landscape and water quality. This should be led by appropriate SNH officers, working with Forestry Commission, Scottish Government agriculture staff, local authority and Scottish Government planning officers etc..

*Delivering Health and well-being*

4.18 No negative effects from proposed actions are identified therefore no mitigation is needed. However, the potential positive benefits for health, biodiversity and cultural heritage from

supporting public access and landscapes should be maximised through taking appropriate account of these in, e.g., grants assessment, or preparation of plans and policies, by SNH officers, and through promoting synergies in SNH's advice to others, e.g. on NSA management strategies, greenspace strategies, and associated environmental assessments (including SEA). Where these are led by SNH this will be the responsibility of the SNH lead officer.

#### *Supporting the Scottish Economy*

- 4.19 No adverse effects have been identified. The actions are already designed to maximise the environmental benefits from action to support other objectives, e.g. economic and social objectives. The action to support places for visitors to enjoy the natural heritage could also support awareness of cultural heritage if the historic environment is considered when implementing this action.

#### *Delivering a high quality public service*

- 4.20 No adverse effects identified therefore no mitigation measures needed.

## 5. Monitoring

### Monitoring and Indicators

- 5.1 A suite of Natural Heritage Indicators was developed by SNH as a means of monitoring trends in relation to the previous Corporate Strategy. Current trends in these are included in Appendix B, as part of the Environmental Baseline. These will continue to be monitored, and additional indicators are being developed to monitor outcomes of the new Strategy not already covered. The set of existing and some proposed indicators are shown in Table 7 below. This will be supported by more detailed monitoring in relation to specific aspects of the Strategy, working with others, e.g. the Scottish Biodiversity Indicators for the Scottish Biodiversity Strategy.

**Table 7 – Proposed SEA Indicators**

What is being monitored	Possible Indicators	Frequency of Measurements
<b>Caring for Nature outcomes</b>		
Overall trends in biodiversity conservation	Trends in priority habitats and species	Every 3 years. (through UK Biodiversity Action Plan reporting)
	Trends in bird populations	Annual
Protection and enhancement of habitats	Habitat condition: botanical indices for extensive broad habitats	Periodic: currently every 10 years (through Countryside Survey)
Condition of special conservation areas	Condition of features of interest of designated sites	Rolling programme every 6 years
Extent of management that incorporates biodiversity conservation objectives	Extent of positive management through protected areas, tenure, management agreements, and planning policies	Periodic (2006 provides baseline)
Access to information about nature	Natural heritage data held on the National Biodiversity Network	Annual
Understanding and appreciation of nature and involvement in managing it	Public surveys (e.g. repeat of 2006 survey of interest on the natural heritage amongst the public, whether they were interested, thought it relevant, were concerned and involved in a practical way.)	Periodic
<b>Responding to climate change outcomes</b>		
Ecosystems that help wildlife adapt to a changing climate	Habitat networks: habitat spatial patterns in relation to species requirements	Periodic: currently every 10 years (from Countryside Survey)
Changes to the natural environment from climate change	Phenological responses (seasonal timing) to warming temperatures: Green spruce aphid first capture, dipper egg-laying, and peak plankton abundance of <i>Ceratium fusus</i> .	Annual
Climate change mitigation	Greenhouse gas emissions (one of the Scottish	Annual

	Sustainable Development Indicators)	
<b>Delivering health and well-being outcomes</b>		
Participation in enjoying the outdoors	Participation in outdoor recreation (& other indicators from Scottish Recreation Survey)	Annual
Provision and quality of greenspace	Extent and composition of greenspace – mainly from local authority plans	Periodic (2006 provides initial baseline but comprehensive baseline expected by 2010)
Landscape change	The visual influence of land cover and development (indicator under development)	Periodic (data available so far for 2002 and 2005)
<b>Supporting the Scottish economy outcomes</b>		
Economic value of the natural heritage	Contribution of the natural heritage to the economy (research project underway)	
	Importance of the natural heritage to visitors (survey)	Periodic (2005 baseline available)
	Natural heritage jobs	Periodic
Extent to which spatial planning minimises impacts on the natural heritage from economic activity	Review of spatial planning policies	Periodic
Sustainable use of natural resources	Trends in commercial fish stocks	Annual
Provision of places and information for visitors to enjoy the natural heritage	To be developed.	
<b>Delivering a high quality public service outcomes</b>		
SNH's Environmental Management	Carbon dioxide emissions from SNH operations	Annual
	Waste produced from SNH operations	Annual

- 5.2 SEA objectives that are potentially affected by the Strategy but are not covered by SNH's Natural Heritage Indicators series include historic environment, public health, and sustainable travel patterns. SNH will take note of trends in these indicators as part of the wider context for the Strategy, but it is for others to monitor national trends.

## 6. Next steps

- 6.1 The timescale for preparation of this SEA is described below. Views on the draft Strategy and Environmental Report are requested by ? March 2008.

**Table 8 – Timetable**

Stage	Proposed Time
SNH publishes Scoping Report	End August 2007
Consultation on Scoping Report	September 2007
SNH considers Scoping Responses	Early October 2007
SNH prepares Environmental Report alongside completion of draft Corporate Strategy	September 2007 to mid-January 2008
Environmental Report out for consultation (8 weeks) alongside draft Corporate Strategy	Late January – mid March
SNH takes account of Environmental Report and views expressed to finalise Corporate Strategy	March 2008
SNH prepares SEA Statement and formally adopts the Corporate Strategy	April 2008

**Appendix A - Other Relevant Plans and Programmes with environmental objectives relevant to the environmental assessment of SNH's Corporate Strategy**

Name and details of strategy/plan/programme	Main requirements
<b>General &amp; inter-relationships</b>	
Scottish Government Economic Strategy (October 2007)	To focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. Delivered through Strategy Objectives.
<p>Scottish Government Strategic Objectives (June 2007):</p> <p><b>1 Wealthier and Fairer:</b></p> <p><b>2 Healthier:</b></p> <p><b>3 Safer and Stronger:</b></p> <p><b>4 Smarter:</b></p> <p><b>5 Greener:</b> Five key themes:</p> <ul style="list-style-type: none"> <li>• <i>climate change</i> – a bill to reduce carbon emissions by 80% by 2050.</li> <li>• <i>sustainable places</i> – healthy communities need healthy places; people need clean air, green spaces, places where they want to live and work.</li> <li>• <i>people and nature</i> – peoples' relationship with the natural world is at the heart of this theme; plan for the next phase of the Scottish Biodiversity Strategy; promote environmental volunteering.</li> <li>• <i>consumption and production</i> – tackle over-consumption and the throwaway society; our challenge is to move towards one planet living and a one-planet economy.</li> <li>• <i>countryside culture</i> – the concept of landscape and people will be central; our landscape and our environment have made us what we are as a nation and a people; everything we do must focus on sustaining living and vibrant communities.</li> </ul>	<p>Enable businesses and people to increase their wealth and more people to share fairly in that wealth.</p> <p>Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.</p> <p>Help local communities to flourish, becoming stronger, safer place to live, offering improved opportunities and a better quality of life.</p> <p>Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements.</p> <p>Improve Scotland's natural and built environment and the sustainable use and enjoyment of it.</p>
Scottish Budget: Spending Review 2007 (November 2007)	Scottish Government Spending Plans 2008/09-2011/12. Set of 15 national outcomes, plus national indicators and targets.

Name and details of strategy/plan/programme	Main requirements
UK Shared Framework for Sustainable Development: <i>One future – different paths</i> 2005	Sets out a common goal for sustainable development across the UK: “to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations”. Plus set of 5 principles
Scottish Sustainable Development Strategy: <i>Choosing our Future</i> 2005	Based on UK Shared Framework. Includes 3 priorities: <ul style="list-style-type: none"> <li>○ Reduce the size of our global footprint;</li> <li>○ Improve the quality of life of individuals and communities in Scotland, securing environmental justice for those who suffer the worst local environments;</li> <li>○ Protect our natural heritage and resources for the long term</li> </ul>
Natural Heritage Futures programme – National and local prospectuses 2002	Sets out a 25-year vision, objectives and actions for the natural heritage and its sustainable use.
Environmental Liability Directive 2004	Implements the ‘polluter pays’ principle, giving responsibility for remediation of environmental damage to those who undertake potentially damaging activities.
National Parks (Scotland) Act 2004	Framework for identification and management of National Parks: to conserve and enhance the natural and cultural heritage; to promote sustainable use of natural resources; to promote understanding and enjoyment; to promote sustainable economic and social development
National Planning Framework for Scotland 2004	Non-statutory framework to guide the spatial development of Scotland to 2025.
Planning etc (Scotland) Act 2006	Sets the framework for development planning in Scotland.
Draft second National Planning Framework 2008 - to guide Scotland’s spatial development to 2030	Key aims: <ul style="list-style-type: none"> <li>• to contribute to a wealthier and fairer Scotland by supporting sustainable economic growth and improved competitiveness and connectivity;</li> <li>• to promote a greener Scotland by contributing to the achievement of climate change targets and protecting and enhancing the quality of the natural and built environments;</li> <li>• to help build safer, stronger and healthier communities, by promoting improved opportunities and a better quality of life; and</li> <li>• to contribute to a smarter Scotland by supporting the development of the knowledge economy.</li> </ul>
NPPG 14: Natural Heritage 1999 (under review)	Gives guidance on how the Government’s policies for the conservation and enhancement of Scotland’s natural heritage should be reflected in land use planning.
<b>Biodiversity, flora, fauna</b>	
EU Birds Directive 1979	Protection of wild birds and their habitats, including through designation of Special Protection Areas (SPAs)
EU Habitats and Species Directive 1992	Protection of habitats and species other than birds including through designation of Special Areas of Conservation as part of the Natura 2000 network (with SPAs)
Conservation (Natural Habitats etc) Regulations (as amended) 1994	Implements Birds and Habitats Directives in the UK
Nature Conservation (Scotland) Act 2004	Duty on public bodies to further the conservation of biodiversity; also protection for Sites of Special Scientific Interest and threatened species

