

Environmental Report for the Draft Orkney Core Paths Plan

**Orkney Islands Council
February 2008**



ORKNEY
ISLANDS COUNCIL

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1. Non-Technical Summary

1.1 Background

A key component of the Land Reform (Scotland) Act 2003 is the duty for all local authorities to draw up a draft Core Paths Plan. The purpose of the plan is to identify a system of key routes for outdoor access, giving the public reasonable provision throughout their area.

A Strategic Environmental Assessment (SEA) of the draft Core Paths Plan is required by the Environmental Assessment (Scotland) Act 2005. This Act is the implementing legislation for the European Directive, known as the SEA Directive.

The purpose of SEA is to ensure that during the preparation of a plan, programme or strategy (pps) the significant environmental effects of the pps are taken into account. Its aim is to prevent, reduce and offset any negative environmental impacts of the plan.

The SEA legislation requires that the findings of the SEA are published in an Environmental Report, which sets out the likely significant environmental effects of the plan. This is the non-technical summary of the Environmental Report for the draft Orkney Core Paths Plan. Consultation is an important element of the SEA process, so the Environmental Report is presented for public consultation, along with the Plan.

1.2 SEA Methodology

SEA identifies a number of environmental topics or factors against which the likely significant effects of a plan should be assessed. These are:

- biodiversity, fauna and flora
- population and human health
- air
- soil
- water
- climatic factors
- landscape
- cultural heritage
- material assets

For each of these topics, SEA objectives have been developed and the impacts of the draft Core Paths Plan have assessed against these objectives. The SEA objectives are shown in Table 1 below. The plan's environmental effects are looked at in terms of short, medium and long term effects; positive and negative effects; permanent and temporary effects; and cumulative impacts. Alternatives to the plan are also considered as part of this assessment process.

1.3 Assessment of the Core Paths Plan

Assessment of Core Paths has been carried out at three levels:

- a) Assessment of the Core Paths Plan objectives against SEA topics. This was to look the objectives of the plan in terms of their affect on the environmental topics. The impact of the Core Paths Plan objectives were found to be largely neutral, or slightly positive.

- b) Assessment of the Core Paths selection criteria against SEA objectives. The criteria used for selecting proposed Core Paths were assessed against the SEA objectives to ensure that they were compatible. None of the selection criteria were found to be incompatible with the SEA objectives.
- c) Assessment of individual Core Paths and Core Paths Networks against SEA objectives. For each island and parish of Orkney the proposed Core Paths have been assessed against the SEA objectives developed for each SEA topic. For each objective the likely significant impact of the path network is assessed and detailed comments on individual routes are provided where appropriate. These assessments can be found in Appendix C. A summary of the overall findings of the Core Paths network assessments is given in the main body of the Environmental Report. The likely significant impacts of the individual Core Paths and the path networks were found to be neutral in most cases, with some positive impacts. The vast majority of the proposed Core Paths are existing, well used routes, where no new infrastructure or path upgrades are required. No new routes, where significant amounts of new infrastructure would be required, are included in the plan. This approach to the Plan has helped to minimise any significant adverse impacts on the environment. Where it is envisioned that promotion of Core Paths could increase their usage and potentially have an adverse impact on the environment, ways of minimising or mitigating the impact have been identified.

1.4 Mitigation

Mitigation measures are developed to avoid, reduce or offset predicted negative impacts. The environmental effects of the draft Core Paths Plan are largely neutral. Where the promotion of Core Paths could have an adverse impact on the natural heritage this will be addressed through awareness raising and interpretation to promote responsible behaviour.

1.5 Monitoring

Monitoring the effects of implementing the Core Paths Plan will include regular inspections of Core Paths by the local authority. This monitoring will include any impacts of the paths on the environment, such as erosion, damage to vegetation adjacent to the path, littering etc. Incidents of disturbance to wildlife as a result of access users will also be monitored.

1.6 Consultation

Comments on this Environmental Report can be sent to the address below until Friday 2 May 2008.

Christine Skene
Policy and projects
Department of Development Services
Orkney Islands Council
Council Offices
School Place
Kirkwall
Orkney
KW15 1NY

Comments may also be sent by fax to 01856 886466 or submitted by email to christine.skene@orkney.gov.uk

A copy of this Environmental Report and the draft Supplementary are available to download at <http://www.orkney.gov.uk>

2. INTRODUCTION

2.1 Purpose of this Environmental Report and key facts

The *Environmental Assessment (Scotland) Act 2005* implements EC Council Directive 2001/42/EC (the Strategic Environmental Assessment (SEA) Directive) on the assessment of the effects of certain plans and programmes on the environment. The Act requires that plans such as the draft Orkney Core Paths Plan must be subject to a process of identifying and taking into account the environmental effects of the plan. The SEA involves examining the Plan in relation to its environmental aims, identifying its likely consequences and, if necessary, undertaking adjustment to reduce any likely significant adverse effects of the Plan on the environment.

SEA is a systematic method for considering the likely environmental effects of certain Plans Programmes and Strategies (PPS) and is a process, not a product. SEA aims to:

- integrate environmental factors into PPS preparation and decision-making;
- improve PPS and enhance environmental protection;
- increase public participation in decision making; and
- facilitate openness and transparency of decision-making.

SEA is required by the Environmental Assessment (Scotland) Act 2005. The key SEA stages are:

Screening	determining whether the PPS 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 done in consultation with Scottish Natural Heritage, Historic Scotland and the Scottish Environment Protection Agency.
Environmental Report	publishing an Environmental Report on the PPS and its environmental effects, and consulting on that report.
Adoption	providing information on: the adopted PPS; how consultation comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the PPS.
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.