Name and details of strategy/plan/programme	Main requirements
Scottish Biodiversity Strategy 2004	Statutory role relating to the biodiversity duty in the Nature Conservation (Scotland) Act. Scotland's contribution to meeting the Convention on Biological Diversity
Making a difference for Scotland's Species: A Framework for Action 2007	Sets out principles for deciding when and how to manage species, and identifies priorities for action
Strategy for Wild Deer in Scotland (consultation draft November 2007)	Sets out a vision in which management of the wild deer resource will contribute to a high quality environment, sustainable economic development, and social well-being.
<b>Population and human health</b>	
Closing the Opportunity Gap (2004) Scottish Executive	Scottish Executive's approach to reducing social disadvantage in Scotland. Aims to prevent people from falling into poverty, to provide routes out of poverty and to sustain people in lifestyles that are free from poverty. The six objectives include increasing employment opportunities for disadvantaged groups, building confidence and skills of young people, reducing financial exclusion, neighbourhood regeneration, health improvement and provision of improved access to services.
Homes for Scotland's People: A Scottish Housing Policy Statement, 2005.	Sets out the Scottish Executive's commitments to housing. Particularly aims to provide more affordable housing, through diversification of ownership structures and ensuring planning plays a role in releasing land for housing in development plans.
People and Place: Regeneration Policy Statement (2006)	Outline the Scottish Executive approach to regeneration including a new approach of: aligning key players, maximising public and private investment in specific places, focussing effort on geographic priorities, targeting action for most deprived neighbourhoods, creating vibrant communities.
<i>Learning for our Future: Action Plan for the UN Decade of Education for Sustainable Development 2006</i>	Actions to be taken by the Scottish Executive in support of the global programme to integrate the principles, values and practices of sustainable development into all aspects of education
Improving Health in Scotland – The Challenge. (2003)	Overarching strategy for health that covers physical, social and mental health.
Scottish Environment and Health Strategic Framework	Recognition of role of natural environment in enhancing health and well-being
Let's Make Scotland More Active: a strategy for physical activity. 2003	Aims to ensure that the Scottish population becomes more active, and so improve public health.
Volunteering Strategy for Scotland 2004-2009	Sets out how action to support volunteering will be taken forward over the next five years. Aims to embed a robust culture of volunteering in Scotland.
<b>Soil (and Land use)</b>	
EU Thematic Strategy for Soil Protection 2005	Notes that soil has important functions but that degradation of its quality is accelerating, partly due to wind and water erosion and also as a result of depletion of organic matter content. It sets out commitments to improving quality as a result, including development of a new Directive

Name and details of strategy/plan/programme	Main requirements
Scottish Soil Strategy (in draft)	Provides a framework for soil protection. A key aspect is the protection of soil as an asset - for the future of the Scottish economy, as well as a contribution to the challenges set by climate change.
A Forward Strategy for Scottish Agriculture: Next Steps 2006	A strategy for the future direction of agriculture in Scotland
Rural Development Programme for Scotland 2007-2013. The Strategic Plan.	Sets out priorities for allocating EU funding rural development over the coming years. Has three key themes of underpinning performance and quality in the primary sectors, enhancing rural landscapes and natural heritage and promoting a more diverse rural economy and thriving rural economies.
Scottish Forestry Strategy (revised 2006)	A strategy for the future direction of Scottish forestry
Choosing the Right Ingredients: The Future for Food in Scotland: Discussion Paper (January 2008)	a vision for food in Scotland – to see everyone healthier, wealthier and smarter with production making communities stronger and consumption respecting the local and global environment.
<b>Water (and Water use)</b>	
EU Water Framework Directive implemented through the Water Environment and Water Services (Scotland) Act 2003	Requires all inland and coastal waters to reach “good ecological status” by 2015.
River Basin Management Plans for Scotland, and Solway -Tweed river basin districts (in prep)	To implement the Water Framework Directive. Preparatory documents include: characterisation reports, strategies, plans of action, and significant water management issues reports
EU Floods Directive 2007	To prevent and limit floods and their damaging effects on human health, the environment, infrastructure and property. Requires Member States to take a long-term planning approach to reducing flood risks.
<i>A Strategic Framework for Scottish Freshwater Fisheries: A Consultation Document</i> September 2007	Sets out a shared vision for freshwater fisheries in Scotland: “Scotland will have sustainably managed freshwater fish and fisheries resources that provide significant economic and social benefits for its people.” Identifies priorities for action.
EU Common Fisheries Policy – 2002 Regulation	Includes objectives relating to the protection and sustainable use of living aquatic resources and minimising impacts on marine ecosystems. Provides for Regional Advisory Councils
Sustainable Framework for Scotland’s Sea Fisheries 2005 Strategic Framework for Inshore Fisheries in Scotland 2005	Sustainable management of changing fish stocks
Seas the Opportunity – Sustainable Development of Scotland’s Coasts and Seas 2005	Sustainable development of coasts and seas including coastal defences, marine renewable energy
Strategic Framework for Scottish Aquaculture 2003	To guide future development of aquaculture industry. Supports development of codes of practice.
Aquaculture and Fisheries (Scotland) Act 2007	to provide a statutory basis for regulating previously unregulated practices in aquaculture; to enhance emergency powers for controlling <i>Gyrodactylus salaris</i> , a parasite of salmon; and to make a number of miscellaneous amendments to salmon, freshwater and sea fisheries legislation
<b>Air quality – Scoped out of the assessment</b>	
<b>Climate</b>	

Name and details of strategy/plan/programme	Main requirements
UK Climate Change Programme 2006	Implementation of international commitments and UK targets for CO <sub>2</sub> emission reductions
Draft UK Climate Change Bill 2007	The draft Climate Change Bill, and accompanying strategy, set out a framework for moving the UK to a low-carbon economy. It demonstrates the UK's leadership as progress continues towards establishing a post-Kyoto global emissions agreement.
Scottish Climate Change Programme 2006	Scotland's commitment to addressing climate change including "Scottish share" of CO <sub>2</sub> emission reductions; and need for adaptation measures
Securing a Renewable Future: Scotland's Renewable Energy 2003	Outlines commitments to promote a wide range of renewable energy technologies
EU Biofuels Directive 2003	Promotes the use of biofuels or other renewable fuels for transport as one of the tools by which the European Community can reduce its dependence on imported energy and influence the fuel market for transport, and hence the security of energy supply in the medium and long term.
<b>Material assets</b>	
Framework for Economic Development in Scotland 2004 (FEDS)	Sets out a vision where "the quality of life of all our people is raised through increasing the economic opportunities for all on a socially and environmentally sustainable basis"
A Smart Successful Scotland 2004	Aims to contribute to growth and productivity but focusing on aspects of FEDS which are key to enterprise, under three broad themes: Growing Business, Skills & Learning, Global Connections
A Smart, Successful Highlands and Islands: An Enterprise Strategy for the Highlands and Islands of Scotland (2005)	Focuses on the economic development needs of the Highlands and Islands, including increasing economic capacity (as opposed to employment creation). States that this should be achieved by strengthening communities, developing skills, growing businesses and establishing global connections. Notes that the area's natural and cultural heritage are unique assets to be harnessed and emphasises importance of sustainable economic development. Outlines the needs of different parts of the area, prioritising action in fragile and regeneration areas.
<i>Scottish Tourism: The Next Decade – A Tourism Framework for Change</i> 2006	Scottish tourism industry led framework mapping the direction of Scottish tourism for the next decade to achieve the ambition of growing tourism by 50% by 2015
<i>Going for green growth: a green jobs strategy for Scotland</i> 2005	Aims to seize the business opportunities and advantages arising from a belief in, and commitment to, sustainable development. Vision for a vibrant, low-carbon economy with Scotland a centre for green enterprise

Name and details of strategy/plan/programme	Main requirements
<i>Scotland's National Transport Strategy 2006</i>	Sets out a long term vision for transport, together with objectives, priorities and plans. It focuses on three strategic outcomes which will set the context for transport policy making for the next twenty years: <ul style="list-style-type: none"> <li>• Improve journey times and connections between cities and towns and global markets to tackle congestion and provide access to key markets</li> <li>• Reduce emissions to tackle climate change</li> <li>• Improve quality, accessibility and affordability of transport, to give people the choice of public transport and real alternatives to the car.</li> </ul>
<b>Cultural Heritage</b>	
<i>Passed to the Future</i> (Sustainable Management of the Historic Environment) 2002	Scottish Executive policy on the historic environment
Scottish Historic Environment Policy 1: The Historic Environment 2006	Sets out Scottish Executive strategic policy for the historic environment. Provides a framework for more detailed strategic policies on the management of the historic environment
Scottish Historic Environment Policy 2. Scheduling: protecting Scotland's nationally important monuments ( <a href="http://www.historic-scotland.gov.uk/shep2.pdf">http://www.historic-scotland.gov.uk/shep2.pdf</a> )	Scottish Executive policy on nationally important monuments.
NPPG 5 Archaeology and planning	Planning guidance on archaeology
NPPG 18 Planning and the Historic Environment	Planning guidance on the historic environment
<b>Access</b>	
Land Reform (Scotland) Act 2003	Establishes rights of responsible access to most land and inland water for informal recreation. Also provision for community right to buy.
<i>Enjoying the Outdoors – supporting participation and sharing the benefits: Policy Statement 2007</i>	An overall policy framework within which SNH & others can take forward goals for promoting the enjoyment of the natural heritage.
<b>Landscape</b>	
European Landscape Convention (signed by the UK Government and ratified by the Council of Europe in 2006)	Promotes the protection, management and planning of all landscapes in Europe. Highlights the importance and need for public involvement in the development of landscapes. Encourages a joined-up approach through policy and planning in all areas of land-use, development and management, including the recognition of landscape in law.

## Appendix B – Environmental Baseline

Information presented here is taken from two main sources:

- SNH's Natural Heritage Trends series [http://www.snh.org.uk/trends/trends\\_notes/](http://www.snh.org.uk/trends/trends_notes/) (including links to Scotland's Biodiversity Indicators recently published by the Scottish Government <http://www.scotland.gov.uk/Publications/2007/10/08091435/> )
- SEPA's State of the Environment Report (*Change tomorrow today*) [www.sepa.org.uk/publications/state\\_of/2006/main/](http://www.sepa.org.uk/publications/state_of/2006/main/) )

Links are also included to Historic Environment information available at <http://www.historic-scotland.gov.uk> and <http://www.PASTMAP.org.uk>

### 1. Biodiversity

#### ***Priority Habitats and species***

Habitats and species that are most at risk – due to their scarcity, international importance, and/or rate of decline – are the focus for targeted action. Biodiversity Action Plans (BAP) include 153 'priority' species and 41 'priority' habitats in Scotland. Taxonomically and ecologically diverse, they are likely to be sensitive to change in the ecosystems and natural processes on which they depend. They therefore indicate change among the most vulnerable parts of terrestrial, freshwater and marine environments. Arresting past declines is not easy or quick, but when assessed in 2005, 11 species (7%) and six habitats (15%) were increasing.