The purpose of this Environmental Report is to:

- provide information on the draft Orkney Core Paths Plan
- identify, describe and evaluate the likely significant effects of the draft Orkney Core Paths Plan
- provide an early and effective opportunity for the Consultation Authorities and the public to offer views on any aspect of this Environmental Report.

The key facts relating to draft Orkney Core Paths Plan are set out in Table 1 below.

Table 1: Key facts relating to the draft Orkney Core Paths Plan

Name of Responsible Authority	Orkney Islands Council
Title of plan/programme	Draft Orkney Core Paths Plan
What prompted the plan	The Land Reform (Scotland) Act 2003 requires local authorities to draw up a draft plan for a network of paths (core paths) sufficient for the purpose of giving the public reasonable access throughout their area. The draft plan must be completed by February 2008.
Plan subject	Outdoor access
Period covered by plan	2008-2013
Frequency of updates	Every five years
Plan area	Orkney Islands Council area.
Plan purpose and/or objectives	<p>To identify a network of paths throughout Orkney, which provides the public with a reasonable provision of access throughout the islands. The objectives of the Plan are:</p> <ul style="list-style-type: none"> • to provide a co-ordinated, actively promoted and well maintained network of paths • to provide a range of opportunities suitable for different user groups and people of all abilities which are safe, welcoming and enjoyable • to work with land managers to achieve a balance between the needs of access users and the needs of those living and working on the land • to promote sustainable access which safeguards the natural, built and cultural heritage.
Contact	<p>Christine Skene Policy and Projects Dept of Development Services Orkney Islands Council Council Offices School Place Kirkwall KW15 1NY Tel: 01856 873535 Email: christine.skene@orkney.gov.uk</p>

2.2 SEA activities to date

Table 2 summarises the SEA activities to date in relation to the draft Orkney Core Paths Plan

Table 2: SEA activities to date

SEA Action/Activity	When carried out	Notes (e.g. comment on data availability, particular issues or any advice from the Consultation Authorities that has now been taken into account)
Work on the draft Core Paths Plan commenced	<i>2002-2005</i>	The first phase of informal public consultation took place. Initial proposals for candidate core paths developed
Environmental assessment methods established. Initial environmental assessment of the emerging candidate core paths undertaken by OIC	<i>Summer 2006</i>	Criteria for electing core paths developed, in conjunction with SEA objectives
Scoping Report submitted by Orkney Islands Council to the SEA Gateway at the Scottish Executive	<i>Oct 31 2006</i>	
SEA Gateway submitted the comments to the scoping report of the Consultation Authorities (HS, SEPA and SNH) to the Council	<i>Dec 4 2006</i>	Consultation authorities responses used to inform development of Environmental Report.
Draft list of candidate core paths developed and out for second phase of informal public consultation	<i>Jan- Sept 2007</i>	Consultees provided feedback on proposed paths.
Full environmental assessment of proposed core paths undertaken following public consultation	<i>Sept-Nov 2007</i>	All paths assessed against core path selection criteria and SEA objectives
Environmental Report developed	<i>Sept 2007 – Jan 2008</i>	
Consultation timescales <ul style="list-style-type: none"> • Timescale for Consultation Authorities • Timescale for public 	<i>Fri 8 Feb – Fri 2 May 2008</i>	
Notification/publicity action		The availability of the Plan and the Draft SEA will be advertised in accordance with legislative requirements. Feedback from both the Consultation authorities and other interested parties will be taken into account in the preparation of the finalised document.

3. CONTEXT

3.1 Outline and objectives of the draft Orkney Core Paths Plan

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes “*an outline of the contents and main objectives of the plan or programme*”. The purpose of this section is to explain the nature, contents, objectives and timescale of the plan.

The Land Reform (Scotland) Act 2003 created a new right of responsible access over most land and inland water. While establishing this wider access right the legislation acknowledged that paths play a very important role in managing outdoor access and that the majority of people do prefer to use defined routes. As a result one of the key duties in the Act is for local authorities to produce a draft Core Paths Plan.

The purpose of the draft Core Paths Plan is to identify a framework of paths that will provide local residents and visitors with reasonable access throughout their local authority area. Core Paths will form the basic network of paths that allow people to enjoy and get around the countryside. This framework of routes will link to, and support, other networks of paths and the wider countryside. The Core Paths Plan should include a wide range of routes suitable for different types of users, including walkers, cyclists and horse riders, as well as providing access opportunities for people of varying ability.

A Core Paths network has been identified for each island and parish of Orkney and together these constitute the overall Core Paths Plan for the Orkney Islands area. The Plan includes maps of all the proposed Core Paths in each area or island.

The draft Core Paths plan documents the process that has been followed to determine which paths should be included as Core Paths. This process has included extensive public consultation and assessment of potential Core Paths. All candidate routes have been assessed against a series of Core Paths selection criteria to determine their suitability as candidate Core Paths. Once adopted, the plan will provide a basis for managing access throughout Orkney.

3.2 Aims and Objectives of the Core Paths Plan

The vision for outdoor access in Orkney as identified in Orkney’s Outdoor Access Strategy is:

‘To promote enjoyment of the outdoors by providing high quality, sustainable access provision, which satisfies the needs and aspirations of the local community and visitors to the islands.’

The aim of the Core Paths Plan will be to work towards this vision by helping to fulfil a number of key objectives for outdoor access in Orkney. These are:

- to provide a co-ordinated, actively promoted and well maintained network of paths
- to provide a range of opportunities suitable for different user groups and people of all abilities which are safe, welcoming and enjoyable
- to work with land managers to achieve a balance between the needs of access users and the needs of those living and working on the land.
- to promote sustainable access which safeguards the natural, built and cultural heritage.

These objectives are assessed in the SEA, as are the Core Paths Networks for each island and parish.

3.3 Relationship with other PPS and environmental protection objectives

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes an outline of the PPS relationships with other relevant PPS, and how environmental protection objectives have been taken into account in the PPS preparation. This section covers these issues and describes the policy context within which the PPS operates, and the constraints and targets that this context imposes on the PPS.

The draft Orkney Core Paths Plan will form part of the suite of planning policy and guidance documents for Orkney, all of which must be consistent with other plans, strategies and policy statements at a higher level.

This information is summarised in as **Relevant plans, programmes and strategies (PPS) and environmental protection objectives, and their relationship with draft Orkney Core Paths Plan** which is presented as **Appendix A** to this Environmental Report. These plans, programmes and strategies are also listed below:

UN Framework Convention on Climate Change & its Kyoto Protocol
UN Convention on Biological Diversity (1992)
Conservation of Wild Birds Directive (79/409/EEC)
Conservation of Natural Habitats and of Wild Fauna and Flora Directive (92/43/EEC)
Water Framework Directive (2000/60/EC) (WFD)
EU Sustainable Development Strategy (2001)
The Scottish Outdoor Access Code
Scotland's National Transport Strategy (2006)
SPP11 Open Space and Physical Activity
National Cycling Strategy 1996
Report of the Disability Working Group 2006
Hitrans Regional transport Strategy
SPP 17 Sustainable Transport
The Water Environment (Controlled Activities) (Scotland) Regulations 2005
Scottish Biodiversity Strategy
NPPG14 Natural Heritage
SEPA Policy 21 Strategy for Implementing Actions under the UK Biodiversity Action Plan
National Waste Strategy (Scotland)
The UK's Shared Framework for Sustainable Development (2005)
NPPG10 Planning and Waste Management
SEPA Policy 26 on the culverting of watercourses
Scottish Executive Marine and Coastal Strategy (2005)
NPPG5 Archaeology and Planning
PAN 42 Archaeology – The Planning Process and Scheduled Monument Procedures
NPPG18 Planning and the Historic Environment
Scottish Historic Environment Policy 1
Scottish Historic Environment Policy 2.
Memorandum of Guidance on Listed Buildings and Conservation Areas, Historic Scotland 1998
OIC Biodiversity Action Plan (2002)
OIC Structure Plan
The Orkney Local Plan (2004)
OIC 2020 Community Plan (2007)
Orkney Outdoor Access Strategy
Orkney Environmental Strategy and Action Plan
Orkney Local Transport Strategy 2008-2010

Analysis of these plans, programmes and strategies has highlighted the following environmental considerations which are relevant to the Core Paths Plan:

- The duty of Orkney Islands Council to incorporate and implement appropriate biodiversity targets, and to ensure that the biodiversity, fauna and flora of Orkney is taken into account in fulfilling the objectives of the Core Paths Plan, in particular species and habitats which are afforded special protection, e.g. under Natura 2000 and European Protected Species;
- The need to ensure that protecting and, where appropriate, enhancing the historic and natural heritage environment is recognised in the development of Core Paths;
- The need to maintain a clean, healthy, safe, productive and biologically diverse marine and coastal environment and to consider any implications for coastal erosion relating to the potential siting of core paths;
- The Core Paths Plan should support the overarching vision for Orkney which is set out in Orkney's Community Plan, 2020.

In a local context, the Orkney Core Paths Plan supports Policy LP/S2 in the Orkney Local Plan 2004. Work is now commencing to review the Orkney Local Plan with a view to publishing the final Development Plan in late 2009 or early 2010.

By integrating and being consistent with the Structure Plan and Local Plan, the Orkney Core Paths Plan is compatible with other local strategies and programmes which have been, or are being, integrated with the development plan, including the Community Plan, the Orkney Outdoor Access Strategy, the local Biodiversity Action Plan and the Local Transport Strategy.

3.4 Relevant aspects of the current state of the environment

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes a description of “the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme”, and “the environmental characteristics of areas likely to be significantly affected”. This section aims to describe the environmental context within which the PPS operates and the constraints and targets that this context imposes on the PPS.

An **Environmental Baseline of the Orkney Islands** has been compiled and is presented as **Appendix B**.

Table 3 below presents a summary of the data collected and the relevant sources.

Table 3: Summary of data collected in compiling an environmental baseline of the Orkney Islands

DATA	SOURCE
Information on climate change	SNIFFER, 'A handbook of climate trends across Scotland', 2006 Climate Change The UK Programme 2006
Information on carbon dioxide emissions	Scottish Executive, Key Scottish Environmental Statistics, 2007 Original information from 'Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990-2004'. AEA Technology, AEAT/ENV/R/2318
Local air quality data for Kirkwall	Orkney Islands Council Department of Environmental Health Scottish Pollutant Release Inventory (SEAP), www.sepa.org.uk
List of statutory and non-statutory designated natural heritage sites	Scottish Natural Heritage (SNH) www.snh.gov.uk Joint Nature Conservation Committee (JNCC) www.jncc.gov.uk Orkney Islands Council Local Plan www.orkney.gov.uk