See:

<http://www.scotland.gov.uk/Publications/2007/10/08091435/3>

<http://www.scotland.gov.uk/Publications/2007/10/08091435/4>

#### ***Non-native species***

Scotland's distinctive biodiversity has evolved through species adaptations to local conditions. Native species become mutually interdependent in ways that optimise diversity within ecosystems. New species may arrive and establish naturally but, for the most part, distance is a barrier to global dispersal. However, when the distance barrier is bridged, such as through trade, species from other continents can turn up unexpectedly. If conditions prove suitable they may establish, and spread where resistant to the ecological checks and balances that govern native species. Around 1000 non-native species have become established in the wild in Scotland, mostly doing little or no known harm. The majority have shown no change and some have declined since the 1950s. However, among the 14% that increased (67% of birds, 46% of mammals, 23% of fish, 57% of invertebrates, 13% of higher plants, 33% of lower plants), some can become so invasive that they pose a threat to native biodiversity. The Species Action Framework prepared by Scottish Natural Heritage in 2007 lists five such species: American mink (a semi-aquatic mammal), North American signal crayfish (a lobster-like freshwater invertebrate), New Zealand pygmyweed (an aquatic plant), rhododendron (a shrub) and wireweed (a seaweed).

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/19>

#### ***Birds***

Terrestrial breeding birds in Scotland, resident and migratory, include familiar species of the garden such as blackbird; of woodland such as willow warbler; of farmland such as linnet; and of upland such as black grouse. Scotland holds the entire British population of Golden Eagle – 400 pairs out of a world population of approximately 120,000. The red kite in Scotland became extinct in the 19<sup>th</sup> Century but, since being re-introduced in 1989 numbers have increased to 76 breeding pairs. The last breeding pair white-tailed eagles in Scotland was shot in Skye in 1916; a reintroduction programme which has run for 35 years has restored their numbers to around 150 birds. The last breeding osprey was shot in 1916, on Loch Loyne. Since their return to Scotland, numbers have expanded to 160 breeding pairs.

Birds respond quickly to variation in habitat quality, through changes in breeding output, survival or dispersal and so are often used as indicators of environmental change. Declines in bird populations had been reported throughout Scotland and the UK since the 1970s, and more widely across Europe since 1980. More recently, however, the 68 bird species assessed in Scotland increased in overall abundance by 17% between 1994 and 2004. Farmland birds increased by 10%; woodland birds by 30%; upland birds remained unchanged.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/5>

Scotland is important as a mild wintering ground for substantial populations of wildfowl. The world population of Svalbard barnacle geese (23,000) winter in the Solway. Half of the world's Greenland white-fronted geese winter in Scotland; 76% of the Iceland and Greenland populations of pink footed geese; and 100% of the Iceland population of greylag geese. Waders, such as lapwing, are commonly associated with wetland or coastal environments. Many, such as bar-tailed godwit, are long-distance migrants, breeding in the high Arctic and wintering on Scottish coasts. Wildfowl (geese, ducks and grebes) can occur on inland waters and estuaries in large numbers. Several large concentrations of wintering waterbirds around the coast of Scotland are of international importance. Waterbird numbers in Scotland increased by 27% since 1975. This seems in part to be associated with a northerly shift in their UK distribution in response to milder winters.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/6>

Scotland's breeding seabird populations are internationally important and include more than half of the world's great skuas and northern gannets, over one third of Europe's Manx shearwaters and at least 10% of the European breeding populations of ten other species. The outlook for seabirds is not so good. When assessed in 2000, 2.8 million pairs of 24 species of seabird were breeding in Scotland, some 75% of the seabird population of the UK. Their overall abundance declined by 30% between 1986 and 2004. This was accounted for largely by declines among (relatively abundant) Arctic tern, Arctic skua and black-legged kittiwake.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/7>

## **Plants**

Vascular plants include most large terrestrial plants, such as trees, shrubs, flowering plants, grasses and ferns. Vascular plant diversity is indicative of habitat condition, given the dependency of many other species on plants and their ecological associations. The botanical condition of semi-natural habitats is influenced by natural processes, land management and environmental conditions such as pollution and climate change. Between 1990 and 1998, plants associated with nutrient enrichment in acid grassland increased and stress-tolerant plants declined in dwarf shrub heath (heather moorland). Possible declines were also evident among already low numbers of arable wild plants.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/8>

Ecosystem health is damaged by NO<sub>2</sub> by contributing to acid deposition, eutrophication and promoting the formation of ground level ozone. Between 1990 and 2005, UK emissions of NO<sub>x</sub> decreased by 45% due to the installation of catalytic converters in vehicles. Air quality targets have not yet been fully met. The area exceeded for critical loads of nutrient nitrogen, the area exceeded declined from 45% in 1995-97 to 38% in 2003-05, a drop of 15%.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/14>

(Work in progress (Defra / Scottish Government))

The acidifying effects of excessive SO<sub>2</sub> in the atmosphere can damage soil, the ecology of fresh waters and vegetation. Annual urban SO<sub>2</sub> levels have fallen by around 75% since the 1956 Clean Air Act was introduced to combat smog. The area exceeded for critical loads of acidity declined from 68% of Scotland in 1995-97 to 44% in 2003-05, a drop of 30%.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/17>

Work in progress (Defra / Scottish Government)

## **Butterflies and moths**

The 34 species of butterfly regularly recorded in Scotland can be divided into 'specialists', that are largely restricted to blocks of semi-natural habitat, and 'generalists', that can utilise a broader range of habitats and linear features across the countryside. Butterfly indicators can play a role in assessing habitat diversity, habitat fragmentation and impacts of climate change. Butterflies increased in abundance by 35% between 1979 and 2005, due to a 51% increase in the abundance of 'generalist' species, such as red admiral. Specialist species, such as grayling, fared worse although an apparent 27% decrease in their abundance was not statistically significant.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/10>

Some 1300 species of moth have been recorded in Scotland (half the total for the British Isles). They occur from seashore to mountain-top, can be found in large numbers, have rapid lifecycles, and in many cases are highly sensitive to habitat and climatic conditions. A wide range of organisms depend upon moths for food. The abundance of 185 species that could be assessed in Scotland fluctuated markedly. An overall increase of nearly 3% between 1975 and 2004 included 45% that increased and 22% that declined.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/11>

### ***Marine species and habitats***

The basking shark, which is globally vulnerable and regarded as commercially extinct in British territorial waters, has been protected by law under the Wildlife and Countryside Act since 1998. Also vulnerable to commercial exploitation, the angel shark, common skate and long-nosed skate were recommended for similar protection in 2002.

Twenty-two species of cetacean (dolphins, porpoises and whales) are known to occur in Scottish waters. The Moray Firth is host to the world's most northerly population of bottlenose dolphin.

Following a global moratorium on commercial whaling imposed by the International Whaling Commission in 1986, most species of large whale are showing signs of recovery in European waters (Norway continues to exploit minke whale in European waters).

Two seal species, the grey seal and harbour or common seal, are present around the coast of Scotland in internationally important numbers. Seals have declined in recent years according to the latest survey (results will become available later in 2007). Harbour seal numbers in Scottish coastal waters approached 30,000 in 2002, representing around 90% of the UK, 40% of the European and 5% of the world population. Around 122,000 grey seals associated with Scottish coastal sites represent over 90% of the British and 40% of the world population. British grey seal numbers increased by 6% per year between 1984 and 1997, and by 2.8% on the main breeding sites between 1997 and 2002.

See: <http://www.snh.org.uk/trends/seas/default.asp>

### ***Site protection and positive management***

Some 1,451 designated sites (Sites of Special Scientific Interest, Ramsar, Special Protection Areas and Special Areas of Conservation) extend across over one million hectares of Scotland. They have been designated for their national or international importance, according to their special biological or geological interests. The sites extend the length and breadth of Scotland, from the moss heaths on the highest summit, Ben Nevis, through lowland species-rich grasslands and raised bogs, to the seas around Scotland, such as the marine reefs of Loch Maddy in the Western Isles. They contain species that may be notable for their exceptional rarity (e.g. golden eagle) or exceptional abundance (e.g. seabird colonies of St Kilda). Between 1999 and 2005, the condition of 2,282 habitat, 593 geological and 2,128 species features for which the sites had been notified were assessed. Some 50% of habitat, 89% of geological and 70% of species features were favourable. While encouraging, more needs to be done, particularly on habitats such as lowland heath and wetland sites, and to conserve rare plants.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/12>

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/13>

The natural heritage exists within a working environment. Positive management, through protected areas, tenure, management agreements and planning policies, provides a basis for conservation and sustainable use. The need for positive management is explicitly recognised across 56% of Scotland's land area, for example through designation / tenure / management agreement, or through Local Plan policy. National Scenic Areas, National Parks, local designations and greenbelt account for half of this. (Work in progress (SNH))

### ***Public awareness & involvement***

Three quarters of adults recognise the relevance of biodiversity to them; 83% of adults are interested or concerned. Some 38% of adults had done some form of volunteering in 2004, among whom some 23,740 were involved with the natural heritage.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/20>

<http://www.scotland.gov.uk/Publications/2007/10/08091435/23>

<http://www.scotland.gov.uk/Publications/2007/10/08091435/24>

## **Access to Information**

Access to natural heritage data, held by SNH and others such as the National Biodiversity Network is a statutory duty and indicator of engagement with the wider public. Scottish records on the Gateway. Between 2006 and 2007, the number of Scottish records increased from half a million to 4.6 million.

See: <http://www.searchnbn.net/>

## **2. Land Use**

Between 1947 and 1988, the extent of semi-natural habitats declined by 17%, and hedges by 54%. Results from 1990 to 1998 suggest a continuation of that trend for open habitats (such as heather moorland), but woodland expansion was more natural in character, in contrast to the previous decades of exotic plantation.

See: [http://www.snh.org.uk/trends/trends\\_notes/show\\_topic.asp?topic\\_id=2](http://www.snh.org.uk/trends/trends_notes/show_topic.asp?topic_id=2)

### **a) Agriculture**

Agricultural land use has a strong influence on the landscape and environment of Scotland. In particular, changes in agricultural land use have an impact on wildlife habitats, water pollution, and emissions of the greenhouse gas carbon dioxide. Between 1982 and 2000, the total land used for agriculture in Scotland decreased by 5% to 6.08m ha followed by a rise to 6.21m ha in 2006. The area of rough grazing decreased by 0.63m ha (14%) between 1982 and 2003, rising slightly in 2005 and 2006. In 2006 the area of woodland and other land was more than two and a half times the 1982 figure. The amount of land set-aside fell to 76,000 ha in 2004, due to the reduction in the Arable Area Payment Scheme set-aside rate that followed the poor EU harvest of 2003. Following changes to the EU Common Agricultural Policy, revised funding arrangements were introduced in 2005, and under the Single Farm Payment Scheme the area of set-aside land was 69,000 ha. This has decreased further in 2006 to 67,500 ha.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/36>

### **b) Woodland**

Woodland provides wildlife habitats, affects the physical environment and is valued as a location for recreation and for its contribution to the landscape. It can also contribute to the sustainable production of wood products and paper, and provide a source of renewable energy. Woodland is managed by the Forestry Commission, other public bodies (including other government departments and local authorities), and private owners. The Forestry Commission manages just over a third of woodland in Scotland. Planting and management of non-Forestry Commission woodland is normally carried out with the assistance of government grants. 52% of Scotland's woodland area is certified as sustainably managed. New planting of woodland peaked in 1988 and 1989 when over 25,000 hectares of new woodland a year were created. Since then new planting has declined to around 4,000 hectares in 2005-06.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/38>

### **c) Moorland**

Moorland, and perhaps especially heather moorland, is an iconic cultural landscape of Scotland. It occurs predominantly in the sub-montane zone between the former natural tree-line and enclosed farmland, supporting rich assemblages of invertebrates, birds and mammals. Some 39,210 km<sup>2</sup> of moorland covers half of Scotland (three quarters of Scotland when secondary cover within habitat mosaics is included). The three characteristic vegetation types, of heath (52%), bog (27%) and grass (21%) have distinctive biogeographical characteristics. Common to them is the expansive, open, largely-treeless landscape that evokes a sense of wildness in the Scottish uplands and which is so striking when encountered in lowland and coastal settings.

It has not always been so. Heather moorland in the uplands could be reduced by 88%, and grass-vegetated moorland by 93%, were trees allowed to re-colonise. Clearance of the post-glacial ecological climax woodland dates back to the Neolithic, some 5,000 years ago. By medieval times, 1,000 years ago, much of the country was denuded of trees.

Moorland covered 64% of Scotland in the late-1940s. It declined by a fifth (49,670 km<sup>2</sup> – 40,350 km<sup>2</sup>) over 41 years: blanket mire by 21% (22,720 km<sup>2</sup> – 17,930 km<sup>2</sup>); heather moorland by 23% (14,615 km<sup>2</sup> – 11,295 km<sup>2</sup>); and rough grassland by 10% (12,330 km<sup>2</sup> – 11,130 km<sup>2</sup>). The loss of blanket mire (4,790 km<sup>2</sup>) was due mainly to afforestation (2,430 km<sup>2</sup>) and land drainage for tree planting (2,090 km<sup>2</sup>). Half of the reduction in

heather moorland arose from afforestation (2,224 km<sup>2</sup>) and a third from grassland expansion (1,530 km<sup>2</sup>). Bracken accounted for most of the remainder (230 km<sup>2</sup>). Rough grassland was reduced by 1,200 km<sup>2</sup> overall.

Scotland had changed economically and politically by the late-1980s. Intensification and specialisation in farming had driven-up production, with the amalgamation of farms and the shedding of labour. Forest increased seven-fold between 1947 and 1988, to cover 9,240 km<sup>2</sup> or 12% of Scotland. Semi-natural habitats declined accordingly, by 17% overall. An amendment of the Wildlife and Countryside Act in 1985 required a more balanced view to be taken of timber production on the one hand and broader environmental considerations on the other. This fundamental change of outlook has rippled throughout rural policy since.

The 1990 estimate of moorland extent was 41,370 km<sup>2</sup>, being 49% bog, 26% dwarf shrub heath, 19% acid grassland, 5% neutral grassland and 1% calcareous grassland. Although small declines were recorded between 1990 and 1998, only those for dwarf shrub heath and neutral grassland in the marginal uplands and islands were statistically significant. Nevertheless, the body of evidence pointed to a continued reduction of semi-natural habitats. Moorland declined by 4% overall, from 41,370 km<sup>2</sup> in 1990 to 39,720 km<sup>2</sup> in 1998, a rate comparable to previous decades.

See: <http://www.heathertrust.co.uk/members/>

### **3. Landscape**

The visual influence of land cover and development is an indicator of changing landscape character. A first approximation, prior to refinement with a viewshed analysis taking account of topography, compared the base year 2002 with 2005. During that period, the area unaffected by visual influence declined from 42% of Scotland to 32% - accounted for mainly by tall structures such as wind turbines. (Work in progress (SNH))

Around two-fifths of Scotland contains development at the 1km<sup>2</sup> scale. The physical footprint is less, by an order of magnitude. The unbuilt area declined by 0.134%, from 57% of Scotland in 2002 to 56.87% in 2005. The built extent increased accordingly, and notably due to windfarms in the uplands. (Work in progress (SNH))

### **4. Air**

Overall air quality in Scotland is improving with statistics showing it is generally good. However, further improvements are needed to reduce the adverse health effects and the number of deaths brought forward by air pollution in urban areas. In rural areas, poor air quality still has the potential to damage ecosystems and to contribute to acidification and nutrient enrichment.

The main sources of air pollution include transport, energy generation, industry, waste and agriculture. With reductions in large-scale industrial emissions, transport is rapidly becoming an increasingly significant source. The continual increase in demand for energy may also give rise to increased emissions.

In relation to specific pollutants, emissions of nitrogen oxides and sulphur dioxide from large industrial sources have fallen. The decrease in domestic coal use has also led to significant reductions in emissions of sulphur dioxide. Emissions of particulates and volatile organic compounds are showing a general downward trend. These improvements contrast with a general increase in ground-level ozone concentrations, with potential to harm humans, crops and ecosystems. In addition, a decline in stratospheric ozone levels over Scotland has the potential to increase levels of exposure to harmful ultraviolet radiation.

The Chapter on air quality in *Change Tomorrow Today* is available at: [www.sepa.org.uk/publications/state\\_of/2006/main/b\\_air.html](http://www.sepa.org.uk/publications/state_of/2006/main/b_air.html)

#### ***Nutrient Enrichment***

The downward trend in emissions of nitrogen oxides to air is linked to reductions in the amounts of nitrogen deposited on nutrient-sensitive plant communities. Ammonia emissions are the dominant source of nitrogen deposition and remain a major problem, particularly for nutrient-sensitive vegetation. Further information about nutrient enrichment is available at: [www.sepa.org.uk/publications/state\\_of/2006/main/c\\_nutrient.html](http://www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html)

#### ***Acidification***

Reductions in emissions of acidifying gases, means there have been significant reductions in acid deposition across the UK. Sulphur dioxide deposition declined by 52% between 1986 and 1997, while deposition of nitrogen oxides declined by 16% over the same period. The relative importance of nitrogen as a contributor to acidification has increased.

Acidification is a potential problem across large areas of upland Scotland due to its ability to damage ecosystems, but evidence of ecological damage is mainly confined to fresh waters in Galloway, smaller areas of the Cairngorms and the western and central Highlands.

As a result of reduced acid deposition in Scotland, impacts on vegetation, soil and freshwater habitats have shown a slight decrease in some areas. There is some evidence to suggest that soils are becoming slightly less acidic. The extent of acid-sensitive vegetation affected by acidification has declined, with some areas showing signs of recovery. Some recovery is also evident in certain rivers and lochs. However, acidification is still causing other watercourses to be devoid of acid-sensitive plants, invertebrates and fish.

The recovery of soil, vegetation and water from acidification does not match the reduction in acid deposition. Recovery is predicted to take decades and some habitats may never return to their original state. Over such long timescales, recovery may be slowed or even reversed by climate change.

Further information about acidification can be found at:  
[www.sepa.org.uk/publications/state\\_of/2006/main/c\\_acidification.html](http://www.sepa.org.uk/publications/state_of/2006/main/c_acidification.html)

## 5. Water

### ***Water quality - general***

Water quality in Scotland is generally good and continues to improve due to a reduction in end-of-pipe discharges. There have been major improvements in the quality of bathing, shellfish and freshwater fish waters. Diffuse pollution originating from farmland and urban areas is a significant issue and is now the largest source of pollution.

Water is generally abundant but demand requires better management to maintain levels in groundwater, lochs and rivers. Changes in river flow patterns may increase the risk of flooding in some areas and there are indications that rivers in the east may be experiencing lower flows in summer. Impacts upon the physical structure of rivers, estuaries and coastal waters are widespread.

The Chapter on water quality in *Change Tomorrow Today* is available at:  
[www.sepa.org.uk/publications/state\\_of/2006/main/b\\_water.html](http://www.sepa.org.uk/publications/state_of/2006/main/b_water.html)

### ***Nutrient enrichment***

Nutrient enrichment of rivers, lochs and groundwater is a significant problem in some areas of Scotland, particularly those with intensive agriculture or high population density, due to its potential to damage ecosystems. Effects of nutrient enrichment on estuarine and coastal waters are limited. Better targeting and supply of nutrients in fertilisers is needed to prevent nutrient enrichment. Discharges of nutrients to water from sewage treatment works are being reduced. Further information about nutrient enrichment is available at:  
[www.sepa.org.uk/publications/state\\_of/2006/main/c\\_nutrient.html](http://www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html)

### ***The sea***

Monitoring the quality of bathing waters provides an indication of the health risks from direct and diffuse discharges of effluents containing faecal contaminants. In 2006, 100% of the 61 identified coastal bathing waters achieved the EC Bathing Water Directive (76/160/EEC) mandatory standard and 56% also complied with the guideline standard.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/26>

Plankton, both plant (phyto-) and animal (zoo-), are at the lowest trophic levels of the marine ecosystem and constitute a vital food-source for higher-level organisms. Phytoplankton Colour Index (PCI) is an indicator of total phytoplankton biomass and abundance. Decapoda (crabs and lobsters) larval abundance reflects the state both of the water column and of the sea bed. The relative abundance of the zoo-planktonic copepods, *Calanus finmarchicus* (of cold cooler water) and *C. helgolandicus* (of warmer water), is influenced by sea

temperature. Since records began in 1958, decapod larvae have fluctuated and phytoplankton have increased in abundance. More noteworthy, the cold water copepods have become scarcer and the warm water ones more common. Their combined abundance declined into the 1990s but, due to the increase of *C. helgolandicus*, has been restored to former levels. However, copepod species dominance in the marine ecosystem is now the reverse of what it was in 1958, and that appears to be associated with warmer seas.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/16>

## **Estuaries**

Estuarine fish include resident species (e.g. flounder); migratory species using the estuary as a route to the sea (e.g. eels) or to rivers (e.g. salmon, lampreys) for breeding or maturation; species using the estuary as a juvenile nursery area (e.g. cod, herring) and others occurring by chance. Fish assemblages are influenced by the size and accessibility of the estuary, habitat diversity, biological productivity, water quality and human activities. The abundance and diversity of estuarine fish are therefore a reflection of estuarine conditions. The Clyde and Forth estuaries suffered heavily from sewage and industrial pollution from the mid 19th and well into the 20th century. With improved water quality, they now support typical assemblages of around 20 fish species.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/17>

## **6. Soil**

Land quality in Scotland is generally considered to be reasonable, although there are significant gaps in our knowledge, especially relating to soils.