DATA	SOURCE
RSPB reserves in Orkney	Royal Society for the Protection of Birds www.rspb.org.uk
European Protected Species	Scottish Natural Heritage (SNH) www.snh.gov.uk
Lists of Priority habitats and species in Orkney	Orkney Islands Council Local Biodiversity Action Plan www.orkney.gov.uk
Water quality data (freshwater and coastal) and Groundwater quality data	Scottish Environment Protection Agency (SEPA) www.sepa.org.uk
Information on rainfall in Orkney Information on areas at risk of flooding	SNIFFER, 'A handbook of climate trends across Scotland', 2006 www.sniffer.org.uk Indicative River and Coastal Flood Map (Scotland), SEPA, 2005
Soil types in Orkney	Scottish Natural Heritage Review No 100, Orkney Landscape Character Assessment, Land Use Consultants, Glasgow (1998) Changing Our Ways, Scotland's Climate Change Programme Scottish Executive (2006) Soil and Land Capability for Agriculture Maps (Orkney and Shetland) mapsales@macaulay.ac.uk
Data on Agricultural Land Use in Orkney during 2002 and 2005	Scottish Agricultural Census 2001 - 2006
Information on contaminated land in Orkney	Orkney Islands Council Department of Environmental Health
Information on Landscape Character Assessment	Scottish Natural Heritage Review No 100, Orkney Landscape Character Assessment, Land Use Consultants, Glasgow (1998)
Gardens and Designed Landscapes	Inventory of Gardens and Designed Landscape www.historic-scotland.gov.uk/index/gardens.htm
Information on Conservation Areas	The Orkney Islands Council Structure Plan 2001
General health of the populations of Orkney and Scotland Life expectancy of residents of the Orkney Islands over the period 2000-2005	Scottish Executive National Census 2001 British Heart Foundation Website www.heartstats.org Scottish Executive and NHS Health Scotland healthy Living website www.InfoScotland.com
Source of aggregates used in Orkney	Orkney Islands Council Roads Department

The following summarises the likely gaps and/or unreliability of the SEA baseline data, and how they were minimised:

There are some gaps or other deficiencies, especially in respect of the links between land use, planning and environmental issues relating to climatic factors, air quality and human health.

The air quality report for 2005-2006 is the most up-to-date available. Monitoring re-commenced in August 2007 following an 18-month gap.

- Results are proving to be very similar to those of 2005 and any change is negligible. As it becomes available, future data will be incorporated in the monitoring programme of this SEA.

Information about the extent and location of habitats of nature conservation importance, protected and other species listed as priority species in Biodiversity Action Plans may not be complete or

up-to-date owing to the large and remote geographic area covered by the Plan and the dynamic nature of some of these resources.

- Natura sites and SSSIs are periodically monitored by SNH through its Site Condition Monitoring programme. A further monitoring programme is currently underway for the Local Sites of Local Nature Conservation Interest, whereby most of the mainland sites and much of the linked South Isles sites have been covered. The North Isles and remaining South Isles still have to be visited.
- Where development may take place in more remote locations of environmental sensitivity, it is likely that a full projects environmental impact statement will be required.

There is no soil quality data available for the Orkney Islands.

- If in future a soil monitoring programme is established, the resulting data will be used to monitor the environmental performance of the SPG.

Information about the extent and location of archaeological resources may be incomplete. Sensitive archaeological remains may extend beyond the confines of many ancient monuments and both arable and non-arable areas may contain sensitive and important monuments.

Population data for the Isles is based on Census data; the most recent information is from the 2001 Census.

Health data is fairly subjective and can only give an indication of peoples' perception of their own health. However, it is considered a useful indicator for the purposes of this report.

3.5 Environmental problems

Schedule 3 paragraph 4 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes a description of existing environmental problems, in particular those relating to any areas of particular environmental importance. Table 4 contains a list of environmental problems or issues which are relevant to the development of the Core Paths Plan.

Table 4: Existing Environmental Problems Relevant to Core Paths

Problem or issue	Supporting data (where available at this stage)	Implications for PPS
<p>1. Climatic factors and local air quality Worldwide, atmospheric levels of greenhouse gases are increasing.</p>	<p>Scottish Executive, Key Scottish Environmental Statistics, 2007</p>	<p>The Core Paths Plan should aim to provide opportunities for outdoor access which reduce the reliance of the public on use of motorised vehicles, particularly for short journeys.</p>
<p>2. Biodiversity, fauna and flora Adverse impacts of outdoor access on the biodiversity and natural habitats of Orkney, including internationally, nationally and locally designated sites and protected species. Both direct and indirect</p>	<p>Information relating to designated areas in the Orkney Islands – SAC, SPA, SSSI, Ramsar site, Sites of Local Nature Importance, Local Nature Reserve</p>	<p>The Core Paths Plan should aim to minimise the impact of outdoor access on designated sites and on other areas of natural and semi-natural vegetation. It should aim to ensure outdoor access does not cause significant disturbance/ damage to protected or priority species</p>

Problem or issue	Supporting data (where available at this stage)	Implications for PPS
<p>effects should be considered as well as any cumulative effects</p> <p>Decline of habitats and species may occur through fragmentation of the countryside.</p>		
<p>3. Water</p> <p>The protection of the water environment, damage or pollution caused by construction activities, or erosion</p>	<p>Information relating to pollutants</p>	<p>The Core Paths Plan should aim to minimise significant adverse impacts of core paths on water bodies and associated wildlife from recreational activities/ new access infrastructure</p>
<p>4. Soil</p> <p>The protection of soils in the Orkney Islands.</p> <p>Peat is a storage system for carbon which, when disturbed, releases carbon to the atmosphere. Peat is also important in regulating water resources.</p> <p>Works involving excavation and soil disturbance result in loss of habitat and can also lead to increased suspended solids in watercourses.</p>	<p>Soil and Land Capacity for Agriculture Maps for Orkney and Shetland</p>	<p>The Core Paths Plan should aim to minimise erosion from outdoor access and ensure new infrastructure does not cause damage to soils including peat.</p>
<p>5. Landscape</p> <p>Adverse impacts of access on the landscapes of the Orkney Islands, which include the Heart of Neolithic Orkney World Heritage Site and a National Scenic Area.</p>	<p>Orkney Landscape Character Assessments</p>	<p>The Core Paths Plan should aim to minimise the adverse impact of outdoor access and associated infrastructure on landscape character.</p>