The way in which land is used and managed is a major factor in determining its quality. Agriculture and forestry can lead to soil erosion and losses of nutrients to the water environment but new policies are encouraging good practice in conserving soil organic matter and promoting biodiversity.

Measures are being taken to enhance habitats and to counteract loss of species and improvements have also been made in the regeneration of derelict and contaminated land in previously industrialised areas.

Soil is a significant component of land but remains poorly understood. Soil erosion is a continuing problem in Scotland and there are concerns about loss of soil organic matter and soil sealing by impermeable surfaces associated with buildings and roads.

The Chapter on soil quality in *Change Tomorrow Today* is available at:

[www.sepa.org.uk/publications/state\\_of/2006/main/b\\_land.html](http://www.sepa.org.uk/publications/state_of/2006/main/b_land.html)

The area of semi-natural terrestrial habitats at risk from nitrogen deposition has declined slightly, but the potential for damage to specific habitats remains high. Agricultural production relies on the supply of nutrients to meet crop requirements, but poor application methods and oversupply of fertilisers can lead to nutrient enrichment. Further information about nutrient enrichment is available at :

[www.sepa.org.uk/publications/state\\_of/2006/main/c\\_nutrient.html](http://www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html)

## **7. Population and Human Health – including public access to the outdoors**

The population of Scotland is projected to rise by 0.8%, from 5,117 in 2004 to 5.119 million in 2024. Households are projected to increase from 2,292,000 to 2,541,000. Between 1976 and 2006, the Scottish GDP index increased from 62 to 107, representing an average annual growth of 1.8%.

See:

<http://www.scotland.gov.uk/Publications/2007/08/20165714/2>

<http://www.scotland.gov.uk/Publications/2007/08/20165714/3>

The environment plays a significant part in the health and quality of life of individuals and communities in Scotland, but the relationship between environment and health is complex and uncertain. There is increasing interest in the positive links between the natural heritage and public health but no data available for Scotland at this time. An analysis of the relationship between human health and environmental pollution is provided in SEPA's report *Change Tomorrow Today* available at [www.sepa.org.uk/publications/state\\_of/2006/main/d\\_human\\_health.html](http://www.sepa.org.uk/publications/state_of/2006/main/d_human_health.html)

Information however is available on outdoor recreation and greenspace provision, both important factors in quality of life and well-being

### **Recreation**

Indices for the Land Reform (Scotland) Act 2003 and Scottish Outdoor Access Code include: the access resource; attitudes & behaviour; impacts; resources and, participation. Over three-quarters of Scottish adults made at least one visit to the outdoors during the past 12 months. Although participation in outdoor recreation has increased slightly since 2003, the potential is there for much more active lifestyles.

- The estimated 214 million outdoor recreation visits in 2004/05 was up from 199m in 2003/04
- walking (mostly 2-8 miles) was the main activity in 55% of visits - 70% when with another activity
- destinations included countryside 56%, urban 27% and coast 17%.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/22>

### **Greenspace**

Four out of five people in Scotland live in towns and cities, the 171 settlements in Scotland with a population of 3,000 or more. A quarter (3,7254 ha) of the settlement area is covered by greenspace policies in Local Plans, half of which (13%) is designated as green belt or for its nature conservation or landscape value. Greenspace is an invaluable component of the urban scene and make settlements pleasant to live in: picture the Clyde-Kelvin-Allendar walkway in Glasgow or the Leith walkway in Edinburgh. Greenspace is where people can experience biodiversity, with space for wildlife and for healthy, active lifestyles. Linked networks can provide habitat corridors and green access routes through urban areas, from the local park to more tranquil and natural settings in town and into the surrounding countryside.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/21>

## **8. Material Assets (resources including natural resources and energy, and waste)**

### **Fish stocks**

The conservation of commercial fish stocks is of prominent national and international importance. The Scottish fishing zone covers nearly 25% of the EU marine area. Of 11 continental shelf finfish stocks assessed, 7 (63%) were at full reproductive capacity in 2005. Stocks not at full reproductive capacity in 2005 were cod of the North Sea and West of Scotland.

See: <http://www.scotland.gov.uk/Publications/2007/10/08091435/18>

### **Tourism**

The National Tourism Strategy tracks membership of the Green Tourism Business Scheme (GTBS) as an indicator of environmental performance. Membership of the GTBS grew by around 60 organisations per year, to around 600 in 2006. The proportion of bronze, silver and gold awards in 2006 was about even. (*Work in progress* (SNH))

### **Energy and transport**

Electricity generation in Scotland fell by 2.8%, from 50,401 GWh in 2000 to 48,985 GWh in 2005. In 2005, 38% of the electricity generated in Scotland came from nuclear fuel; 25% from coal; 22% from gas and oil; 11% from hydro; and 4% from other renewable sources. Electricity consumption increased by 2.5%, from 34,740 GWh in 2000 to 35,629 GWh in 2005. In 2005, Scotland was 137% self-sufficient in electricity generation capacity.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/4>

The volume of motor traffic on roads in Scotland has increased by 25% between 1993 and 2006, from 34,938 million vehicle kilometres (MVK) to 43,629 MVK. Cars account for nearly 80% of road traffic.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/5>

## **Waste**

Around 20 million tonnes of waste is produced in Scotland each year, mostly from commerce and industry. The amount of household waste produced in Scotland continues to increase. Fly tipping and litter remain a problem. The amount of waste disposed of to landfill is continuing to fall with substantial progress having been made in the recovery and recycling of waste.

There have been reductions in emissions to the environment associated with landfilling and thermal treatment. More landfill gas is being used to produce energy and stricter controls on landfill operations mean that the environmental impact of sites is decreasing. Emissions of dioxins and nitrogen oxides from municipal waste incinerators have fallen to low levels compared with those from other UK sources.

The Chapter on waste and resources in *Change Tomorrow Today* is available at:  
[www.sepa.org.uk/publications/state\\_of/2006/main/c\\_waste.html](http://www.sepa.org.uk/publications/state_of/2006/main/c_waste.html)

## **9. Climatic Factors**

Climate change is evident in Scotland from observed trends in temperature, rainfall and snow cover. Climate change is causing changes in the growing, breeding and migration seasons, shifts in species abundance and diversity, higher river flows leading to flood risk, and sea level rise causing erosion. Left unchecked, climate change will accelerate causing damaging effects on physical, biological and chemical processes with significant consequences for Scotland's environment, economy and society.

Continued reliance on fossil fuels and growing demand for energy, for transport and for housing will escalate emissions of carbon dioxide to increasingly dangerous and potentially irreversible levels. Scotland must play its part in rapidly adopting energy conservation and efficiency measures and low carbon energy solutions. Much of the change in climate over the next 30 to 40 years is already determined by past and present emissions, so it is important that Scotland prepares itself for the inevitable impacts.

The Chapter on climate change in *Change Tomorrow Today* is available at:  
[www.sepa.org.uk/publications/state\\_of/2006/main/d\\_climate\\_change.html](http://www.sepa.org.uk/publications/state_of/2006/main/d_climate_change.html)

Also relevant are the climate trends set out in the publication *A handbook of climate trends across Scotland: presenting changes in the climate across Scotland over the last century* (2006). Published by SNIFFER and available at: <http://www.sniffer.org.uk/climatehandbook/>.

Since records began in 1914, the annual mean surface temperature in Scotland increased at a rate of 0.65°C per 100 years, slightly higher than the global average of 0.57°C. The annual temperature for each of the last four years is higher than for any other year during this period. By 2100, temperatures in Scotland are predicted to rise by 3.5°C during the summer months and around 2.5°C during the winter months. It is estimated that by 2100 winters will be up to 30% wetter in some places, while summers will be up to 50% drier.

See: <http://www.scotland.gov.uk/Publications/2007/08/20165714/8>

### ***Response to climate change in nature***

Phenological responses (seasonal timing) to warming temperatures is a measure of stress on biodiversity / ecosystems. Increasing earliness is exhibited to varying degrees among the majority (but not all) of species for which data are available.

- Terrestrial - green spruce aphid first capture date 1971 to 2004: 4.3 days earlier / decade (8 day advance / 1 °C)
- Fresh water - dipper egg-laying 1973 to 2003: 3 days earlier / decade (4 day advance / 1 °C)
- Marine - peak plankton abundance of *Ceratium fusus* 1958 to 2003: 5.3 days earlier / decade (12 day advance / 1 °C)

(Work in progress (SNH))

## **9. Historic Environment**

The following are main features of the historic environment that may be relevant to this Corporate Strategy.

- **Scheduled ancient monuments and listed buildings** (including supporting information) are provided on Pastmap (<http://www.PASTMAP.org.uk>), a free, interactive, map-based query system developed jointly by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) and Historic Scotland. Databases providing summary information on scheduled ancient monuments and listed buildings are also available on the Historic Scotland website.
- **Designated gardens and designed landscapes** are provided on Pastmap. Detailed supporting information on gardens and designed landscapes is provided in the Inventory of Gardens and Designed Landscapes. The Inventory can be consulted at HS offices or is available to purchase from HS and SNH (see below for addresses). The underlying gardens and designed landscape data used on Pastmap is available from Scottish Natural Heritage (contact [data.supply@snh.gov.uk](mailto:data.supply@snh.gov.uk)). The Inventory is currently being updated.
- **Archaeological/historic sites, buildings and finds recorded in the National Monuments Record of Scotland** (NMRS) are available on the RCAHMS website (<http://www.rcahms.gov.uk>). Locational and supporting information is provided on Pastmap.
- **Historic landscapes**, in particular historic land-use assessment and NMRS data, can be obtained from the RCAHMS website (<http://www.rcahms.gov.uk>). The historic land-use assessment is a GIS-based analysis of past and present land-use, developed jointly by Historic Scotland and RCAHMS. It can be found on the RCAHMS web-site at HLAMAP.
- **Cultural World Heritage Sites** are provided on the Historic Scotland website (<http://www.historic-scotland.gov.uk>).
- **Wrecks** may be protected under the Protection of Wrecks Act 1973, scheduled as ancient monuments or identified as NMRS sites. Information on protected wrecks is available, under licence, in GIS format (contact [hsgimanager@scotland.gsi.gov.uk](mailto:hsgimanager@scotland.gsi.gov.uk)).

Local authorities also hold information on the historic environment relevant to their areas. Their archaeological services can provide information on sites included in their Sites and Monuments Records, whilst planning authorities can provide information on conservation areas.

## Appendix C: Results of the Environmental Assessment

The assessment is presented in Tables 9-13, with one Table for each of the five Strategy Priorities. Each Table is comprised of the following elements:

**A. Column headings:** SEA objective against which the components of the Strategy (the actions) are assessed, e.g. will the Strategy protect and enhance biodiversity?

**B. Comments column:** the nature of the effects, positive or negative, considering short, medium, and long term effects and cumulative impacts, and any mitigation required to address negative effects. Comments in parenthesis refer to the effect of SNH not undertaking this action.

**C. Row headings:** Actions under each Strategy Priority

**D. Scoring** of assessment of actions against SEA objectives, i.e. the impact that SNH's action will have, over and above what would happen otherwise:

- + = positive effect
- = negative effect
- +/- = both positive and negative effects
- ? = unknown effect
- 0 = no significant effect

Scores in parenthesis ( ) are the effect of SNH not taking action

**E. Summary:** This cell summarises the environmental effects identified under this Priority.

**F. Mitigation:** This cell summarises any mitigation required under this Priority

**G. Issues to be flagged to lower level environmental assessment:** This cell identifies any issues that will require more detailed assessment at a later stage, e.g. during more detailed business planning.

**Table 9: Caring for Nature: Assessment of the environmental effects of the proposed actions under this Corporate Strategy Priority.**

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity— will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels (Comments in parenthesis refer to effects if SNH takes no action)</p>
<p>lead action to prevent further biodiversity loss and promote recovery, concentrating on developing healthy ecosystems that are resilient to a changing climate</p>	<p><b>D.</b> + (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+</p>	<p>Action to support recovery of biodiversity will promote biodiversity objectives as well as having positive effects on soils, water quality and climate change adaptation. It should also enhance landscape so long as landscape character is taken account of in preparation of detailed plans and strategies, following best practice. (In the absence of SNH action there are likely to be continuing losses to biodiversity, and biodiversity is likely to be less able to adapt to climate change).</p>
<p>advise on the management of biodiversity and geodiversity, and promote codes of practice for activities where there is a potential for damage</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+</p>	<p>Similar positive effect to previous action. Codes of good practice include facilitating access, e.g. for wildlife watching, so that wildlife is not disturbed, improving enjoyment for all, as well as understanding of human impacts on natural resources. (In the absence of SNH action there are likely to be continuing losses to biodiversity, and also to soils).</p>
<p>support the Scottish Biodiversity Forum in developing and implementing the Scottish Biodiversity Strategy</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+</p>	<p>Similar effects to first action above. (and similar effects if no action). SNH plays a lead role in delivering the Scottish Biodiversity Strategy.</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels (Comments in parenthesis refer to effects if SNH takes no action)</p>
<p>Advise and support land managers to ensure that protected natural features in Natura sites and Sites of Special Scientific Interest are well managed, and review and simplify lists of operations requiring consent</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>+/-</p>	<p>0</p>	<p>+ (0)</p>	<p>+</p>	<p>Positive management of such sites is important in protecting and enhancing biodiversity and plays a part in protecting soils, water quality, and landscapes. These sites also contribute to adaptation to climate change by acting as part of a network for species dispersal and a habitat resource in the face of change. They contribute to ecosystem function and related services for human adaptation, e.g. water management. Cultural heritage such as archaeological features can also be protected through careful management of such sites following good practice including guidance in the concordat between SNH and Historic Scotland. (Since SNH has a lead, statutory role here, and given the need for positive management to maintain site condition, lack of action would be likely to lead to declines in biodiversity and soil quality).</p>
<p>identify a suite of marine Natura sites to deliver Scotland's share in meeting UK obligations under EU wildlife legislation, and propose other action required to meet international commitments for the north-east Atlantic</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0?</p>	<p>+</p>	<p>Positive effects on marine biodiversity, and contribution to marine water quality and the sustainable use of marine resources including fisheries. (Since SNH has a lead, statutory role here, and given the pressures on the marine environment, lack of action would be likely to lead to declines in marine biodiversity, and potentially unsustainable fisheries management).</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD ‘good’ status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels (Comments in parenthesis refer to effects if SNH takes no action)</p>
<p>provide places for enjoying nature and make information about wildlife and geology accessible to people, including through a suite of well-managed and promoted National Nature Reserves</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+</p>	<p>Increasing awareness and enjoyment of nature promotes protection of biodiversity, soils, natural resources, and landscapes. Encouraging enjoyment also promotes health benefits. Links between nature and the cultural heritage can be made in on-site interpretation. (Significant adverse effects are unlikely in the absence of SNH action because of the general level of increase in awareness and the action carried out by other organisations including voluntary bodies).</p>
<p>provide opportunities for people to volunteer, look after and learn about the natural world, linking this to a better understanding of the need for sustainable lifestyles</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>+</p>	<p>Opportunities for looking after and learning about nature promote protection of biodiversity, natural resources, and landscapes. Encouraging volunteering also promotes health benefits and enhances enjoyment of the outdoors. (In the absence of SNH action, the contribution that volunteers make to biodiversity protection could be lost).</p>
<p>develop opportunities for outdoor learning and voluntary action by young people, to help them develop confidence and citizenship</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>+</p>	<p>Similar effects to previous action.</p>
<p>raise awareness of the range of functions which ecological systems fulfil and the loss to society if they cease to function</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+</p>	<p>Understanding of ecosystems increases protection of biodiversity, soils, water, natural resources and climate change adaptation. (These positive effects in relation to biodiversity and ecosystems are particularly dependent on SNH action, and this understanding is essential to future biodiversity conservation)</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD ‘good’ status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels (Comments in parenthesis refer to effects if SNH takes no action)</p>
<p>promote an integrated approach to use and management of the land and sea which incorporates conservation of all aspects of the natural heritage, amongst those who manage the resource, in land-use planning and in national policy</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>+</p>	<p>Integrated approaches allow for incorporation of biodiversity, soils, water, climate change mitigation and adaptation, natural resource use, cultural heritage and landscape objectives into management. (In the absence of SNH’s action in this area there would be likely to be negative effects on biodiversity and landscape from inappropriate activities).</p>
<p>build capacity across all sectors to care for the natural heritage, by sharing of good practice through events and professional training and by making information widely available</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>+</p>	<p>Improving capacity and good practice amongst professionals improves protection of all environmental factors linked to the natural heritage. (Given SNH’s expertise and the wider pressures on biodiversity and landscapes, lack of SNH’s action in this area could lead to negative impacts on biodiversity and landscape objectives)</p>

**Table 9: Caring for Nature cont.**

<b>E. Summary</b>	<b>F. Mitigation</b>	<b>G. Issues to be flagged to lower level environmental assessment</b>
<p>Actions under this Priority are likely to lead to significant positive effects on biodiversity objectives. There are also likely to be additional benefits for soils, water quality, climate change adaptation, sustainable use of natural resources, and landscape from positive action for biodiversity. Action to involve people and encourage their enjoyment of nature is also likely to lead to positive benefits for public access and for public health. The protection of cultural heritage can also be integrated into management for biodiversity objectives. (Because of the continuing trends in losses to biodiversity, and because of SNH's lead role in protecting biodiversity, a lack of action in this area would have significant negative effects on biodiversity objectives, and in some cases on other objectives)</p>	<p>Possible negative effects on cultural heritage from management for biodiversity can be avoided through following good practice, and working arrangements agreed between SNH and Historic Scotland, e.g. the concordat. Cultural heritage should always be considered in preparation of site management plans. This is the responsibility of the appropriate SNH officer.</p>	<p>SNH should ensure that other objectives, e.g. soils, water, public health, climate change, landscape, access and cultural heritage are as far as possible promoted through activities, plans or programmes aimed at taking forward biodiversity objectives. Potential benefits can be highlighted through SEA, EIA, site management planning or internal planning processes. This is the responsibility of the SNH lead officer, taking account of advice from other organisations such as Historic Scotland. The consideration of these interests in the activities, plans or programmes of other organisations is the responsibility of those organisations, taking advice from as appropriate.</p>

**Table 10: Responding to Climate Change: Assessment of the environmental effects of the proposed actions under this Corporate Strategy Priority.**

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>find out and publicise what's happening to the natural environment as a result of climate change</p>	<p><b>D.</b> + (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+</p>	<p>Raising awareness of the impacts of climate change is likely to promote action to support biodiversity and encourage more sustainable lifestyles amongst the public, thus contributing to climate change mitigation and sustainable use of natural resources. (A lack of SNH action would in itself be unlikely to have significant adverse effects)</p>
<p>work with other agencies in the UK to assess the implications of climate change and possible adaptation measures for habitats and species at a national level</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>-/0? (0)</p>	<p>+/0 (0)</p>	<p>+/0 (0/-)</p>	<p>+ (-)</p>	<p>This action will support the adaptation actions identified below - helping biodiversity to adapt to climate change, thus reducing some of climate change's negative effects. Managed carefully, measures to enhance habitats may also improve soil quality, water quality and ecological functioning, landscape and public access. These and the historic environment should be considered at the strategic and local planning and management levels.  (A lack of SNH action could result in inadequate provision for biodiversity to adapt to climate change and loss of associated benefits).</p>
<p>help achieve reductions in greenhouse gas emissions by advising on how renewable energy can be harnessed with least impact on the natural heritage</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (+/-)</p>	<p>0</p>	<p>-/0 (-/0)</p>	<p>0</p>	<p>+/- (-)</p>	<p>+ (-)</p>	<p>The main effect of SNH's advice will be to reduce climate change by enabling renewable energy development. In advising on appropriate renewable energy development it should also protect biodiversity and landscape. However there may be some instances where SNH advises that the overall positive impact on climate change outweighs negative impacts on biodiversity or landscape. Potentially the cultural heritage could also be affected. These impacts and any mitigation should be addressed as part of EIA.  (A lack of SNH action could result in negative effects on</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
											<p>biodiversity and landscape because of inappropriate development and could in the longer term lead to fewer approved schemes as a result of loss in public confidence in renewable energy)</p>
<p>develop a better understanding of the role played by peatland and other carbon-rich soils as a long-term carbon store, and how best to protect or manage such soils to retain carbon</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+</p>	<p>Increasing understanding of the role of carbon-rich soils in climate change is likely to support efforts to avoid carbon loss from peatlands and soils, and contribute to climate change mitigation through promoting better land management practices.</p> <p>(A lack of SNH action could mean that these potential benefits are not pursued, with negative effects on biodiversity, soils and climate change)</p>
<p>help nature as far as possible to adapt to a changing climate, by promoting conservation, land management and planning approaches which maintain health natural systems and enable species to disperse and colonise</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>0</p>	<p>-/0? (0)</p>	<p>+/0 (0)</p>	<p>+/0 (0/-)</p>	<p>+ (-)</p>	<p>Measures to deliver this action, e.g. habitat networks, should help biodiversity adapt to climate change, thus reducing some of climate change's negative effects. Managed carefully, they may also improve soil quality, water quality and ecological functioning, landscape and public access. These and the historic environment should be considered at the strategic and local planning and management levels.</p> <p>(A lack of SNH action could result in inadequate provision for biodiversity to adapt to climate change and loss of associated benefits).</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>new habitats</p>											
<p>In the light of climate change and change to habitats, review the extent to which conservation targets may require to be adjusted, and indeed the role which should be played by protected areas</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>In itself this action will not have significant environmental effects but the knowledge gained will assist in the previous action and in actions under the Caring for Nature Priority.</p>
<p>advise people on how to make best use of natural processes in adapting to climate change, for example in flood management</p>	<p>+ (-)</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+/0 (0/-)</p>	<p>+ (-)</p>	<p>SNH's advice should improve the opportunities for protecting and enhancing biodiversity, soils, and water quality and associated landscapes. It should also help both people and wildlife to adapt to climate change. (Given SNH's expertise in this area and the potentially significant impact from climate change both on biodiversity and on flood management, a lack of SNH action is likely to result in negative effects upon biodiversity and climate change response, and potentially result in conflicts between objectives)</p>