Problem or issue	Supporting data (where available at this stage)	Implications for PPS
<p>7. Cultural heritage Adverse impacts of access on Orkney's historic environment and cultural heritage, which includes the World Heritage Site and many scheduled ancient monuments, protected buildings and archaeological sites and their historic setting.</p>	<p>Information relating to Orkney's World Heritage Site, its Scheduled Monuments, listed buildings and conservation areas.</p> <p>Information relating to areas which are included in the Inventory of Gardens and Designed Landscapes.</p>	<p>The Core Paths Plan should avoid adverse impacts on archaeological/ historical /cultural sites and/or their setting. It should help alleviate pressure on sensitive sites where possible.</p>
<p>Human health The health of residents of Orkney.</p>		<p>The Core Paths Plan should aim to have a positive effect on human health by encouraging walking and cycling</p>
<p>Material assets</p>		<p>The Core Paths Plan should encourage the use of local materials and/or sustainable resources in the development of access infrastructure</p>
<p>Cumulative effect The cumulative effects of more paths and access</p>		<p>Core paths should be assessed in terms of networks and the overall impact of the network for each area/island</p>

3.6 Likely evolution of the environment without the Orkney Core Paths Plan

Without the Orkney Core Paths Plan it is considered that the likely future changes to the area would be as described below:

Climatic factors and local air quality

Without the increase in outdoor access opportunities provided by the Core Paths Plan it is unlikely that there will be any decrease in the use of motorised vehicles for recreation in the countryside or for accessing facilities and services in and around settlements.

Biodiversity

Without the focus of developing formal Core Paths access routes could be developed in Orkney in an ad hoc manner, without consideration of their impacts on biodiversity and the natural heritage. The assessment of Core Paths through SEA will ensure the environmental impacts of these routes are thoroughly considered.

Water /Soil

If paths were developed/promoted without going through the Core Paths assessment process it is possible that there could be localised negative effects on hydrology, water supply, water quality and the soil environment from new routes or pressure from access users.

Landscape

If paths were developed/promoted without going through the Core Paths assessment process it is possible that there could be localised negative effects on the landscape from new path infrastructure or path surfacing.

Cultural Heritage

Without the focus of developing formal Core Paths access routes could be developed in Orkney in an ad hoc manner, without consideration of their impacts on the cultural heritage, Scheduled Ancient Monuments and other historic sites. The assessment of Core Paths through SEA will ensure the impacts of these routes on the historic environment are thoroughly considered.

Human health

Without the increase in outdoor access opportunities provided by the Core Paths Plan there will be more limited options for residents to keep active and healthy by walking and cycling.

3.7 SEA Objectives

A set of objectives and environmental criteria has been identified which will be used as measures by which the environmental impacts of the PPS may be assessed.

These objectives and environmental criteria are presented in Table 5 below.

Table 5: Environmental objectives and criteria against which the Core Paths networks will be tested

SEA Objectives	Relevant SEA topics	SEA criteria for Core Paths
To conserve and enhance natural habitats and species and avoid adverse effects on Natura sites	biodiversity	<ul style="list-style-type: none">• Minimise the impact of outdoor access on designated sites• Minimise the impact of outdoor access on other areas of natural and semi-natural vegetation• Ensure outdoor access does not cause significant disturbance/ damage to protected or priority species
To conserve and enhance the integrity of ecosystems	biodiversity, soil, water, air, landscape	<ul style="list-style-type: none">• Ensure outdoor access and associated infrastructure does not cause fragmentation of habitats, or inhibit movement of species.
To conserve geodiversity including geology, geomorphology and natural processes		<ul style="list-style-type: none">• Ensure outdoor access and associated infrastructure does not damage sensitive sites
Provide sustainable opportunities for people to enjoy and appreciate wildlife and wild places	biodiversity, landscape	<ul style="list-style-type: none">• Provide sustainable access opportunities for people to enjoy wildlife and wild places
To protect water bodies and water quality	biodiversity, water, landscape, human health	<ul style="list-style-type: none">• Minimise significant adverse impacts on water bodies and associated wildlife from recreational activities/ new access infrastructure• Minimise water pollution from recreational access/ new infrastructure