<b>A. Will the action...? &gt;</b>  <b>C. Action</b>	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	<b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
provide an example to others in environmental management by reducing SNH's carbon emissions	0	0	0	0	+ (-)	+ (-)	0	0	0	0	Although SNH's carbon emissions are a small part of Scotland's overall emissions, by showing what is possible, including through more efficient use of resources, SNH's action can benefit climate change and sustainable resource use objectives. (Given that as a public environmental organisation others expect SNH to show a lead, and the fact that urgent action is needed by all, an absence of SNH action here could result in a lack of action by others, hence negative impacts on these objectives)
<b>E. Summary</b>					<b>F. Mitigation</b>			<b>G. Issues to be flagged to lower level environmental assessment</b>			
<p>The actions under this Priority would lead to positive effects on climate change, biodiversity, soil, and water, and possibly on access and landscape as well as the inter-relationships between these. These would generally be medium-long term effects and would be cumulative over time, and in association with action by others.</p> <p>If the climate change benefits from particular renewable energy developments were seen to outweigh site-based impacts, there is a possibility of local negative impacts on biodiversity, cultural heritage and landscape. However with mitigation, particularly early incorporation into planning and design these, should not be significant.</p> <p>(If the actions under this Priority were not included in SNH's strategy, there is a significant risk of failure to meet biodiversity, soil, and climate change objectives from an insufficient response to the changing climate. There is also a risk to biodiversity and landscape objectives from an inappropriate response such as insensitive renewable energy development.)</p>					<p>Actions under this Priority should take full account of indirect impacts, e.g. on biodiversity, landscape or cultural heritage. Most mitigation actions will be for consideration at site or project level as discussed in column G. In relation to biodiversity these may include habitat management to compensate for lost habitat.</p> <p>Adaptation measures, e.g. the development of habitat networks, should consider the potential benefits to other objectives including landscape and water quality. This should be led by appropriate SNH officers, working with Forestry Commission, Scottish Government agriculture staff, local authority and Scottish Government planning officers etc.</p>			<p>Potential negative impacts from renewable energy development on biodiversity, landscape, and cultural heritage should be addressed through the planning process, including input by SNH and Historic Scotland to local authority planning policies for renewable development (and associated SEA), and advice on individual developments (and associated EIA).</p>			

**Table 11: Delivering Health & Well-being: Assessment of the environmental effects of the proposed actions under this Corporate Strategy Priority.**

A. Will the action...? >  C. Action	Biodiversity— will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
promote and help create a better and more attractive environment for people to live and work in, with accessible, well-managed greenspace, and advise on the policies and practices needed to achieve it	+ (-)	+ (-)	0	0	0	0	0	+ (-)	+ (-)	+	Action to improve local environments including greenspace will have positive effects on biodiversity and landscape, and encourage people to enjoy the natural heritage, with consequent positive effects on people's physical and mental well-being. (Without SNH's support for these aims, including support for Greenspace Scotland, there are likely to be negative effects on local environments through inadequate provision or inappropriate management).
encourage the development of places and facilities for people to enjoy the outdoors, both in the rural and urban environment, and a network of paths close to where people live for both recreation and local travel	0	+ (-)	0	0	+ (0)	0	0	+ (-)	+ (0)	+	Positive effects on improving facilities and encouraging public access and enjoyment of the outdoors with associated public health benefits in encouraging physical activity. Positive effects on climate change mitigation through encouraging more sustainable travel, on foot/cycle. Developing places for people to enjoy will be likely to lead to improved landscapes. (SNH has an important role in supporting local authorities, and a lack of action could result in insufficient provision. Given the current need to increase levels of physical activity to combat rising obesity, there could also be negative effects on public health.)
encourage greater levels of outdoor recreation, promoting wider participation and recognition of its health benefits, especially among young people and disadvantaged groups	0	+ (-)	0	0	+ (0)	0	0	+ (-)	0	+	Positive effects in encouraging public access and enjoyment of the outdoors with associated public health benefits in encouraging physical activity. Positive effects on climate change mitigation through encouraging more sustainable travel, on foot/cycle. (SNH has an important role in supporting local authorities, and a lack of action could result in insufficient promotion of public access. Given the current need to increase levels of physical activity there could also be negative effects on public health)

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD ‘good’ status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>promote use and understanding of the Scottish Outdoor Access Code and maintain an overview of the success of access legislation</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>+ (-)</p>	<p>0</p>	<p>+</p>	<p>Positive effects in facilitating public access and reducing potential conflicts between users and land managers. Also positive effects by reducing potential effects on biodiversity and cultural heritage from public access through encouraging responsible behaviour. (SNH has a lead role, and the Code is essential to underpin responsible access so a lack of action could result in negative effects on habitats/species and on access promotion)</p>
<p>encourage greater involvement by people, and pride, in the planning and management of the places and landscapes around them, through volunteering and community initiatives</p>	<p>+ (-)</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (-)</p>	<p>+</p>	<p>Positive effects on biodiversity and landscape through greater community involvement in managing local environments, increasing understanding and support for improvements and appropriate management. Associated benefits from encouraging public enjoyment of the outdoors including improved physical and mental well-being. (SNH has an important role in providing advice to support initiatives and organisations. In the absence of SNH action the potential environmental benefits may be lost).</p>
<p>champion the diversity and distinctiveness of Scotland’s landscapes, and stimulate people’s awareness of how landscapes and wildlife contribute to cultural identity and quality of life</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (-)</p>	<p>+</p>	<p>Positive effects through encouraging positive management of landscapes and greater appreciation of their values. Associated benefits to biodiversity and cultural heritage from promoting inter-relationships. (SNH has a lead role in relation to landscapes, and in the absence of SNH action the value of landscapes and therefore their positive enhancement is likely to be significantly less supported by others).</p>
<p>encourage the planning and design of new development and land use which enhances regional distinctiveness and sense of place</p>	<p>+ (0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (0)</p>	<p>0</p>	<p>+ (-)</p>	<p>+</p>	<p>Positive effects in protecting and enhancing landscape character and local distinctiveness. Associated benefits for biodiversity and cultural heritage. (In the absence of SNH’s advice, and given current development pressures, there are likely to be negative effects on landscape through inappropriate new development).</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>promote action by all relevant public bodies for more positive management of National Scenic Areas and other designated landscapes</p>	<p>+</p> <p>(0)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+</p> <p>(-)</p>	<p>+</p>	<p>Positive effects in protecting and enhancing designated landscapes. Associated benefits for biodiversity through positive management. (In the absence of SNH's advice, and given current land-use pressures, there are likely to be negative effects on landscape through unsympathetic management.)</p>

**Table 11: Delivering Health & Well-being cont.**

<b>E. Summary</b>	<b>F. Mitigation</b>	<b>G. Issues to be flagged to lower level environmental assessment</b>
<p>Actions under this Priority will lead to significant improvements in the provision for public access, and increasing enjoyment of the natural heritage. This, and improvements to local environments with community involvement, will be associated with positive effects on public health, including improved physical and mental well-being. Advice on enhancing greenspace and on responsible access will provide associated benefits to biodiversity. There are also potential benefits to cultural heritage from increasing awareness and integrating features if the historic environment into positive management.</p> <p>Promoting the value of landscapes and appropriate management of local landscapes and designated areas, will benefit landscape objectives. Links to cultural identity will support cultural heritage objectives.</p> <p>(Given pressures on greenspace and on landscapes, and SNH's role in providing advice and expertise, a lack of action would be likely to result in inadequate provision or inappropriate management of greenspace, and negative effects on local environments and wider landscapes including designated area. Given the need to increase levels of physical activity to combat obesity, there could be negative effects on public health from a lack of SNH support for public access.)</p>	<p>No negative effects from proposed actions are identified therefore no mitigation needed.</p> <p>However, the potential positive benefits for health, biodiversity and cultural heritage from supporting public access and landscapes should be maximised through taking appropriate account of these in, e.g., grants assessment, or preparation of plans and policies, by SNH officers, and through promoting synergies in SNH's advice to others. These opportunities are already recognised in the draft Corporate Strategy, e.g. through the links to public health and cultural identity.</p>	<p>None identified but potential benefits as identified under Mitigation should be identified by the respective lead authority during preparation of NSA Management Strategies, access or landscape policies or strategies, SNH's grants policies, greenspace strategies (by local authorities) making use of environmental assessment where appropriate. Where environmental assessment is required, SNH may provide advice during this process.</p>

Table 12: Supporting the Economy: Assessment of the environmental effects of the proposed actions under this Corporate Strategy Priority

A. Will the action...? >  C. Action	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
develop understanding of, and promote, the economic value of the natural heritage	+ (-)	0	0	0	0	+ (-)	0	0	+ (-)	+	Increasing understanding of the economic value of the natural heritage is likely to lead to greater efforts to use natural resources sustainably, and to protect the biodiversity and landscape resource on account of its value. (Given increasing pressures on natural resources, a lack of SNH action here may have negative effects through continued unsustainable practices where resources are not sufficiently valued)
help ensure that economic activities are sustainable in relation to the natural heritage and do not exceed environmental limits, while taking account of the socio-economic value of such activities in our advice and regulatory activity	+ (-)	0	+ (-)	+ (0)	+ (-)	+ (-)	0	0	+ (-)	+	Ensuring that economic activities are carried out in a way that does not adversely affect the natural heritage and within environmental limits will have positive effects on biodiversity, soils, water, climate change adaptation, sustainable use of natural resources, and landscapes. (SNH's advice is important in this area and given increasing pressures on land, sea and natural resources, in the absence of this advice there are likely to be negative effects on biodiversity, soils, climate change adaptation, natural resources and landscapes).
advise local authorities and Government on how built development can be accommodated, and impacts mitigated, in a way that is compatible with	+ (-)	0	+ (0)	+ (0)	+ (-)	+ (-)	0	+ (-)	+ (-)	+	Helping to ensure that built development is undertaken in a way that is compatible with the natural heritage will have positive effects on biodiversity, soils, water, climate change adaptation, sustainable use of natural resources, access, and landscapes. (SNH's advice is important in this area and given increasing pressures on land-use, in the absence of this advice there are likely to be negative effects on biodiversity, soils, climate change adaptation, natural resources, access and landscapes).