To conserve & enhance distinctive landscape character, scenic value and visual amenity of the area	landscape, biodiversity, material assets, cultural heritage	<ul style="list-style-type: none"> • Minimise the adverse impact of outdoor access on landscape character. • Ensure infrastructure is sited/designed to make a positive contribution to landscape character
To maintain and improve air quality	air, human health, biodiversity	<ul style="list-style-type: none"> • Reduce the need for travel by private car for outdoor access
To maintain and where possible improve soil quality and integrity	soil, water, human health, biodiversity,	<ul style="list-style-type: none"> • Minimise erosion from outdoor access • Safeguard soil quality and function when developing new access routes/infrastructure
To reduce greenhouse gas emissions	Climatic factors	<ul style="list-style-type: none"> • To reduce the dependency on travel by private car for outdoor access
To conserve & where appropriate enhance or restore the historic environment	cultural heritage, material assets, landscape	<ul style="list-style-type: none"> • Ensure new outdoor access/infrastructure has a positive effect on archaeological/ historical /cultural sites and/or their setting • Ensure new access alleviates pressure on sensitive sites
Provide opportunities for people to enjoy and appreciate the historic environment	cultural heritage, material assets	<ul style="list-style-type: none"> • Provide sustainable access to historic sites
To protect and enhance human health	population, human health	<ul style="list-style-type: none"> • Provide outdoor access opportunities for all sectors of the community • Encourage communities/ visitors to be more active • Encourage less dependency on cars • Maintain and improve access to public open space
To reduce waste and pollution	air, water, soil, biodiversity, human health	<ul style="list-style-type: none"> • Reduce litter and dereliction in the countryside • Minimise pollution from human waste in the countryside • Reduce the need for use of private cars for outdoor access
To promote sustainable use of natural resources and material assets	material assets	<ul style="list-style-type: none"> • Encourage use of local materials in development of access infrastructure • Encourage use of materials from sustainable resources

4. Assessment of environmental effects and measures envisaged for prevention, reduction and offset of any significant adverse effects

4.1 Alternatives to which SEA was applied

Assessment of Alternatives

The Environmental Report is required to consider alternatives to the proposed plan as part of the SEA process, as stated in the SEA Directive and the Environmental Assessment (Scotland) Act.

The Core Paths Plan is a statutory requirement of the Land Reform (Scotland) Act 2003 so a 'do nothing' alternative to the Plan is not an option. However, throughout the preparation of the Core Paths Plan, a wide range of possible routes have been considered for inclusion in the draft plan. Assessment of these routes against the objectives of the plan, the selection criteria for the plan and the SEA objectives has helped to refine the candidate routes to those included in this Plan. In addition the consultation process has helped to select the key routes that stakeholders wish to see included in the plan.

The vision and strategic objectives of the plan were developed to reflect the Orkney Outdoor Access Strategy 2004, in accordance with the relevant legislation and with reference to the stakeholder and community consultation carried out as part of the Core Paths planning process. A number of possible objectives were considered during the development phase, but were refined to those included in this report. The SEA process also informed the selection of the plan objectives, so that one of the objectives is 'to promote sustainable access which safeguards the natural, built and cultural heritage'. All the Core Paths Plan objectives were assessed against the SEA objectives to ensure there were no incompatibilities between them.

The objectives of the plan and stakeholder consultation then helped to define the selection criteria for proposed Core Paths. Different options for selection criteria were assessed against the objectives of the plan before choosing those which appeared to reflect best the strategic objectives and the aspirations of the community, and were also compatible with the legislation. All candidate Core Paths were assessed against these criteria before final selection was made.

All candidate Core Paths and the Core Paths networks were also assessed against the SEA objectives and the specific criteria developed from the SEA objectives.

A number of other factors were taken into account in selecting Core Paths. Specifically it was important to consider the 'reasonable provision of access' as defined in the Land Reform (Scotland) Act 2003. For each area it was important to consider what was required to achieve this reasonable provision and to select paths accordingly. In developing a Core Paths Plan local authorities are also required to provide access for a variety of different access users. The selection of routes in the plan therefore reflects this need to provide access opportunities for different activities and different abilities.

It was essential to balance the needs of access users with those of land managers. Some paths were rejected on the grounds of land management issues which could not be resolved in the timescale of the development of the plan.

In addition the practicalities of the local authority being able to resource the signage and promotion of the Core Paths Network had to be considered as a factor in terms of the number of Core Paths to be included in the plan. It is also accepted that much of the maintenance of the network will fall to the Council and this too had to be considered when assessing the level of provision.

The type of paths which were considered as potential Core Paths included public rights of way; paths promoted by the Council; paths developed by landowners; other informal but well used routes; and quiet sections of roads particularly on the outer isles.

A number of completely new routes were suggested as potential Core Paths during the consultation process. These were considered where agreement could be reached with relevant landowners and the paths could be implemented within two years of the adoption of the plan. Certain of these routes have been classified as 'aspirational' routes, which could be developed at a later date and be included in a future review of the plan.

The consultation process identified community and stakeholder priorities for outdoor access. In particular there was considerable community demand shown for coastal paths, access to amenity and heritage sites and circular routes. This demand has helped shape the development of the draft Plan and the selection of routes.

4.2 Assessment of Proposed Core Paths

Assessment of Core Paths has been carried out at three levels:

- a) Assessment of the Core Paths Plan objectives against SEA topics
- b) Assessment of the Core Paths selection criteria against SEA objectives and criteria
- c) Assessment of individual Core Paths and Core Paths Networks against SEA objectives and criteria.

a) Core Paths Plan Objectives

The overall Core Paths Plan objectives have been assessed against the SEA topics to ensure that at a strategic level the Plan does not have significant adverse impacts on the environment. The results of this assessment are presented in Table 6 below.

Table 6: Assessment of Core Paths Plan Objectives

AIM/OBJECTIVE	ASSESSMENT CRITERIA									
	Biodiversity	Human health	soil	air	water	Material assets	Cultural heritage	Landscape	Mitigation required?	Comments and overall assessment including information on secondary, cumulative or synergistic effects or effects on existing environmental problems
To provide a co-ordinated, actively promoted and well maintained network of paths	☐	✓	☐	✓	☐	☐	☐	☐	Y	Potential positive effect on human health by providing increased opportunities for walking, cycling, running. Potential for increased access on paths could have an adverse impact on the natural heritage. This is offset by the positive effect paths can have on the management of access eg by deflecting access from sensitive areas. Access to the heritage also provides opportunities for education and interpretation about that heritage, raising awareness of sensitivities and issues and encouraging responsible behaviour.
To provide a range of opportunities suitable for different user groups and people of all abilities which are safe, welcoming and enjoyable	☐	✓	☐	✓	☐	☐	☐	☐	-	Potential positive effects on human health by providing opportunities for recreational activities for a wide range of users and abilities. Potential positive effect on air quality by encouraging walking and cycling and reducing the dependency on cars for short journeys Other effects are generally neutral – see comments above.
To work with land managers to achieve a balance between the needs of access users and the needs of those living and working on the land.	☐	☐	☐	☐	☐	☐	☐	☐	-	Working with landowners on the development of access provides an opportunity to raise their awareness of the possible impacts of access on the environment.
To promote sustainable access which safeguards the natural, built and cultural heritage	✓	✓	✓	✓	✓	✓	✓	✓	-	The public have access rights over most land, but generally prefer to use marked paths. The development of a Core Paths network which safeguards the natural, built and cultural heritage will have potential positive effects through its ability to manage public access in a sustainable way.

✓ positive ☐ neutral X negative

b) Core Paths Selection Criteria

A series of criteria have been developed to assist in the selection of Core Paths for the draft Core Paths Plan. All candidate Core Paths have been scored against these criteria before being included in the plan. It is therefore important that the Core Paths selection criteria are compatible with the SEA objectives and criteria. The Core Paths selection criteria are given below and Table 7 assesses these against the SEA objectives.

Core Paths Plan Selection Criteria

1. Community Demand

- demand identified in consultations
- high level of current usage
- already promoted path

2. Safe and fit for purpose

- path design and infrastructure is adequate for the intended usage
- major improvements are not needed to make the Core Path safe and fit for purpose

3. Consistent with access strategy

- Core Paths should contribute to the aims of the Orkney Outdoor Access Strategy

4. Potential for multi use

- a good percentage of Core Paths should be suitable for more than one use
- all Core Paths should be as barrier free as possible to permit usage by a wide range of users eg gates instead of stiles

5. Provides access to amenity sites and/or sites with heritage interests

- high demand in Orkney for access to coastal sites, including beaches
- high demand for access to sites of natural, historical or cultural heritage

6. Avoids/mitigates land management or privacy issues

- Core Paths over enclosed farmland should help to reduce conflicts between access users and land management, especially where there are livestock
- Core Paths should not interfere with local resident's privacy and peace of mind

7. Assists management of the heritage of the area

- Core Paths and/or access users should not have a negative impact on the natural, cultural or built heritage
- where possible they should have a positive management effect on the heritage

8. Links and supports wider path networks or wider access rights

- Core Paths should link with wider path networks
- Core Paths may provide links through enclosed farmland to open areas where access rights apply eg hill ground

9. Community Links

- where settlements exist there should be Core Paths which are easily accessible from the town or village, without the use of a car
- in settlements Core Paths should help people to access local amenity sites
- in villages and towns Core Paths should help residents to access facilities such as schools, colleges, shops, sports centres etc.

Table 7: Assessment of Core Paths Selection Criteria against SEA objectives

SEA Objectives	Core Paths Criteria								
	1	2	3	4	5	6	7	8	9
To conserve and enhance natural habitats and species and avoid adverse effects on Natura sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To conserve and enhance the integrity of ecosystems	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To conserve geodiversity including geology, geomorphology and natural processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide sustainable opportunities for people to enjoy and appreciate wildlife and wild places	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
To protect water bodies and water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To conserve & enhance distinctive landscape character, scenic value and visual amenity of the area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To maintain and improve air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
To reduce greenhouse gas emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
To maintain and where possible enhance soil quality and integrity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To conserve & where appropriate enhance or restore the historic environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide opportunities for people to enjoy and appreciate the historic environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
To protect and enhance human health	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
To reduce waste and pollution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
To promote sustainable use of natural resources and material assets	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

core path criterion and SEA objective are compatible with each other
 core path criterion and SEA objective are not specifically linked
 core path criterion and SEA objective are incompatible.

c) Assessment of individual Core Paths and Core Path Networks

For each island and parish of Orkney the proposed Core Paths have been assessed against the SEA objectives developed for each SEA topic. For each objective the likely significant impact of the path network is assessed and detailed comments on individual routes are provided where appropriate. These assessments can be found in Appendix C. A summary of the overall findings of the Core Paths network assessments is given in Table 8 below.