A. Will the action...? >	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
natural heritage aims											
support the development and use of spatial planning, both on land and at sea, in a way which helps protect the natural heritage and which fully involves users and communities	+ (-)	0	+ (-)	+ (0)	+ (-)	+ (-)	0	0	+ (-)	+	Effective use of spatial planning is an essential tool to integrate environmental objectives into the management of the land and sea. In particular there are likely to be positive benefits for biodiversity, soils, water, climate change (mitigation and adaptation), sustainable use of natural resources and landscapes. (In the absence of SNH action, and in the light of pressures on land, sea and natural resources, there are likely to be negative effects especially on biodiversity, soils, climate change adaptation, natural resources and landscapes)
use SNH's current planning review as a foundation for a refreshed approach to giving effective planning advice	+ (0)	0	+ (0)	+ (0)	+ (0)	+ (0)	0	+ (0)	+ (0)	0	Giving clearer and more constructive advice on the impacts of development on the natural heritage will enable decision-makers to take better-informed planning decisions which should lead to improved management of the natural heritage.
advise Government on structures and possible legislation for better management of the sea, including further advice, if required, on proposals for a coastal and marine national park	+ (-)	0	0	+ (0)	+ (-)	+ (-)	0	0	+ (-)	+	There is a recognised need for better legal and governance provisions for the management of the sea. SNH's advice should ensure that this promotes biodiversity, water, natural resources and landscape objectives. This should also help facilitate use of the sea for marine renewable energy development, thus contributing to climate change mitigation. (Since SNH is the key Government advisor on biodiversity, natural resources and landscape objectives, a lack of SNH advice here is likely to lead to negative effects on these objectives since new structures may not adequately take them into account)

A. Will the action...? >  C. Action	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
provide support to initiatives, including community-based ones, which create new economic opportunities based on the natural heritage, especially in economically fragile areas	+ (-)	0	0	0	0	+ (-)	0	0	+ (-)	+	SNH's advice under this action is mainly intended to support economic and social objectives, but in providing advice SNH can help ensure that biodiversity and landscape is protected and enhanced and natural resources used sustainably. The promotion of such economic activities also encourages people to value and therefore protect the natural heritage. (A lack of SNH's advice in this area may mean that these potential benefits to biodiversity and landscape are lost and inappropriate economic activity leads to negative effects).
contribute to the regeneration of disadvantaged areas through environmental renewal	+ (-)	+(0)	0	0	0	0	0	+(0)	+ (-)	+	SNH's advice under this action is intended to support social and economic objectives, but will also promote biodiversity, access and landscape objectives, and in improving local environments will help to support public health objectives. (A lack of SNH involvement may mean that these potential benefits are lost, and inappropriate regeneration leads to negative effects).
support the development of more high quality and readily accessible natural heritage in central Scotland for people to enjoy	+(0)	+(0)	0	0	0	0	0	+(0)	+(0)	+	This action should lead to more opportunities for access to high quality natural heritage in the central belt of Scotland, with enhanced biodiversity and landscape care.

A. Will the action...? >	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
enhance Scotland's tourism product by developing places where visitors can experience and enjoy the natural heritage better, and ensuring information about such places is readily available	0	+(0)	0	0	0	0	+(0)	+(-)	0	0	The action is mainly intended to support economic objectives but in providing places for visitors to enjoy the natural heritage, and information about them, public access objectives are also promoted. Cultural heritage objectives could also be supported if considered in implementing this action. (A lack of SNH action may mean that these potential benefits are not realised).

**Table 12: Supporting the Economy cont.**

<b>E. Summary</b>	<b>F. Mitigation</b>	<b>G. Issues to be flagged to lower level environmental assessment</b>
<p>Actions under this Priority should lead to positive benefits for biodiversity, soils, water, climate change, natural resources and landscape, through promoting economic development that takes full account of these environmental objectives. Provision for tourists to enjoy the natural heritage will also increase opportunities for public access and enjoyment. (A lack of SNH action may mean that the contribution of the natural heritage to economic activities and therefore the need to look after it is not sufficiently recognised, or that expertise is not available to ensure that the natural heritage is used sustainably. Both of which would have negative implications, especially for biodiversity, natural resource and landscape objectives.)</p>	<p>No adverse affects have been identified. The actions are already designed to maximise the environmental benefits from action to support other objectives, e.g. economic and social objectives.</p> <p>The action to support places for visitors to enjoy the natural heritage could also support awareness of cultural heritage if the historic environment is considered in implementing this action. This would involve the SNH lead officer involving others, e.g. from Historic Scotland or local authorities.</p>	<p>None</p>

**Table 13: Delivering a High Quality Public Service: Assessment of the environmental effects of the proposed actions under this Corporate Strategy Priority**

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>maintain an open, responsive, collaborative and inclusive style of operating</p>	0	0	0	0	0	0	0	0	0	0	<p>In itself this Action will not have significant environmental effects although it will support the delivery of Actions under the other four strategic Priorities</p>
<p>ensure effective and efficient use of resources, delivering 2% per annum efficiency savings over the next three years, and exploring further shared use of offices</p>	0	0	0	0	0	0	0	0	0	0	<p>In itself this Action will not have significant environmental effects as it is intended to take place alongside effective delivery of other Actions</p>
<p>work with other parts of Scottish Government to deliver the Scottish Rural Development Programme</p>	+ (-)	0	+ (-)	+ (-)	+ (-)	+ (-)	+ (-)	+ (-)	+ (-)	+ (-)	<p>In supporting effective delivery of the Scottish Rural Development Programme, this Action should have benefits for biodiversity, soils, water, climate change mitigation and adaptation, sustainable use of natural resources, cultural heritage, access and landscape. (In the absence of SNH involvement SRDP would be less likely to deliver its objectives, particularly but not only in relation to biodiversity, access and landscape)</p>
<p>work with other bodies involved in providing rural and environmental services to deliver a Scottish Rural Service</p>	0	0	0	0	0	0	0	0	0	0	<p>In itself this Action will not have significant environmental effects although it will support the delivery of Actions under other Priorities</p>

<p><b>A. Will the action...? &gt;</b></p> <p><b>C. Action</b></p>	<p>Biodiversity – will the objective protect and enhance biodiversity?</p>	<p>Population and Human health - protect and enhance human health</p>	<p>Soil – protect soil quality and function</p>	<p>Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes</p>	<p>Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change</p>	<p>Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling</p>	<p>Cultural heritage – protect and enhance the historic environment</p>	<p>Access – promote enjoyment, understanding of and access to the natural heritage.</p>	<p>Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.</p>	<p>Inter-relationships</p>	<p><b>B. Comments</b> – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels</p>
<p>seek agreement with local authorities on service standards and outcome measures with a view to transferring grant funding to the main local authority funding settlement from 2009-10 on</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (-)</p>	<p>+ (-)</p>	<p>+ (-)</p>	<p>This Action is likely to help secure effective delivery by local authorities of actions relating to biodiversity, public access, and landscape that are currently supported through SNH grants. It may indeed increase current benefits as local authorities develop greater capacity in these areas. (In the absence of SNH action, there is a danger that such benefits would be lost under the new funding arrangements for local authorities)</p>
<p>ensure our advice is well-informed, based where appropriate on sound science</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>In itself this Action will not have significant environmental effects although it will support the delivery of Actions under other Priorities</p>
<p>continue to support the Joint Nature Conservation Committee as a focus for coordinated action by natural heritage agencies across the UK on common issues of wider-than-Scotland or international importance</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>+ (-)</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>This Action is like to support biodiversity and climate change outcomes through more effective action on nature conservation issues that require a UK or international approach, e.g. climate change adaptation. (in the absence of SNH support, the effectiveness of action in support of biodiversity and climate change mitigation and adaptation would be likely to be reduced).</p>

A. Will the action...? >	Biodiversity – will the objective protect and enhance biodiversity?	Population and Human health - protect and enhance human health	Soil – protect soil quality and function	Water – protect and enhance water bodies to WFD 'good' status - maintains and restore key ecological processes	Climatic factors – reduce greenhouse gas emissions / contribute to effective adaptation to climate change	Material assets – promote sustainable use of natural resources – reduce waste and energy consumption and promote efficiency/ recycling	Cultural heritage – protect and enhance the historic environment	Access – promote enjoyment, understanding of and access to the natural heritage.	Landscape – protect and enhance the landscape, esp. in designated areas; value and protect diversity and local distinctiveness.	Inter-relationships	B. Comments – likely positive or negative impacts, and comments on mitigation or issues to be investigated more fully at lower levels
implement our 'People Strategy' so that we engage, motivate, develop and retain the right staff for SNH	0	0	0	0	0	0	0	0	0	0	In itself this Action will not have significant environmental effects although it will support the delivery of Actions under other Priorities
minimise our environmental footprint and set a good example through SNH's environmental management	+ (-)	0	0	+ (-)	+ (-)	+ (-)	0	0	0	+	Although as a relatively small organisation with a small land holding (beyond NNRs managed under other Priorities), and small carbon emissions relative to Scotland's overall emissions, by showing what is possible, including through more efficient use of resources, and positive action for biodiversity, SNH's action can benefit biodiversity, water, climate change and sustainable resource use objectives. (Given that as a public environmental organisation others expect SNH to show a lead, and the fact that urgent action is needed by all, an absence of SNH action here could result in a lack of action by others, hence negative impacts on these objectives)

**Table 13: Delivering a High Quality Public Service cont.**

<b>E. Summary</b>	<b>F. Mitigation</b>	<b>G. Issues to be flagged to lower level environmental assessment</b>
<p>Actions under this Priority should lead to positive benefits for biodiversity, soils, water, climate change, natural resources, access and landscape, through supporting delivery of the SRDP, action to address UK and international nature conservation issues, local authority delivery of biodiversity, access and landscape objectives, and improving SNH's environmental management.</p> <p>(A lack of SNH action would reduce the effectiveness of the SRDP, could lead to failure to address issues requiring acting at national and international levels, and may result in reduced delivery by local authorities in relation to biodiversity, landscape and access objectives. Limited delivery of SNH's environmental management may lead to reduced action by other public bodies who see SNH as setting an example.)</p>	<p>No adverse affects have been identified.</p>	<p>None</p>