Table 8: Assessment of Core Paths Networks against SEA objectives

SEA Objectives	Likely significant impact	Comments
To conserve and enhance natural habitats and species and avoid adverse effects on Natura sites	neutral	To minimise the impact of access on designated sites and other areas of natural heritage interest, Core Paths in these areas are all existing routes, which avoid sensitive areas. No physical interventions are required that would have adverse impacts on the interests of the sites. Where needed signage and interpretation will be provided to promote responsible behaviour and to raise awareness of sensitivities.
To conserve and enhance the integrity of ecosystems	neutral	None of the proposed Core Paths will cause fragmentation of habitats or inhibit movement of species. The majority of core paths are existing routes, with natural surfaces and there are no proposals to change path surfacing.
To conserve geodiversity including geology, geomorphology and natural processes	neutral	Where there is the possibility of access causing damage to fragile sites, such as sand dunes, Core Paths follow already established tracks or avoid sensitive areas. Where necessary guidance will be provided to raise awareness of any issues.
Provide opportunities for people to enjoy and appreciate wildlife and wild places	positive	The Core Paths provide sustainable access opportunities for people to enjoy wildlife and wild places. Wherever necessary or appropriate, signage and interpretation will be provided to raise awareness of the natural heritage.
To protect water bodies and water quality	neutral	The proposed Core Paths require no new infrastructure or upgrades that could have an adverse impact on water bodies or water quality. Most Core Paths in the vicinity of water bodies are sufficiently removed from the water to avoid causing erosion and/or disturbance to wildlife. Where this is not the case, signage will be provided to discourage access users from approaching too close to the water during sensitive times, such as the bird breeding season. Guidance will be provided where necessary to raise awareness of minimising pollution of water bodies eg for wild campers.
To conserve & enhance distinctive landscape character and scenic value of the area	neutral	No changes to the natural surfaces of the paths, or new infrastructure, are proposed which could adversely affect landscape value or visual amenity. Any on site signage and interpretation that is required will be sensitively sited and designed to avoid negative impacts on the landscape.
To maintain and		Promotion of Core Paths may have a small positive effect

improve air quality	slightly positive	on air quality by encouraging more walking and cycling. In a number of areas Core Paths provide opportunities for access directly from villages and towns, which could help to reduce the dependency on cars for short journeys.
To maintain soil quality and integrity	neutral	The proposed Core Paths avoid areas which might be vulnerable to erosion. No major path improvements are proposed which could affect soil quality and integrity. Increased usage of paths could result in minor effects in relation to soil erosion and this should be monitored.
To reduce greenhouse gas emissions	slightly positive	In a number of areas Core Paths provide opportunities for access directly from villages and towns, which could help to reduce the dependency on cars for short journeys.
To conserve & where appropriate enhance or restore the historic environment	neutral	Where Core Paths access historic sites these are existing, well used routes which avoid sensitive areas. No new paths or infrastructure are proposed which could have an adverse impact on sites.
Provide opportunities for people to enjoy and appreciate the historic environment	positive	Core Paths provide sustainable access to a variety of historic sites. A number of sites already have interpretation and further interpretation will be provided where appropriate.
To protect and enhance human health	positive	Promotion of Core Paths will encourage the public to become more active, through cycling and walking. Core Paths provide outdoor access opportunities for all sectors of the community and in all areas.
To reduce waste and pollution	neutral	Promotion of Core Paths and outdoor access should include awareness raising of litter and pollution.
To promote sustainable use of natural resources and material assets	neutral	The majority of Core Paths do not require major new infrastructure. Where improvements are needed, materials from sustainable resources should be used.

4.3 Measures envisaged for the prevention, reduction and offsetting of significant adverse effects

Schedule 3 paragraph 7 of the Environmental Assessment (Scotland) Act 2005 requires an explanation of “the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.” Table 9 sets out any environmental problems that are likely to remain on implementation of the PPS and summarises proposed measures for the prevention, reduction and offset of significant adverse effects.

Table 9: Measures envisaged for the prevention, reduction and offsetting of any significant adverse effects

SEA Issue	Impact of Core Paths Plan	Proposed measures for the reduction/prevention and offset of significant adverse effects
biodiversity	Largely neutral. Main issue - promotion of the Core Paths network may increase public use of paths. Increased usage could have an adverse impact on the natural heritage eg disturbance of ground nesting birds.	<ul style="list-style-type: none"> • while increased public access could have an adverse on the natural heritage, this can be offset by providing guidance through signage and interpretation. Guidance and information can help to minimise any adverse effects and have the positive effect of increasing understanding of the natural environment. • where Core Paths pass through designated sites they can help to minimise adverse impacts by directing visitors away from more sensitive areas of the site. The provision of signage and interpretation can be used to educate access users about the important interests of a site. This can have a positive effect in terms of encouraging a sense of stewardship in the public. Guidance can be used to reduce adverse impacts, eg keeping dogs under control to avoid disturbance of ground nesting birds during the breeding season. • The Core Paths plan consists of mostly existing routes and for the majority of paths no new infrastructure or path upgrades are planned. Where physical interventions are required these will be carried out sensitively and taking into account the natural heritage interests of the site.
Cultural heritage	Largely neutral Main issue - promotion of the Core Paths network may increase public use of paths which access cultural heritage.	<ul style="list-style-type: none"> • while increased public access could have an adverse on historic sites, this can be minimised by providing guidance through signage and interpretation. Guidance and information can help to minimise any adverse effects and have the positive effect of increasing understanding of the cultural heritage. • The Core Paths plan consists of mostly existing routes and for the majority of paths no new infrastructure or path upgrades are planned. Where physical interventions are required these will be carried out sensitively and taking into account the cultural heritage interests of the site.

5. Monitoring

Monitoring the effects of implementing the Core Paths Plan will include the following

- Regular inspections of Core Paths by the local authority. A regime is already in place for monitoring the condition of paths and recording this on a database. This monitoring will be extended to include any impacts of the paths on the environment, such as erosion, damage to vegetation adjacent to the path, littering etc.
- Recording of incidents of disturbance to wildlife as a result of access users. For example incidents of dogs not under proper control, disturbing breeding birds.
- People counters installed on key routes to monitor increased usage of paths as a result of promotion of the Core Paths Plan.

6. Next steps

Table 10 lists future milestones in the development of the PPS and its SEA, and the dates when these are expected to be completed.

Table 10: Anticipated plan-making and SEA milestones

Expected date	Milestone
8 February 2008	Environmental Report consultation period commences
2 May 2008	Consultation deadline